

INVITATION TO BID

Nº JOF-0131-29582/2016

August, 2016

Section 1. Letter of Invitation

Brasília, 1 August 2016.

RAC System Components, Equipment, Tools and Consumables for the Implementation of HCFC Containment Demonstration Projects in Brazilian Supermarkets

Dear Sir(s)/Madam(s),

We hereby invite you to submit a Bid to this Invitation to Bid (ITB) for the above-referenced subject.

This ITB includes the following documents:

Section 1 – This Letter of Invitation

Section 2 – Instructions to Bidders (including Data Sheet)

Section 3a – Schedule of Requirements and Technical Specifications

Section 3b - Related Services

Section 4 - Bid Submission Form

Section 5 – Documents Establishing the Eligibility and Qualifications of the Bidder

Section 6 – Technical Bid Form

Section 7 - Price Schedule Form

Section 8 – Form for Bid Security (Not Applicable)

Section 9 – Form for Performance Security (Not Applicable)

Section 10 – Form for Advanced Payment Guarantee (Not Applicable)

Your offer, comprising of a Technical Bid and Price Schedule, together in a sealed envelope, should be submitted in accordance with Section 2.

You are kindly requested to submit an acknowledgment letter to the following address:

UN House Brazil
JOF - Joint Operations Facility
Ref. Bid JOF-0131-29582/2016
Casa das Nações Unidas no Brasil
Setor de Embaixadas Norte, Quadra 802, Conjunto C, Lote 17
Complexo Sergio Vieira de Mello, Módulo I, Prédio Zilda Arns, Salas 117 a 123
CEP 70800-400 – Brasília, DF - Brasil

The letter should be received no later than **15 September 2016 at 3 p.m**. (Brasília time). The same letter should advise whether your company intends to submit a Bid. If that is not the case, we would appreciate your information on the reasons of non-participation, for our records.

Should you require any clarification, kindly communicate with the contact identified in the attached Data Sheet for queries on this ITB.

Kindly be advised that a Pre Bid Meeting will be held in order to clarify the Bid formal and technical requirements.

Date: 18 August 2016

Hour: 10:00 a.m.

Venue: ABRAVA - Auditório da Associação Brasileira de Refrigeração, Ar

Condicionado, Ventilação e Aquecimento.

Address: Av. Rio Branco, 1492 – Campos Elíseos, 01206-001 – São Paulo (SP).

We look forward to receiving your Bid and thanks you in advance for your interest in our procurement opportunities.

Cordially,

JOF - Joint Operations Facility

United Nations in Brazil

Section 2: Instruction to Bidders¹

Definitions

- a) "Bid" refers to the Bidder's response to the Invitation to Bid, including the Bid Submission Form, Technical Bid and Price Schedule and all other documentation attached thereto as required by the ITB.
- b) "Bidder" refers to any legal entity that may submit, or has submitted, a Bid for the supply of goods and provision of related services requested by UNDP.
- c) "Contract" refers to the legal instrument that will be signed by and between UNDP and the successful Bidder, all the attached documents thereto, including the General Terms and Conditions (GTC) and the Appendices.
- d) "Country" refers to the country indicated in the Data Sheet.
- e) "Data Sheet" refers to such part of the Instructions to Bidders used to reflect conditions of the tendering process that are specific for the requirements of the ITB.
- f) "Day" refers to calendar day.
- g) "Goods" refer to any tangible product, commodity, article, material, wares, equipment, assets or merchandise that UNDP requires under this ITB.
- h) "Government" refers to the Government of the country where the goods and related services provided/rendered specified under the Contract will be delivered or undertaken.
- i) "Instructions to Bidders" refers to the complete set of documents which provides Bidders with all information needed and procedures to be followed in the course of preparing their Bid
- j) "ITB" refers to the Invitation to Bid consisting of instructions and references prepared by UNDP for purposes of selecting the best supplier or service provider to fulfil the requirement indicated in the Schedule of Requirements and Technical Specifications.
- k) "LOI" (Section 1 of the ITB) refers to the Letter of Invitation sent by UNDP to Bidders.
- "Material Deviation" refers to any contents or characteristics of the bid that is significantly different from an essential aspect or requirement of the ITB, and (i) substantially alters the scope and quality of the requirements; (ii) limits the rights of UNDP and/or the obligations of the offeror; and (iii) adversely impacts the fairness and principles of the procurement process, such as those that compromise the competitive position of other offerors.

¹ Note: this Section 2 - Instructions to Bidders shall not be modified in any way. <u>Any necessary changes to address specific country and project information shall be introduced only through the Data Sheet.</u>

- m) "Schedule of Requirements and Technical Specifications" refers to the document included in this ITB as Section 3 which lists the goods required by UNDP, their specifications, the related services, activities, tasks to be performed, and other information pertinent to UNDP's receipt and acceptance of the goods.
- n) "Services" refers to the entire scope of tasks related or ancillary to the completion or delivery of the goods required by UNDP under the ITB.
- o) "Supplemental Information to the ITB" refers to a written communication issued by UNDP to prospective Bidders containing clarifications, responses to queries received from prospective Bidders, or changes to be made in the ITB, at any time after the release of the ITB but before the deadline for the submission of Bid.

A. GENERAL

- 1. UNDP hereby solicits Bids as a response to this Invitation to Bid (ITB). Bidders must strictly adhere to all the requirements of this ITB. No changes, substitutions or other alterations to the rules and provisions stipulated in this ITB may be made or assumed unless it is instructed or approved in writing by UNDP in the form of Supplemental Information to the ITB.
- Submission of a Bid shall be deemed as an acknowledgement by the Bidder that all obligations stipulated by this ITB will be met and, unless specified otherwise, the Bidder has read, understood and agreed to all the instructions in this ITB.
- 3. Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of any Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this ITB.
- 4. UNDP implements a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical practices, and obstruction. UNDP is committed to preventing, identifying and addressing all acts of fraud and corrupt practices against UNDP as well as third parties involved in UNDP activities. (See
 - http://www.undp.org/about/transparencydocs/UNDP Anti Fraud Policy English FINAL june 2011.pdf and
 - http://www.undp.org/content/undp/en/home/operations/procurement/procurement_protest/for full description of the policies)
- 5. In responding to this ITB, UNDP requires all Bidders to conduct themselves in a professional, objective and impartial manner, and they must at all times hold UNDP's interests paramount. Bidders must strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. All Bidders found to have a conflict of interest shall be disqualified. Without limitation on the generality of the above, Bidders, and any of their affiliates, shall be considered to have a conflict of interest with one or more parties in this solicitation process, if they:

- 5.1 Are, or have been associated in the past, with a firm or any of its affiliates which have been engaged UNDP to provide services for the preparation of the design, Schedule of Requirements and Technical Specifications, cost analysis/estimation, and other documents to be used for the procurement of the goods and related services in this selection process;
- 5.2 Were involved in the preparation and/or design of the programme/project related to the goods and related services requested under this ITB; or
- 5.3 Are found to be in conflict for any other reason, as may be established by, or at the discretion of, UNDP.

In the event of any uncertainty in the interpretation of what is potentially a conflict of interest, Bidders must disclose the condition to UNDP and seek UNDP's confirmation on whether or not such conflict exists.

- 6. Similarly, the following must be disclosed in the Bid:
 - 6.1 Bidders who are owners, part-owners, officers, directors, controlling shareholders, or key personnel who are family of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving the goods and related services under this ITB; and
 - 6.4 Others that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices.

Failure of such disclosure may result in the rejection of the Bid.

- 7. The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP's further evaluation and review of various factors such as being registered as an independent entity, the extent of Government ownership/share, receipt of subsidies, mandate, access to information in relation to this ITB, and others that may lead to undue advantage against other Bidders, and the eventual rejection of the Bid.
- 8. All Bidders must adhere to the UNDP Supplier Code of Conduct, which may be found at this link: http://web.ng.undp.org/procurement/undp-supplier-code-of-conduct.pdf

B. CONTENTS OF BID

9. Sections of Bid

Bidders are required to complete, sign and submit the following documents:

- 9.1 Bid Submission Cover Letter Form (see ITB Section 4);
- 9.2 Documents Establishing the Eligibility and Qualifications of the Bidder (see ITB Section 5);
- 9.3 Technical Bid (see prescribed form in ITB Section 6);
- 9.4 Price Schedule (see prescribed form in ITB Section 7);
- 9.5 Bid Security, if applicable (if required and as stated in the DS nos. 9-11, see prescribed Form in ITB Section 8);

9.6 Any attachments and/or appendices to the Bid (including all those specified under the **Data Sheet**)

10. Clarification of Bid

- 10.1 Bidders may request clarification of any of the ITB documents no later than the number of days indicated in the **Data Sheet** (DS no. 16) prior to the Bid submission date. Any request for clarification must be sent in writing via courier or through electronic means to the UNDP address indicated in the **Data Sheet** (DS no. 17). UNDP will respond in writing, transmitted by electronic means and will transmit copies of the response (including an explanation of the query but without identifying the source of inquiry) to all Bidders who have provided confirmation of their intention to submit a Bid.
- 10.2 UNDP shall endeavor to provide such responses to clarifications in an expeditious manner, but any delay in such response shall not cause an obligation on the part of UNDP to extend the submission date of the Bid, unless UNDP deems that such an extension is justified and necessary.

11. Amendment of Bid

- 11.1 At any time prior to the deadline for submission of Bid, UNDP may for any reason, such as in response to a clarification requested by a Bidder, modify the ITB in the form of a Supplemental Information to the ITB. All prospective Bidders will be notified in writing of all changes/amendments and additional instructions through Supplemental Information to the ITB and through the method specified in the **Data Sheet** (DS No. 18).
- 11.2 In order to afford prospective Bidders reasonable time to consider the amendments in preparing their Bid, UNDP may, at its discretion, extend the deadline for submission of Bid, if the nature of the amendment to the ITB justifies such an extension.

C. PREPARATION OF BID

12. Cost

The Bidder shall bear any and all costs related to the preparation and/or submission of the Bid, regardless of whether its Bid was selected or not. UNDP shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the procurement process.

13. Language

The Bid, as well as any and all related correspondence exchanged by the Bidder and UNDP, shall be written in the language (s) specified in the **Data Sheet** (DS No. 4). Any printed literature furnished by the Bidder written in a language other than the language indicated in the **Data Sheet**, must be accompanied by a translation in the preferred language indicated in the **Data Sheet**. For purposes of interpretation of the Bid, and in the event of discrepancy or inconsistency in meaning, the version translated into the preferred language shall govern. Upon conclusion of a contract, the language of the contract shall govern the relationship between the contractor and UNDP.

14. Bid Submission Form

The Bidder shall submit the Bid Submission Form using the form provided in Section 4 of this ITB.

15. Technical Bid Format and Content

Unless otherwise stated in the **Data Sheet** (DS no. 28), the Bidder shall structure the Technical Bid as follows:

- 15.1 Expertise of Firm/Organization this section should provide details regarding management structure of the organization, organizational capability/resources, and experience of organization/firm, the list of projects/contracts (both completed and on-going, both domestic and international) which are related or similar in nature to the requirements of the ITB, manufacturing capacity of plant if Bidder is a manufacturer, authorization from the manufacturer of the goods if Bidder is not a manufacturer, and proof of financial stability and adequacy of resources to complete the delivery of goods and provision of related services required by the ITB (see ITB Clause 18 and DS No. 26 for further details). The same shall apply to any other entity participating in the ITB as a Joint Venture or Consortium.
- 15.2 Technical Specifications and Implementation Plan this section should demonstrate the Bidder's response to the Schedule of Requirements and Technical Specifications by identifying the specific components proposed; how each of the requirements shall be met point by point; providing a detailed specification and description of the goods required, plans and drawings where needed; the essential performance characteristics, identifying the works/portions of the work that will be subcontracted; a list of the major subcontractors, and demonstrating how the bid meets or exceeds the requirements, while ensuring appropriateness of the bid to the local conditions and the rest of the project operating environment during the entire life of the goods provided. Details of technical bid must be laid out and supported by an Implementation Timetable, including Transportation and Delivery Schedule where needed, that is within the duration of the contract as specified in the **Data Sheet** (DS noS. 29 and 30).

Bidders must be fully aware that the goods and related services that UNDP require may be transferred, immediately or eventually, by UNDP to the Government partners, or to an entity nominated by the latter, in accordance with UNDP's policies and procedures. All bidders are therefore required to submit the following in their bids:

- a) A statement of whether any import or export licences are required in respect of the goods to be purchased or services to be rendered, including any restrictions in the country of origin, use or dual use nature of the goods or services, including any disposition to end users;
- b) Confirmation that the Bidder has obtained license of this nature in the past, and have an expectation of obtaining all the necessary licenses, should their bid be rendered the most responsive; and
- c) Complete documentation, information and declaration of any goods classified or may be classified as "Dangerous Goods".

15.3 Management Structure and Key Personnel – This section should include the comprehensive curriculum vitae (CVs) of key personnel that will be assigned to support the implementation of the technical bid, clearly defining their roles and responsibilities. CVs should establish competence and demonstrate qualifications in areas relevant to the requirements of this ITB.

In complying with this section, the Bidder assures and confirms to UNDP that the personnel being nominated are available to fulfil the demands of the Contract during its stated full term. If any of the key personnel later becomes unavailable, except for unavoidable reasons such as death or medical incapacity, among other possibilities, UNDP reserves the right to render the Bid non-responsive. Any deliberate substitution of personnel arising from unavoidable reasons, including delay in the implementation of the project of programme through no fault of the Bidder, shall be made only with UNDP's acceptance of the justification for substitution, and UNDP's approval of the qualification of the replacement who shall be either of equal or superior credentials as the one being replaced.

- 15.4 Where the **Data Sheet** requires the submission of the Bid Security, the Bid Security shall be included along with the Technical Bid. The Bid Security may be forfeited by UNDP, and reject the Bid, in the event of any or any combination of the following conditions:
 - a) If the Bidder withdraws its offer during the period of the Bid Validity specified in the **Data Sheet** (DS no. 11), or;
 - b) If the Bid Security amount is found to be less than what is required by UNDP as indicated in the **Data Sheet** (DS no. 9), or;
 - c) In the case the successful Bidder fails:
 - i. to sign the Contract after UNDP has awarded it;
 - ii. to comply with UNDP's variation of requirement, as per ITB Clause 35; or
 - iii. to furnish Performance Security, insurances, or other documents that UNDP may require as a condition to rendering effective the contract that may be awarded to the Bidder.

16. Price Schedule

The Price Schedule shall be prepared using the attached standard form (Section 7). It shall list all major cost components associated with the goods and related services, and the detailed breakdown of such costs. All goods and services described in the Technical Bid must be priced separately on a one-to-one correspondence. Any output and activities described in the Technical Bid but not priced in the Price Schedule, shall be assumed to be included in the prices of the items or activities, as well as in the final total price of the bid.

17. Currencies

All prices shall be quoted in the currency indicated in the **Data Sheet** (DS no. 15). However, where Bids are quoted in different currencies, for the purposes of comparison of all Bid:

- 17.1 UNDP will convert the currency quoted in the Bid into the UNDP preferred currency, in accordance with the prevailing UN operational rate of exchange on the last day of submission of Bid; and
- 17.2 In the event that the Bid found to be the most responsive to the ITB requirement is quoted in another currency different from the preferred currency as per **Data Sheet** (DS no. 15), then UNDP shall reserve the right to award the contract in the currency of UNDP's preference, using the conversion method specified above.

18. Documents Establishing the Eligibility and Qualifications of the Bidder

- 18.1 The Bidder shall furnish documentary evidence of its status as an eligible and qualified vendor, using the forms provided under Section 5, Bidder Information Forms. In order to award a contract to a Bidder, its qualifications must be documented to UNDP's satisfactions. These include, but are not limited to the following:
 - a) That, in the case of a Bidder offering to supply goods under the Contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the goods' manufacturer or producer to supply the goods in the country of final destination;
 - b) That the Bidder has the financial, technical, and production capability necessary to perform the Contract; and
 - c) That, to the best of the Bidder's knowledge, it is not included in the UN 1267 List or the UN Ineligibility List, nor in any and all of UNDP's list of suspended and removed vendors.
- 18.2 Bids submitted by two (2) or more Bidders shall all be rejected by UNDP if they are found to have <u>any</u> of the following:
 - a) they have at least one controlling partner, director or shareholder in common; or
 - b) any one of them receive or have received any direct or indirect subsidy from the other/s; or
 - c) they have the same legal representative for purposes of this ITB; or
 - d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Bid of, another Bidder regarding this ITB process;
 - e) they are subcontractors to each other's bid, or a subcontractor to one bid also submits another Bid under its name as lead Bidder; or
 - f) an expert proposed to be in the bid of one Bidder participates in more than one Bid received for this ITB process. This condition does not apply to subcontractors being included in more than one Bid.

19. Joint Venture, Consortium or Association

If the Bidder is a group of legal entities that will form or have formed a joint venture, consortium or association at the time of the submission of the Bid, they shall confirm in their Bid that: (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the joint venture jointly and severally, and this shall be duly evidenced by a duly notarized Agreement among the legal entities, which shall be submitted along with the Bid; and

(ii) if they are awarded the contract, the contract shall be entered into, by and between UNDP and the designated lead entity, who shall be acting for and on behalf of all entities that comprise the joint venture.

After the bid has been submitted to UNDP, the lead entity identified to represent the joint venture shall not be altered without the prior written consent of UNDP. Furthermore, neither the lead entity nor the member entities of the joint venture can:

- a) Submit another Bid, either in its own capacity; nor
- b) As a lead entity or a member entity for another joint venture submitting another Bid.

The description of the organization of the joint venture/consortium/association must clearly define the expected role of each of the entity in the joint venture in delivering the requirements of the ITB, both in the bid and in the Joint Venture Agreement. All entities that comprise the joint venture shall be subject to the eligibility and qualification assessment by UNDP.

Where a joint venture is presenting its track record and experience in a similar undertaking as those required in the ITB, it should present such information in the following manner:

- a) Those that were undertaken together by the joint venture; and
- b) Those that were undertaken by the individual entities of the joint venture expected to be involved in the performance of the services defined in the ITB.

Previous contracts completed by individual experts working privately but who are permanently or were temporarily associated with any of the member firms cannot be claimed as the experience of the joint venture or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials.

If the Bid of a joint venture is determined by UNDP as the most responsive Bid that offers the best value for money, UNDP shall award the contract to the joint venture, in the name of its designated lead entity, who shall sign the contract for and on behalf of all the member entities.

20. Alternative Bid

Unless otherwise specified in the **Data Sheet** (DS nos. 5 and 6), alternative bid shall not be considered. Where the conditions for its acceptance are met, or justifications are clearly established, UNDP reserves the right to award a contract based on an alternative bid.

21. Validity Period

- 21.1 Bid shall remain valid for the period specified in the **Data Sheet** (DS no. 8), commencing on the submission deadline date also indicated in the **Data Sheet** (DS no. 21). A Bid valid for a shorter period shall be immediately rejected by UNDP and rendered non-responsive.
- 21.2 In exceptional circumstances, prior to the expiration of the Bid validity period, UNDP may request Bidders to extend the period of validity of their Bid. The request and the responses shall be made in writing, and shall be considered integral to the Bid.

22. Bidder's Conference

When appropriate, a Bidder's conference will be conducted at the date, time and location specified in the **Data Sheet** (DS no. 7). All Bidders are encouraged to attend. Non-attendance, however, shall <u>not</u> result in disqualification of an interested Bidder. Minutes of the Bidder's conference will be either posted on the UNDP website, or disseminated to the individual firms who have registered or expressed interest with the contract, whether or not they attended the conference. No verbal statement made during the conference shall modify the terms and conditions of the ITB unless such statement is specifically written in the Minutes of the Conference, or issued/posted as an amendment in the form of a Supplemental Information to the ITB.

D. SUBMISSION AND OPENING OF BID

23. Submission

- 23.1 The Technical Bid and the Price Schedule <u>must</u> be submitted together and sealed together <u>in one and the same envelope</u>, delivered either personally, by courier, or by electronic method of transmission. If submission will not be done by electronic means, the Technical Bid and Price Schedule must be sealed together in an envelope whose external side must:
 - a) Bear the name of the Bidder;
 - b) Be addressed to UNDP as specified in the **Data Sheet** (DS no.20); and
 - c) Bear a warning not to open before the time and date for Bid opening as specified in the **Data Sheet** (DS no. 24).

If the envelope is not sealed nor labeled as required, the Bidder shall assume the responsibility for the misplacement or premature opening of Bid due to improper sealing and labeling by the Bidder.

- 23.2 Bidders must submit their Bid in the manner specified in the **Data Sheet** (DS nos. 22 and 23). When the Bid is expected to be in transit for more than 24 hours, the Bidder must ensure that sufficient lead time has been provided in order to comply with UNDP's deadline for submission. UNDP shall indicate for its record that the official date and time of receiving the Bid is the <u>actual</u> date and time when the said Bid has physically arrived at the UNDP premises indicated in the **Data Sheet** (DS no. 20).
- 23.3 Bidders submitting Bid by mail or by hand shall enclose the original and each copy of the Bid, in separate sealed envelopes, duly marking each of the envelopes as "Original Bid" and the others as "Copy of Bid". The two envelopes, consisting of original and copies, shall then be sealed in an outer envelope. The number of copies required shall be as specified in the Data Sheet (DS no. 19). In the event of any discrepancy between the contents of the "Original Bid" and the "Copy of Bid", the contents of the original shall govern. The original version of the Bid shall be signed or initialed by the Bidder or person(s) duly authorized to commit the Bidder on every page. The authorization shall be communicated through a document evidencing such authorization issued by the highest official of the firm, or a

Power of Attorney, accompanying the Bid.

23.4 Bidders must be aware that the mere act of submission of a Bid, in and of itself, implies that the Bidder accepts the General Contract Terms and Conditions of UNDP as attached hereto as Section 11.

24. Deadline for Submission of Bid and Late Bids

Bid must be received by UNDP at the address and no later than the date and time specified in the **Data Sheet** (DS no. 20 and 21).

UNDP shall not consider any Bid that arrives after the deadline for submission of Bid. Any Bid received by UNDP after the deadline for submission of Bid shall be declared late, rejected, and returned unopened to the Bidder.

25. Withdrawal, Substitution, and Modification of Bid

- 25.1 Bidders are expected to have sole responsibility for taking steps to carefully examine in detail the full consistency of its Bid to the requirements of the ITB, keeping in mind that material deficiencies in providing information requested by UNDP, or lack clarity in the description of goods and related services to be provided, may result in the rejection of the Bid. The Bidder shall assume any responsibility regarding erroneous interpretations or conclusions made by the Bidder in the course of understanding the ITB out of the set of information furnished by UNDP.
- A Bidder may withdraw, substitute or modify its Bid after it has been submitted by sending a written notice in accordance with ITB Clause 23, duly signed by an authorized representative, and shall include a copy of the authorization (or a Power of Attorney). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be received by UNDP prior to the deadline for submission and submitted in accordance with ITB Clause 23 (except that withdrawal notices do not require copies). The respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," or MODIFICATION".
- 25.3 Bid requested to be withdrawn shall be returned unopened to the Bidders.
- 25.4 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bid and the expiration of the period of Bid validity specified by the Bidder on the Bid Submission Form or any extension thereof.

26. Bid Opening

UNDP will open the Bid in the presence of an ad-hoc committee formed by UNDP of at least two (2) members. If electronic submission is permitted, any specific electronic Bid opening procedures shall be as specified in the **Data Sheet** (DS no. 23).

The Bidders' names, modifications, withdrawals, the condition of the envelope labels/seals, the

number of folders/files and all other such other details as UNDP may consider appropriate, will be announced at the opening. No Bid shall be rejected at the opening stage, except for late submission, for which the Bid shall be returned unopened to the Bidder.

27. Confidentiality

Information relating to the examination, evaluation, and comparison of Bid, and the recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process, even after publication of the contract award.

Any effort by a Bidder to influence UNDP in the examination, evaluation and comparison of the Bid or contract award decisions may, at UNDP's decision, result in the rejection of its Bid.

In the event that a Bidder is unsuccessful, the Bidder may seek a meeting with UNDP for a debriefing. The purpose of the debriefing is discussing the strengths and weaknesses of the Bidder's submission, in order to assist the Bidder in improving the bid presented to UNDP. The content of other bid and how they compare to the Bidder's submission shall not be discussed.

E. EVALUATION OF BID

28. Preliminary Examination of Bid

UNDP shall examine the Bid to determine whether they are complete with respect to minimum documentary requirements, whether the documents have been properly signed, whether or not the Bidder is in the UN Security Council 1267/1989 Committee's list of terrorists and terrorist financiers, and in UNDP's list of suspended and removed vendors, and whether the Bid are generally in order, among other indicators that may be used at this stage. UNDP may reject any Bid at this stage.

29. Evaluation of Bid

- 29.1 UNDP shall examine the Bid to confirm that all terms and conditions under the UNDP General Terms and Conditions and Special Conditions have been accepted by the Bidder without any deviation or reservation.
- 29.2 The evaluation team shall review and evaluate the Bids on the basis of their responsiveness to the Schedule of Requirements and Technical Specifications and other documentation provided, applying the procedure indicated in the **Data Sheet** (DS No. 25). Absolutely no changes may be made by UNDP in the criteria after all Bids have been received.
- 29.1 UNDP reserves the right to undertake a post-qualification exercise, aimed at determining, to its satisfaction the validity of the information provided by the Bidder. Such post-qualification shall be fully documented and, among those that may be listed in the **Data Sheet** (DS No.33), may include, but need not be limited to, all or any combination of the following:
 - a) Verification of accuracy, correctness and authenticity of the information provided by the

- bidder on the legal, technical and financial documents submitted;
- b) Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team;
- c) Inquiry and reference checking with Government entities with jurisdiction on the bidder, or any other entity that may have done business with the bidder;
- d) Inquiry and reference checking with other previous clients on the quality of performance on on-going or previous contracts completed;
- e) Physical inspection of the bidder's plant, factory, branches or other places where business transpires, with or without notice to the bidder;
- f) Testing and sampling of completed goods similar to the requirements of UNDP, where available; and
- g) Other means that UNDP may deem appropriate, at any stage within the selection process, prior to awarding the contract.

30. Clarification of Bid

To assist in the examination, evaluation and comparison of bids, UNDP may, at its discretion, ask any Bidder to clarify its Bid.

UNDP's request for clarification and the Bidder's response shall be in writing. Notwithstanding the written communication, no change in the prices or substance of the Bid shall be sought, offered, or permitted, except to provide clarification, and confirm the correction of any arithmetic errors discovered by UNDP in the evaluation of the Bid, in accordance with ITB Clause 35.

Any unsolicited clarification submitted by a Bidder in respect to its Bid, which is not a response to a request by UNDP, shall not be considered during the review and evaluation of the Bid.

31. Responsiveness of Bid

UNDP's determination of a Bid's responsiveness will be based on the contents of the Bid itself.

A substantially responsive Bid is one that conforms to all the terms, conditions, and specifications of the ITB without material deviation, reservation, or omission.

If a Bid is not substantially responsive, it shall be rejected by UNDP and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.

32. Nonconformities, Reparable Errors and Omissions

- 32.3 Provided that a Bid is substantially responsive, UNDP may waive any non-conformities or omissions in the Bid that, in the opinion of UNDP, do not constitute a material deviation.
- 32.4 Provided that a Bid is substantially responsive, UNDP may request the Bidder to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

- 32.5 Provided that the Bid is substantially responsive, UNDP shall correct arithmetical errors as follows:
 - a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of UNDP there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
 - b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
 - c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to the above.
- 32.6 If the Bidder does not accept the correction of errors made by UNDP, its Bid shall be rejected.

F. AWARD OF CONTRACT

33. Right to Accept, Reject, or Render Non-Responsive Any or All Bid

- 33.1 UNDP reserves the right to accept or reject any Bid, to render any or all of the Bids as non-responsive, and to reject all Bids at any time prior to award of contract, without incurring any liability, or obligation to inform the affected Bidder(s) of the grounds for UNDP's action. Furthermore, UNDP is not obligated to award the contract to the lowest price offer.
- 33.2 UNDP shall also verify, and immediately reject their respective Bid, if the Bidders are found to appear in the UN's Consolidated List of Individuals and Entities with Association to Terrorist Organizations, in the List of Vendors Suspended or Removed from the UN Secretariat Procurement Division Vendor Roster, the UN Ineligibility List, and other such lists that as may be established or recognized by UNDP policy on Vendor Sanctions. (See http://www.undp.org/content/undp/en/home/operations/procurement/procurement/protest/

34. Award Criteria

Prior to expiration of the period of Bid validity, UNDP shall award the contract to the qualified and eligible Bidder that is found to be responsive to the requirements of the Schedule of Requirements and Technical Specification, and has offered the lowest price (See DS No. 32).

35. Right to Vary Requirements at the Time of Award

At the time of award of Contract, UNDP reserves the right to vary the quantity of the goods and/or related services, by up to a maximum twenty five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

36. Contract Signature

Within fifteen (15) days from the date of receipt of the Contract, the successful Bidder shall sign and date the Contract and return it to UNDP.

Failure of the successful Bidder to comply with the requirement of ITB Section F.3 and this provision shall constitute sufficient grounds for the annulment of the award, and forfeiture of the Bid Security if any, and on which event, UNDP may award the Contract to the Bidder with the second highest rated Bid, or call for new Bid.

37. Performance Security

A performance security, if required, shall be provided in the amount and form provided in Section 9 and by the deadline indicated in the **Data Sheet** (DS no. 14), as applicable. Where a Performance Security will be required, the submission of the said document, and the confirmation of its acceptance by UNDP, shall be a condition for the effectivity of the Contract that will be signed by and between the successful Bidder and UNDP.

38. Bank Guarantee for Advanced Payment

Except when the interests of UNDP so require, it is the UNDP's preference to make no advanced payment(s) on contracts (i.e., payments without having received any outputs). In the event that the Bidder requires an advanced payment upon contract signature, and if such request is duly accepted by UNDP, and the said advanced payment exceeds 20% of the total Bid price, or exceed the amount of USD 30,000, UNDP shall require the Bidder to submit a Bank Guarantee in the same amount as the advanced payment. A bank guarantee for advanced payment shall be furnished in the form provided in Section 10.

39. Vendor Protest

UNDP's vendor protest procedure provides an opportunity for appeal to those persons or firms not awarded a purchase order or contract through a competitive procurement process. In the event that a Bidder believes that it was not treated fairly, the following link provides further details regarding UNDP vendor protest procedures:

http://www.undp.org/procurement/protest.shtml

Instructions to Bidders

DATA SHEET²

The following data for the supply of goods and related services shall complement / supplement the provisions in the Instruction to Bidders. In the case of a conflict between the Instruction to Bidders and the Data Sheet, the provisions in the Data Sheet shall prevail.

DS No.	Cross Ref. to Instructions	Data	Specific Instructions / Requirements					
1		Project Title:	HCFC Phase Out Management Plan (HPMP) Brazil – Better HCFC-22 Containment Projects in Brazilian Supermarkets					
2		Title of Goods/Services/Work Required:	RAC System Components, Equipment, Tools and Consumables for the Implementation of HCFC Containment Demonstration Projects in Brazilian Supermarkets.					
3		Country:	Brazil					
4	C.13	Language of the Bid:	☑ English☑ French☑ Others – Portuguese					
5	C.20	Conditions for Submitting Bid for Parts or sub-parts of the Total Requirements						
6	C.20	Conditions for Submitting Alternative Bid	Shall not be considered					
7	C.22	A pre-Bid conference will be held on:	18 August 2016 at 10 a.m. Venue: Auditória da Associação Brasileira de Refrigeração, Ar Condicionado, Ventilação e Aquecimento (ABRAVA) Address: Av. Rio Branco, 1492 – Campos Elíseos, 01206-001 – São Paulo (SP).					

 $^{^2}$ All DS number entries in the Data Sheet are cited as references in the Instructions to Bidders. All DS Nos. corresponding to a Data must not be modified. Only information on the 3^{rd} column may be modified by the user. If the information does not apply, the 3^{rd} column must state "n/a" but must not be deleted.

8	C.21.1	Period of Bid Validity commencing on the submission date	☐ 60 days ☐ 90 days ☑ 120 days
9	B.9.5 C.15.4 b)	Bid Security	Not Required ■ Not Required N
10	B.9.5	Acceptable forms of Bid Security ³	n/a
11	B.9.5 C.15.4 a)	Validity of Bid Security	n/a
12		Advanced Payment upon signing of contract	Not allowed
13		Liquidated Damages	 ✓ Will be imposed under the following conditions: Percentage of contract price per day of delay:0,5% Max. no. of days of delay :30 days Next course of action : Termination of contract
14	F.37	Performance Security	Not Required ■ Not Required ■ Not Required ■ Not Required ■ Not Required Not Req
15	C.17 C.17.2	Preferred Currency of Bid and Method for Currency conversion	 ☑ United States Dollars (US\$) ☑ Local Currency (Real) Reference date for determining UN Operational Exchange Rate: UN Exchange Rate valid on the Bid Openning Section (September, 2016) http://treasury.un.org/operationalrates/Operationa IRates.aspx
16	B.10.1	Deadline for submitting requests for clarifications/ questions	23 August 2016
17	B.10.1	Contact Details for submitting clarifications/questions ⁴	E-mail: licitacoes.jof@un.org.br Ref: JOF-0131-29582/2016

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 $^{^3}$ Surety bonds or other instruments issued by non-bank Financial Institutions are least preferred by UNDP. Unless stated otherwise, they shall be considered unacceptable to UNDP.

⁴ This contact person and address is officially designated by UNDP. If inquiries are sent to other person/s or address/es, even if they are UNDP staff, UNDP shall have no obligation to respond nor can UNDP confirm that the query was officially received.

			Address: UN House Brazil JOF - Joint Operations Facility Ref. JOF-0131-29582/2016 Casa das Nações Unidas no Brasil Setor de Embaixadas Norte, Quadra 802, Conjunto C, Lote 17 Complexo Sergio Vieira de Mello, Módulo I, Prédio Zilda Arns, Salas 117 a 123 CEP 70800-400 – Brasília, DF - Brasil
18	B.11.1	Manner of Disseminating Supplemental Information to the ITB and responses/clarifications to queries	☑ Direct communication to prospective Bidders by email or fax, and Posting on the website ⁵ : http://www.un.org.br/licitacoes/Home/Licitacoes
19	D.23.3	No. of copies of Bid that must be submitted	Original: 1 Copies: 1 hardcopy and one digital
20	D.23.1 b) D.23.2 D.24	Bid submission address	UN House Brazil JOF - Joint Operations Facility Ref. JOF-0131-29582/2016 Casa das Nações Unidas no Brasil Setor de Embaixadas Norte, Quadra 802, Conjunto C, Lote 17 Complexo Sergio Vieira de Mello, Módulo I, Prédio Zilda Arns, Salas 117 a 123 CEP 70800-400 – Brasília, DF - Brasil
21	C.21.1 D.24	Deadline of Receipt of Proposals	15 September 2016 at 03:00 P.M.
22	D.23.2	Manner of Submitting Bid	☑ Courier/Hand Delivery
23	D.23.2 D.26	Conditions and Procedures for electronic submission and opening, if allowed	N/A
24	D.23.1 c)	Date, time and venue for opening of Bid	Date and Time: 16 September 2016, 03:00 P.M. Venue: UN House Brazil

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 $^{^{5}}$ Posting on the website shall be supplemented by directly transmitting the communication to the prospective offerors.

			Casa das Nações Unidas no Brasil Setor de Embaixadas Norte, Quadra 802, Conjunto C, Lote 17 Complexo Sergio Vieira de Mello, Módulo I, Prédio Zilda Arns, Salas 117 a 123 CEP 70800-400 – Brasília, DF - Brasil
25		Evaluation method to be used in selecting the most responsive Bid	 ✓ Non-Discretionary "Pass/Fail" Criteria on the Technical Requirements; and ✓ Lowest price offer of technically qualified/responsive Bid per item
26	C.15.1	Required Documents that must be Submitted to Establish Qualification of Bidders (In "Certified True Copy" form only)	 ☑ Company Profile, which should not exceed fifteen (15) pages, including printed brochures and product catalogues relevant to the goods/services being procured ☐ Members of the Governing Board and their Designations duly certified by the Corporate Secretary, or its equivalent document if Bidder is not a corporation ☑ List of Shareholders and Other Entities Financially Interested in the Firm owning 5% or more of the stocks and other interests, or its equivalent if Bidder is not a corporation ☑ Tax Registration/Payment Certificate issued by the Internal Revenue Authority evidencing that the Bidder is updated with its tax payment obligations, or Certificate of Tax exemption, if any such privilege is enjoyed by the Bidder ☑ Certificate of Registration of the business, including Articles of Incorporation, or equivalent document if Bidder is not a corporation ☑ Trade name registration papers, if applicable ☑ Local Government permit to locate and operate in the current location of office or factory ☑ Official Letter of Appointment as local representative, if Bidder is submitting a Bid in behalf of an entity located outside the country ☑ Quality Certificate (e.g., ISO, etc.) and/or other similar certificates, accreditations, awards and citations received by the Bidder, if any ☐ Environmental Compliance Certificates, Accreditations, Markings/Labels, and other evidences of the Bidder's practices which contributes to the ecological sustainability and reduction of adverse

	environmental impact (e.g., use of non-toxic substances, recycled raw materials, energy-efficient equipment, reduced carbon emission, etc.), either in its business practices or in the goods it manufactures Patent Registration Certificates, if any of technologies submitted in the Bid is patented by the Bidder Plan and details of manufacturing capacity, if Bidder is a manufacturer of the goods to be supplied Certification or authorization to act as Agent in behalf of the Manufacturer, or Power of Attorney, if bidder is not a manufacturer Latest Audited Financial Statement (Income Statement and Balance Sheet) including Auditor's Report for the past [indicate number of years of reference] Statement of Satisfactory Performance from the Top [indicate number] Clients in terms of Contract Value the past [indicate number of years of reference] List of Bank References (Name of Bank, Location, Contact Person and Contact Details) All information regarding any past and current litigation during the last five (5) years, in which the bidder is involved, indicating the parties concerned, the subject of the litigation, the amounts involved, and the final resolution if already concluded.
Other documents that may be Submitted to Establish Eligibility	In case of Brazilian Offerors, the legal status and registration will be verified based on the presentation of the following documents: a) Organizational Registration Document — Declaration of sole proprietor, By-Laws or Articles of Organization — in force, duly registered or enrolled in the proper organ, and evidencing the acting executive officers. b) Declaration of non-existence of nighttime work, hazardous or unhealthy conditions to minors less than eighteen years of age and, furthermore, that there are no minors less than sixteen years of age employed, except in the condition of apprentice, as from fourteen years of age.
	Submitted to Establish

			c) Debt Clearance Certificate in respect to Federal Taxes and Contributions issued by the Brazilian Federal Revenue Department. d) State or Federal District Tax and Social Contribution Debt Clearance Certificate issued by the relevant authority; e) Municipal Tax and Social Contribution Debt Clearance Certificates issued by the relevant authority; f) Debt Clearance Certificate (CND), issued by the Brazilian Federal Revenue Department. g) Certificate of Good Standing with Employee Severance Fund ("FGTS"), issued by Caixa Econômica Federal (CEF) [Federal Saving Bank];			
28	C.15	Structure of the Technical Bid and List of Documents to be Submitted	Detailed product descriptions of each item with pictures incl. drawings, diagrams and tables, if applicable Inform delivery date			
29	C.15.2	Latest Expected date for commencement of Contract	Upon contract signature			
30	C.15.2	Maximum Expected duration of contract	3 months			
31		UNDP will award the contract to:				
32	F.34	Criteria for the Award and Evaluation of Bid	Award Criteria Non-discretionary "Pass" or "Fail" rating on the detailed contents of the Schedule of Requirements and Technical Specifications Compliance on the following qualification requirements: Bid Evaluation Criteria ⁶ Minimum no. of years of experience in similar contracts: [indicate number];			

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⁶ Pls. reconcile and ensure consistency with the contents of the Technical Specifications

			□ Minimum annual turnover of [indicate amount and currency] for the past [indicate number of years of reference]; □ Current ratio of not less than 1.0 [modify if a higher number is required]; □ Net Working Capital of [indicate amount and currency] for the past [indicate number of years of reference]; □ Minimum no. of similar projects undertaken over the past 3 years [indicate number]; □ Highest value of contract over the past 5 years [indicate number]; □ Full compliance of Bid to the Technical Requirements; ☑ Quality Inspection and Testing Certificates for the goods to be supplied; ☑ After-sales service of at least 12 month; □ Lowest Operating Costs Evidenced by a Table of Consumables, Rate of Consumption, and Unit Price; ☑ Warranty on parts and services for a minimum period of 12 month; □ User's Training for a minimum of [indicate number of persons] to be conducted at [indicate location] for a period of [indicate duration]; □ Maximum percentage of supply/work that will be sub-contracted [indicate percentage]; ☑ Acceptability of the Transportation/Delivery Schedule; □ Appropriateness of the Implementation Timetable to Project Schedule; □ Qualification of the Team Leader to directly coordinate with UNDP [specify details]; □ Qualification of all other personnel to be assigned to the contract [specify details]
33	E.29	Post qualification Actions	 ✓ Verification of accuracy, correctness and authenticity of the information provided by the bidder on the legal, technical and financial documents submitted; ✓ Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team;

34		☑ Signature of contract by UNDP and the selected provider
35	Other Information Related to the ITB ⁷	Not Applicable

 $^{^{7}}$ Where the information is available in the web, a URL for the information may simply be provided.

Section 3a: Schedule of Requirements and Technical Specifications

Lot 1 Components for cooling positions for Supermarket 1

Position Number	Item/s to be Supplied	Quantity	Description/Specifications of Goods	Related Services	Delivery Date	Other Information			
Expansion Valves	,								
1	Thermostatic Expansion Valve (TEV). Refrigerant HCFC R22.	4	Stainless steel TEV body with bimetal (stainless steel/copper) connections for brazing into a refrigeration system, PS 34 bar. Valve for interchangeable orifice assembly and external pressure equalization. Range -40°C / +10°C Size: ¼ x ½ (Ext. ¼) Type: TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.			
2	Thermostatic Expansion Valve (TEV). Refrigerant HCFC R22.	20	Stainless steel TEV body with bimetal (stainless steel/copper) connections for brazing into a refrigeration system, PS 34 bar. Valve for interchangeable orifice assembly and external pressure equalization. Range -40°C / +10°C Size: ¾ x ½ (Ext. ¼) Type: TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.			

	Т	1	T	T		
			Stainless steel TEV body with	Transport until	Max. 90 days	Besides the
			bimetal (stainless steel/copper)	final	after signing of	product price
			connections for brazing into a	destination	contract	the quote may
	Thermostatic		refrigeration system, PS 34 bar.			also include
	Expansion Valve		Valve for interchangeable orifice			costs and
3	(TEV). Refrigerant	4	assembly and internal pressure			insurance for
3	HCFC R22.	4	equalization.			transportation
						until final
			Range -40°C / +10°C			destination in
			Size: ¼ x ½			Belém-PA,
			Type: TUA or equivalent			according to
						section 3b.
			Stainless steel TEV body with	Transport until	Max. 90 days	Besides the
			bimetal (stainless steel/copper)	final	after signing of	product price
			connections for brazing into a	destination	contract	the quote may
	Thermostatic		refrigeration system, PS 34 bar.			also include
	Expansion Valve		Valve for interchangeable orifice			costs and
4	(TEV). Refrigerant	4	assembly and internal pressure			insurance for
4	HCFC R22.	4	equalization.			transportation
						until final
			Range -40°C / +10°C			destination in
			Size: 3/8 x 1/2			Belém-PA,
			Type: TUA or equivalent			according to
						section 3b.
				Transport until	Max. 90 days	Besides the
			Orifice assembly with filter and	final	after signing of	product price
	Orifice for		gasket.	destination	contract	the quote may
	Thermostatic					also include
5		7	Nom. Capacity R22 0,6 kW,			costs and
5	Expansion Valve with stainless steel	′	Size: 0,			insurance for
			Type: TUA/TUAE or equivalent			transportation
	body.					until final
						destination in
						Belém-PA,

						according to section 3b.
6	Orifice for Thermostatic Expansion Valve with stainless steel body.	7	Orifice assembly with filter and gasket. Nom. Capacity R22 0,9 kW, Size: 1, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
7	Orifice for Thermostatic Expansion Valve with stainless steel body.	7	Orifice assembly with filter and gasket. Nom. Capacity R22 1,3 kW, Size: 2, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
8	Orifice for Thermostatic Expansion Valve with stainless steel body.	7	Orifice assembly with filter and gasket. Nom. Capacity R22 1,8 kW, Size: 3, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final

						destination in Belém-PA, according to section 3b.
9	Orifice for Thermostatic Expansion Valve with stainless steel body.	10	Orifice assembly with filter and gasket. Nom. Capacity R22 2,6 kW, Size: 4, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
10	Orifice for Thermostatic Expansion Valve with stainless steel body.	10	Orifice assembly with filter and gasket. Nom. Capacity R22 3,5 kW, Size: 5, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
11	Orifice for Thermostatic Expansion Valve with stainless steel body.	5	Orifice assembly with filter and gasket. Nom. Capacity R22 5,3 kW, Size: 6, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

						transportation until final destination in Belém-PA, according to section 3b.
12	Orifice for Thermostatic Expansion Valve with stainless steel body.	3	Orifice assembly with filter and gasket. Nom. Capacity R22 7,0 kW, Size: 7, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
13	Spare gasket	25	Orifice assembly. Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
14	Spare filter	25	Orifice assembly. Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include

						costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
15	Bulb Strap	1	Sensor bulb fixation for max. 28mm tube diameter. Bulb strap with nut lock, strap and screw. Size: 0,4 - max 28 mm Tube Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
16	Bulb Strap	1	Sensor bulb fixation for max. 50mm tube diameter. Bulb strap with nut lock, strap and screw. Size: 0,4 - max 50 mm Tube Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

Strainer						
17	Y- Filter Strainer with flanges for brazing connections	2	Removal of debris from refrigerant and oil, PS = 34,5 bar and for temperatures -29°C to 93°C. The strainer assembly is made from brass with a stainless steel mesh screen. The O-ring is made from neoprene. Area 2030 mm² Mesh 100 Size: ½ ODS	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
18	Y- Filter Strainer with flanges for brazing connections	2	Removal of debris from refrigerant and oil, PS = 34,5 bar and for temperatures -29°C to 93°C. The strainer assembly is made from brass with a stainless steel mesh screen. The O-ring is made from neoprene. Area 4520 mm² Mesh 100 Size: 5% ODS	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
19	Permanent copper Strainer, hermetically, for brazing connections, PS = 30 bar	22	Permanent copper strainers are used for filtering particles and contaminants with a stainless steel screen in the filter body. Brazed-in connections at in- and outlet side. Size: 3/8"	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in

20	Permanent copper Strainer, hermetically, for brazing connections, PS = 30 bar	5	Permanent copper strainers are used for filtering particles and contaminants with a stainless steel screen in the filter body. Brazed-in connections at in- and outlet side. Size: 1/2"	Transport until final destination	Max. 90 days after signing of contract	Belém-PA, according to section 3b. Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
Solenoid Valves				l -	1.4 00 1	5 .1 .1
21	Solenoid Valve, without Coil, with flanges for brazing connections.	3	Normally closed, direct operated solenoid valve for liquid, suction and hot gas lines with fluorinated refrigerants, PS 42,5 bar. Kv value 0,270 m³/h Size: ¼ Type: EVR 3 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
22	Solenoid Valve, without Coil, with flanges for brazing connections.	12	Normally closed, direct operated solenoid valve for liquid, suction and hot gas lines with fluorinated refrigerants, PS 42,5 bar. Kv value 0,270 m³/h	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

			Size: ¾			transportation
			Type: EVR 3 or equivalent			until final
			Type. LVN 3 of equivalent			destination in
						Belém-PA,
						according to
						_
				T.	NA: OO da	section 3b.
				Transport until	Max. 90 days	Besides the
			Normally closed, servo operated	final	after signing of	product price
			solenoid valve for liquid, suction	destination	contract	the quote may
			and hot gas lines with fluorinated			also include
	Solenoid Valve,		refrigerants, PS 42,5 bar.			costs and
	without Coil, with	2	l remigerants, ro 12,5 barr			insurance for
	flanges for brazing	_	Kv value 0,800 m³/h			transportation
23	connections.		Size: ½			until final
25			Type: EVR 6 or equivalent			destination in
			Type. LVN 0 of equivalent			Belém-PA,
						according to
						section 3b.
				Transport until	Max. 90 days	Besides the
				final	after signing of	product price
			Coil for clip-on fastening without	destination	contract	the quote may
			tools, supplied with a minimum of			also include
			1 metre 3-core cable, coil			costs and
	Coil for solenoid	40	enclosure IP 67.			insurance for
	valve.	10				transportation
2.4			10 Watt, 220 Volts, 60 Hz			until final
24			·			destination in
			Type: BF or equivalent			Belém-PA,
			'			according to
						section 3b.
	Service Kit for		The service kit is consisting of the	Transport until	Max. 90 days	Besides the
	solenoid valve (Kv	_	O-ring, screw, armature	final	after signing of	product price
	0,160 - 0,270	5	assembly, rubber gasket, and	destination	contract	the quote may
25	m³/h)		compress spring.			also include

			Type: EVR 2&3 or equivalent The seal kit is consisting of the O-	Transport until	Max. 90 days	costs and insurance for transportation until final destination in Belém-PA, according to section 3b. Besides the
26	Seal Kit for solenoid valve (Kv 0,160 - 0,270 m ³ /h)	5	ring and the rubber gasket. Type: EVR 2&3 or equivalent	final destination	after signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
Brazing Adapters						
27	Flare - Brazing adapter, size ¼"/¼"	40	Industrial manufactured flare/brazing adapter containing a copper seal which protects the flare collar against wear and fatigue. The copper seal ensures a tightness similar to that of brazed joints, PS 46 bar. Size: ¼ / ¼ Type: FSA 22 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

28	Flare - Brazing adapter, size %"/¼"	40	Industrial manufactured flare/brazing adapter containing a copper seal which protects the flare collar against wear and fatigue. The copper seal ensures a tightness similar to that of brazed joints, PS 46 bar. Size: ¾ / ¼ Type: FSA 32 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
29	Flare - Brazing adapter, size ¾" / ¾"	40	Industrial manufactured flare/brazing adapter containing a copper seal which protects the flare collar against wear and fatigue. The copper seal ensures a tightness similar to that of brazed joints, PS 46 bar. Size: 3/8 / 3/8 Type: FSA 33 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
30	Flare - Brazing adapter, size ½" / ½"	20	Industrial manufactured flare/brazing adapter containing a copper seal which protects the flare collar against wear and fatigue. The copper seal ensures a tightness similar to that of brazed joints, PS 46 bar. Size: ½" / ½" Type: FSA 44 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA,

31	Flare - Brazing adapter, size %" / %"	15	Industrial manufactured flare/brazing adapter containing a copper seal which protects the flare collar against wear and fatigue. The copper seal ensures a tightness similar to that of brazed joints, PS 46 bar. Size: 5%" / 5%" Type: FSA 516m or equivalent	Transport until final destination	Max. 90 days after signing of contract	according to section 3b. Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
32	Flare - Brazing adapter, size ¾" / ¾"	15	Industrial manufactured flare/brazing adapter containing a copper seal which protects the flare collar against wear and fatigue. The copper seal ensures a tightness similar to that of brazed joints, PS 46 bar. Size: ¾" / ¾" Type: FSA 66 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
33	Solder Adaptor Copper Gasket Replacement 1/4"	1	Packaging unit of 300 pieces 1/4" Type: B2-4 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation

						until final destination in Belém-PA, according to section 3b.
34	Solder Adaptor Copper Gasket Replacement %"	1	Packaging unit of 300 pieces %" Type: B2-6 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
35	Solder Adaptor Copper Gasket Replacement ½"	1	Packaging unit of 200 pieces ½" Type: B2-8 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
36	Solder Adaptor Copper Gasket Replacement %"	2	Packaging unit of 100 pieces %" Type: B2-10 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and

			Packaging unit of 50 pieces ¾"	Transport until	Max. 90 days after signing of	insurance for transportation until final destination in Belém-PA, according to section 3b. Besides the product price
37	Solder Adaptor Copper Gasket Replacement ¾"	2	Type: B2-12 or equivalent	destination	contract	the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
Ball Valves						
38	Ball-Valve size ¾" without access port for the cooling positions.	15	Manual operated shut-off valve suitable for bi-directional flow of all fluorinated refrigerants and with brazing connections. Valve with one-piece wire seal cap to prevent unintentional cap removal or tampering between services, 1/4 turn for fully open to fully closed, full flow with a minimum pressure loss and PS of 45 bar. Size: 3/8" Type: GBC 10 s or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

39	Ball-Valve size ¾" without access port for the oil return line at the oil separator.	2	Manual operated shut-off valve suitable for bi-directional flow of all fluorinated refrigerants and with brazing connections. Valve with one-piece wire seal cap to prevent unintentional cap removal or tampering between services, 1/4 turn for fully open to fully closed, full flow with a minimum pressure loss and PS of 45 bar. Size: 3/8" Type: GBC 10 s or equivalent Manual operated shut-off valve	Transport until final destination Transport until	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
40	Ball-Valve size ¾" without access port for the cooling positions and machinery room.	16	suitable for bi-directional flow of all fluorinated refrigerants and with brazing connections. Valve with one-piece wire seal cap to prevent unintentional cap removal or tampering between services, 1/4 turn for fully open to fully closed, full flow with a minimum pressure loss and PS of 45 bar. Size: ¾" Type: GBC 18 s or equivalent	final destination	after signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

41	Ball-Valve size ¾" without access port.	5	Manual operated shut-off valve suitable for bi-directional flow of all fluorinated refrigerants and with brazing connections. Valve with one-piece wire seal cap to prevent unintentional cap removal or tampering between services, 1/4 turn for fully open to fully closed, full flow with a minimum pressure loss and PS of 45 bar. Size: ½"	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
			Type: GBC 22 s or equivalent	Transport until	May 90 days	Resides the
42	Ball-Valve size 1½" without access port.	6	Manual operated shut-off valve suitable for bi-directional flow of all fluorinated refrigerants and with brazing connections. Valve with one-piece wire seal cap to prevent unintentional cap removal or tampering between services, 1/4 turn for fully open to fully closed, full flow with a minimum pressure loss and PS of 45 bar. Size: 11/8 Type: GBC 28 s or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
43	Ball-Valve size 1%" without access port.	5	Manual operated shut-off valve suitable for bi-directional flow of all fluorinated refrigerants and with brazing connections. Valve with one-piece wire seal cap to prevent unintentional cap	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

44	Ball-Valve size 1%" without access port.	6	removal or tampering between services, 1/4 turn for fully open to fully closed, full flow with a minimum pressure loss and PS of 45 bar. Size: 1¾" Type: GBC 35 s or equivalent Manual operated shut-off valve suitable for bi-directional flow of all fluorinated refrigerants and with brazing connections. Valve with one-piece wire seal cap to prevent unintentional cap removal or tampering between services, 1/4 turn for fully open to fully closed, full flow with a minimum pressure loss and PS of 45 bar.	Transport until final destination	Max. 90 days after signing of contract	transportation until final destination in Belém-PA, according to section 3b. Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to
			Size: 1%" Type: GBC 42 s or equivalent			section 3b.
45	Ball -Valve Spare Service Kit	1	Valves from 1/4" to 7/8" - 21mm Multi-Pack Type: GBC 6s to 22s or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

46	Ball -Valve Spare Service Kit	1	Valves from 1%" to 1%" - 31mm Multi-Pack, Type: GBC 25s to 35s or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
47	Ball -Valve Spare Service Kit	1	Valves from 1%" to 3%"- 42mm, Multi-Pack Type: GBC 38s to 79s or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
48	Ball-Valve Spare Cap	1	Valves from 1/4" to 7/8" - 21mm, Multi-Pack Type: GBC 6s to 22s or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA,

						according to
						section 3b.
49	Ball-Valve Spare Cap	1	Valves from 1½" to 1¾" - 31mm, Multi-Pack Type: GBC 25s to 35s or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
50	Ball-Valve Spare Cap	1	Valves from 1%" to 3%"- 42mm, Multi-Pack Type: GBC 38s to 79s or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
Sight Glasses	_			T	T	
51	Sight glass for HCFC R22 with brazing adapters and humidity indicator.	3	The sight glass will be used to indicate the condition of the refrigerant (including moisture content) and/or the flow in the oil return line from the oil separator. The maximum working pressure PS is 35 bar.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation

			Size: 3/8" x 3/8" Type: SGI 10s or equivalent			until final destination in Belém-PA, according to section 3b.
52 Tubing Component	Sight glass for HCFC R22 with flaring connections and humidity indicator.	3	The sight glass will be used to indicate the condition of the refrigerant (including moisture content) and/or the flow in the oil return line from the oil separator. The maximum working pressure PS is 35 bar. Size: 3/8" x 3/8" Type: SGI 10 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
rubing component	S			Transport until	Max. 90 days	Besides the
53	Flare Nut	75	Flare Nut ¼" / 7/16" UNF Type: DIN8912 or equivalent	final destination	after signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
54	Copper Cap (Gasket)	100	Copper Cap (Gasket) ¼" / 7/16" UNF Type: DIN8912 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include

						costs and insurance for transportation until final destination in Belém-PA,
						according to section 3b.
55	Shutoff Valve with flare/solder and T- connection	6	Shutoff Valve with flare/solder and T-connection ¼ - Charging Type: HBLK6 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
56	Shutoff Valve with flare/solder and T-connection	4	Shutoff Valve with flare/solder and T-connection 3/4 - Evacuation Type: HBLK10 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
57	Copper Gasket	100	Copper Gasket 7/16"	Transport until final	Max. 90 days after signing of	Besides the product price

				destination	contract	the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
58	Copper Gasket	100	Copper Gasket 5/8"	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
59	Copper Seal	100	Copper Seal 1/4" Type: CUD-06 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

Lot 2 General Refrigeration Circuit Components for Supermarket 1

Position Number	Item/s to be Supplied	Quantity	Description/Specifications of Goods	Related Services	Delivery Date	Other Information
Flexible Process Cor	ntrol Lines and Adapto	er				
60	Flexible process line with inner diameter of 4 mm, color orange.	2	Flexible refrigerant transfer line for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is -45°C to 130°C. Diffusion tight and oil resistant. Length of 10 meter	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
61	Pressing connector without core depressor, straight, in set of ten pieces.	2	Flexible refrigerant transfer line accessories for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is -45°C to 130°C. 7/16", 4mm	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

62	Pressing connector without core depressor, elbow 90°, in set of ten pieces.	2	Flexible refrigerant transfer line accessories for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is - 45°C to 130°C. 7/16", 4mm	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
63	Pressing connector without core depressor, straight, in set of ten pieces.	2	Flexible refrigerant transfer line accessories for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is -45°C to 130°C. 5/8", 4mm	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
64	Pressing connector without core depressor, elbow 90°, in set of ten pieces.	2	Flexible refrigerant transfer line accessories for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is - 45°C to 130°C. 5/8", 4mm	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA,

			Flexible refrigerant transfer line accessories for connection of pressure limiter and controller.	Transport until final destination	Max. 90 days after signing of contract	according to section 3b. Besides the product price the quote may also include costs and
65	Pressing connector T-fitting, in set of ten pieces.	1	Maximum operational pressure PS is 60 bar, operation range is - 45°C to 130°C.			insurance for transportation until final destination in Belém-PA, according to section 3b.
66	Hydraulic pressing pliers for DN 4mm pressing operation	1	Flexible refrigerant transfer line accessories for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is - 45°C to 130°C. 4mm	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
67	Core depressor opener in set of 50 pieces	1	Flexible refrigerant transfer line accessories for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is - 45°C to 130°C.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final

						destination in Belém-PA, according to section 3b.
68	Tube cutter	1	Flexible refrigerant transfer line connection tool	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
69	Spare blade for tube cutter in set of two pieces	1	Flexible refrigerant transfer line accessories	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
70	Copper gaskets in set of 50 pieces	2	Flexible refrigerant transfer line accessories for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is - 45°C to 130°C.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

Safety and Control	Dovisos		7/16" UNF			transportation until final destination in Belém-PA, according to section 3b.
Safety and Control	Devices		Counter pressure independent	Transport until	Max. 90 days	Besides the
71	Overflow Safety Valve	2	overflow safety valve to avoid emission of refrigerant to the environment. In case of activation, the refrigerant is leaded into the low-pressure side of the refrigeration system. Safety valve is led sealed and with acceptance test certificate (TUV / DEKRA or equivalent). Permissible temperature range is -30°C to +120°C and the valve is suitable for all halogenated refrigerants. Set pressure 28 bar Type: ÜSV Hansa or equivalent	final destination	after signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
72	Overflow safety valve discharge tube, complete assembly set.	2	Assembly set consists of: Gauge, double nut, connection tube, brazing adapter Type: ÜSV Hansa or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA,

						according to section 3b.
Suction Accumulat	tor					
73	Suction line accumulator for Minus Cooling to = -33°C / tc 45°C and for Bitzer compressor 4J- 13.2 (frequency controlled), refrigeration capacity Qo = 9,6 kW refrigerant HCFC R22	1	Accumulator with integrated oil injection technology. Even if the accumulator is full of liquid refrigerant, it is not possible for liquid to enter the compressor suction. Maximum allowable operating pressure (PS max) is 20 bar (-10°C to -50°C). Volume 7,5 litre, brazing connections 1¾" (35mm) ODS, vessel diameter 200mm, weight 5,6 kg.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
74	Suction line accumulator for Plus Cooling to = -17°C / tc 45°C and for Bitzer compressor 6J- 22.2 (frequency controlled), refrigeration capacity Qo = 16 kW refrigerant HCFC R22 (part load).	1	Type: FA 35 or equivalent Accumulator with integrated oil injection technology. Even if the accumulator is full of liquid refrigerant, it is not possible for liquid to enter the compressor suction. Maximum allowable operating pressure (PS max) is 20 bar (-10°C to -50 °C). Volume 7,5 litre, brazing connections 1%" (35mm) ODS, vessel diameter 200mm, weight 5,6 kg Type: FA 35 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

75 Oil Separator	Heater Band for suction line accumulator plus and minus cooling system	2	Heater band for vessels with diameter from 190mm to 270mm. Heating capacity 55 Watt for power supply 220V, 1Ph, 60Hz. 55 Watt for 220V-1Ph-60Hz; Size: 190 > 270mm Type: HB-55/195 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
Oii Separator	Oil sananatanı ili			Turn and and a second	Mary 00 days	Desides the
76	Oil separator with brazing connections for Minus Cooling to = -33°C / tc 45°C and for Bitzer compressor 4J-13.2 (frequency controlled), refrigeration capacity Qo = 9,6 kW refrigerant HCFC R22. Maximum compressor displacement 76,64 m³/h (60 Hz).	1	Separator for effectively removal of oil from discharge gas in strainer elements and return trough a high precision float valve to an oil control system. The oil separator is accessible through the flanged bottom plate for ease of maintenance. Maximum working pressure PS = 31 bar (140°C to -10°C). Up to 175 m³/h compressor displacement. Brazing connections 42mm (1½"), volume 11 dm³. Type: OS-42FH or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

77	Oil separator with brazing connections for Plus Cooling to = - 17°C / tc 45°C and for Bitzer compressor 6J-22.2 (frequency controlled), refrigeration capacity Qo = 9,6 kW refrigerant HCFC R22 (part load). Maximum compressor displacement 115,02 m³/h (60 Hz).	1	Separator for effectively removal of oil from discharge gas in strainer elements and return trough a high precision float valve to an oil control system. The oil separator is accessible through the flanged bottom plate for ease of maintenance. Maximum working pressure PS = 31 bar (140°C to -10°C). Up to 205 m³/h compressor displacement. Brazing connections 42mm (1½"), volume 18,5 dm³ Type: OS-42FY or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
78	Check Valve for oil separator return line	2	Check valve with 0,1 bar opening pressure difference. Maximum allowable working pressure PS = 53 bar. 10mm - 3/8" flare, length 60mm Type: RV-10B-0,1 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

79	Y- Filter Strainer with flanges for brazing connections for the oil return line at the oil-separator.	2	Removal of debris from refrigerant and oil, PS = 34,5 bar and for temperatures -29°C to 93°C. The strainer assembly is made from brass with a stainless steel mesh screen. The O-ring is made from neoprene. Area 4520 mm² Mesh 100. MODS.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
80	Flat gaskets (spare part) for oil separators flange	2	Flat gaskets (spare part) for oil separators flange Size: 129mm Type: FD-108/95x1,5 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
Oil reservoir						
81	Oil reservoir with two Rotalock valves (inlet/outlet) and with brazing connections for Minus Cooling Bitzer compressor 4J-13.2 (frequency	1	In the oil reservoir, any refrigerant trapped within the oil is boiled-off and the oil is cooled and kept available. The maximum allowable operating pressure PS = 31 bar with temperature levels of 100°C to -10°C. Oil line 10mm (3/8") for brazing connection at Rotalock valves.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in

	controlled), maximum compressor displacement 76,64 m³/h (60 Hz), oil charge of 4 litres. Reservoir equipped with two sight-glasses and float ball level		Volume 10,5 m³/h, weight 7,8 kg. High 439 mm, diameter 200 mm. Type: OSA-11 or equivalent			Belém-PA, according to section 3b.
82	indicators. Oil reservoir with two Rotalock valves (inlet/outlet) and with brazing connections for Plus Cooling Bitzer compressor 6J-22.2 (frequency controlled), maximum compressor displacement 115,02 m³/h (60 Hz) oil charge of 4,75 litres. Reservoir equipped with two sight-glasses and float ball level indicators.	1	In the oil reservoir, any refrigerant trapped within the oil is boiled-off and the oil is cooled and kept available. The maximum allowable operating pressure PS = 31 bar with temperature levels of 100°C to -10°C. Oil line 10mm (3/8") for brazing connection at Rotalock valves. Volume 10,5 m³/h, weight 7,8 kg. High 439 mm, diameter 200 mm. Type: OSA-11 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

83	Oil level control device for high and low level control.	5	Electronic oil level controller to be used with the oil reservoir as maximum and minimum level indicator with alarm function. Maximal admissible ambient temperature -30°C to +85°C, maximal admissible working pressure PS 60 bar. The maximal medium temperature is 120°C. Device supplied with one set of spare gaskets for each unit. Power supply 220V - 60Hz Size: ENC2-M20-1.½" Type: ENC2 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
84	Pressure difference valve	3	Maintaining the required and secured oil return to the compressor crank-case. Maximum allowable operating pressure PS = 53 bar, maximal allowable operating pressure 100°C. Range/Capacity: 1,5 bar Connection oil reservoir 5/8" - 18 UNF, connection to suction line 10mm / 32/8" flare Type: RV2-10B/1,5 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

85	Refrigeration Oil Bitzer provided in 1 litre container	30	For compressor 4J-13.2 and 46J-22.2	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
86	Rotalock valve spare gasket	8	Oil reservoir connection Type: DR-19-1,6 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
87	Heater elements for oil reservoir	2	Heater elements for oil reservoir 55 Watt for 220V-1Ph-60Hz. Size: 190 > 270mm Type: HB-55/195 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA,

						according to section 3b.
Mechanical oil leve	Oil level regulator, mechanical type with 3-/4- bolt flange and for compact installation with a		Regulator with precision float valve controls the oil level into the compressors crankcase. Regulator complete with two sight-glasses and with all necessary mounting accessories. Factory oil level setting is center of sight glass. Allowable operating temperature is 100°C	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in
88	thread-fitting. For the installation with Minus Cooling Bitzer compressor 4J- 13.2 (sight glass).	1	to -10°C, the maximum allowable working pressure PS = 40 bar. Recommended working pressure diff. is 1,5 bar, max. allowable working pressure diff. is 6,5 bar. Inner volume is 0,5 dm³. Type: ORE2-0-BC or equivalent.			Belém-PA, according to section 3b.
89	Oil level regulator, mechanical type with 3-/4- bolt flange and for compact installation with a thread-fitting. For the installation with Plus Cooling Bitzer compressor 6J-22.2 (sight glass).	1	Regulator with precision float valve controls the oil level into the compressors crankcase. Regulator complete with two sight-glasses and with all necessary mounting accessories. Factory oil level setting is center of sight glass. Allowable operating temperature is 100°C to -10°C, the maximum allowable working pressure PS = 40 bar.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

			Recommended working pressure diff. is 1,5 bar, max. allowable working pressure diff. is 6,5 bar. Inner volume is 0,5 dm ³ . Type: ORE2-0-BC or equivalent.			
90	Oil strainer for installation with oil level regulator and Minus Cooling compressor Bitzer 4J-13.2. Strainer equipped with brazing connections.	1	Installation in front of the oil level regulator to strain particles larger than 0,05 mm. Allowable operation temperature 70°C to -10°C and the maximum allowable operation pressure PS is 53 bar. Volume 0,1 dm³. 3/8" brazing connections. Type: F-10L or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
91	Oil strainer for installation with oil level regulator and Plus Cooling compressor Bitzer 6J-22.2. Strainer equipped with brazing connections.	1	Installation in front of the oil level regulator to strain particles larger than 0,05 mm. Allowable operation temperature 70°C to -10°C and the maximum allowable operation pressure PS is 53 bar. Volume 0,1 dm³. 3/8" brazing connections. Type: F-10L or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
92	Adapter kit for oil regulator installation	2	Complete with all necessary assembly parts Type: BI-BI or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may

93	Spare gaskets for oil level regulator	4	Regulator and compressor connection Type: OR-33x2,62 or equivalent	Transport until final destination	Max. 90 days after signing of contract	also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b. Besides the product price the quote may also include costs and insurance for transportation until final destination in
						Belém-PA, according to section 3b.
Vibration Eliminato	or					
94	Vibration eliminator for installation at the compressor and between the compressor and the suction/discharge line.	2	The body of the eliminator is made of stainless steel while the brazing connectors are made of copper. The allowable operating temperature is 140°C to -50°C and the maximum admissible operating pressure PS = 45bar. Size: 42mm / 1-5/8" Type: VAFS-11 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

95	Vibration eliminator for installation at the compressor and between the compressor and the suction/discharge line.	2	The body of the eliminator is made of stainless steel while the brazing connectors are made of copper. The allowable operating temperature is 140°C to -50°C and the maximum admissible operating pressure PS = 60bar. Size: 35mm / 1-3/8" Type: VAFS-101 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
96	Vibration eliminator for installation at the compressor and between the compressor and the suction/discharge line.	2	The body of the eliminator is made of stainless steel while the brazing connectors are made of copper. The allowable operating temperature is 140°C to -50°C and the maximum admissible operating pressure PS = 60bar. Size: 28mm / 1-1/8" Type: VAFS-91 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
97	Vibration eliminator for installation at the Oil-return line	2	The body of the eliminator is made of stainless steel while the brazing connectors are made of copper. The allowable operating temperature is 140°C to -50°C and the maximum admissible operating pressure PS = 60bar. Size: 3/8", Type: VAFS-31 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA,

						according to section 3b.
Suction Filters					1	
98	Filter-Drier Element (housing) for two (2) replaceable solid cores with top cover. Element for installation at the compressors suction line.	2	Housing is made entirely of steel and compatible with HCFC R22 refrigerants. Housing has undergone phosphate pretreatment and have corrosion resistant power paint finish. Zincchromate steel top covers without external access connection. The maximum allowable working pressure is 46 bar. Size: 42mm / 1-5/8" Type: DCR 09613s or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
99	Caps, core block holders, gaskets and cover springs for the filter drier element.	2	Caps, core block holders, gaskets and cover springs for the filter drier element. Type: DCR or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
100	Solid core with gasket	8	Solid core with 30% molecular sieve and 70% activated alumina. High acid adsorption and standard water adsorption. Type: 48-DA or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and

						insurance for transportation until final destination in Belém-PA, according to section 3b.
101	Strainer for mounting in suction line	2	Strainer for mounting in suction line Type: 48-F or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
102	Cartridge filter element solid for liquid line filter housing, Danfoss filter core fitted	1	Cartridge filter element solid for liquid line filter housing, Danfoss filter core fitted Type: 48-DM or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

Compressors						
103	CIC System for BITZER Minus cooling compressor 4J- 13.2 refrigerant HCFC R22	1	Electronically controlled refrigerant injection for single stage accessible hermetic reciprocating compressors. Control system as complete kit comprising of all functional parts and installation material.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
104	Differential oil pressure sensor for BITZER compressors with oil pump.	2	Electronic monitoring device to control the differential pressure of refrigeration compressors. Permitted medium temperature - 30°C to 90°C, maximum operational pressure PS is 30 bar. Device supplied with one set of spare gaskets. Supply voltage is AC 50/60Hz, 115-230V. Connection thread M20x1,5mm. Type: Delta-P II or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
105	Set of gaskets for BITZER Minus cooling compressor 4J- 13.2 refrigerant HCFC R22	1	including part number: 24, 33, 35, 45, 60, 67, 70, 74, 77, 83, 88, 94, 94, 105, 108, 112, 114, 115, 120, 121, 212, 135, 163	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation

						until final destination in Belém-PA, according to section 3b.
106	Spare gasket for compressor 4J-13.2	1	Spare gasket for compressor 4J- 13.2	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
107	Set of gaskets for BITZER Plus cooling compressor 6J- 22.2 refrigerant HCFC R22	1	including part number: 24, 33, 35, 45, 60, 67, 70, 74, 77, 83, 88, 94, 94, 105, 108, 112, 114, 115, 120, 121, 212, 135, 163	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
108	Spare gasket for compressor 6J-22.2	1	Spare gasket for compressor 6J- 22.2	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and

						insurance for transportation until final destination in Belém-PA, according to section 3b.
109	Brass Block Service Fittings	10	Brass Block Service Fittings 14" SAE x 1/8" NPTF	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
Refrigerant Received	Vertical liquid refrigerant receiver (for HCFC R22) with approval according to the EC pressure equipment directive 97/23/EC	2	Minimum/maximum allowable temperature -10°C to 120°C. Maximum allowable pressure PS = 33 bar. Receiver volume is 89 dm³ for maximum HCFC R22 refrigerant charge of 96,9 kg. Receiver weight empty of 60 kg (without refrigerant charge). Receiver equipped with three sight glasses. Refrigerant inlet connection 45mm (1-5/8") and outlet connection 35mm (1-3/8") wit brazing adapters and spare gasket for Rotalock valve.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

			Size: 89 dm ³			
111	Opto electronical liquid level monitoring device consisting of an opto-electronic unit and a prism unit. Monitoring of the minimum and maximum refrigerant charge level within the refrigerant receiver.	5	Type: FS902 or equivalent The prism unit is mounted to a Rotalock T- joint with sideward viewing sight-glass. The Rotalock T-joint is than mounted into the receiver instead of the upper and lower sight-glass. The opto-electronic unit is not in direct contact with the refrigerant. It is screwed into the prism unit and integrated into the control circuit of the plant. Maximum allowable pressure is 33 bar for temperatures -10°C to 120°C. Allowable ambient temperature -30°C to 60°C. Maximum medium temperature is 100°C. Supply voltage 220V AV ± 10%, supply frequency 60 Hz. Enclosure class IP54 Type: OLC-D1 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
112	Adapter (Rotalock T-joint) for Opto electronical liquid level monitoring device in combination with a sight glass. Device supplied with a set of spare gaskets.	5	The Rotalock T-joint is than mounted into the receiver instead of the upper and lower sight-glass.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA,

				Transport until	Max. 90 days	according to section 3b. Besides the
113	Adapter for pressure relief valve connection	2	Adapter for connection of the Counter pressure independent overflow safety valve to the refrigerant receiver. Size: G1/2 > SW 22 > 1-1/4" -12 UNF	final destination	after signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

Lot 3 Supermarket Gas Detection System for Supermarket 1

Position Item/s Number Supp	•	Description/Specifications of Goods	Related Services	Delivery Date	Other Information
permarket Gas Detection	n System				
Fixed gas detection system for leakages monitoring cooling positions within the machiner room.	n for sing in s and	The Monitoring system is comprising of a Refrigerant Leak Detection device utilizing infrared absorption sensors to analyze air samples. The monitor has at least 8 individual sampling Channels (SAMMs), each having their own pump and filter. Each SAMM is connected to the area to be sampled by 6mm semirigid nylon pipework. The specific area can then be further subdivided into small regions using a manifold with up to 4 sampling pipes, known as spur kits. This multi sampling technique ensures that likely sources of refrigerant leakage can be specifically targeted. Each spur is 5 meters in length. Alarms can be generated at three different levels described as 'Alert', 'Alarm' and 'Critical', these alarms can be signaled to other devices using the 16 configurable relays. The current alarm status is indicated on a TFT LCD display and a Traffic Light Display provides the user with an instant visual status of the system. Details of System Alarms, Events and Faults are stored within the internal PC and can be accessed using the Operators Keypad. The monitor is IP addressable	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurant for transportation until final destination in Belém-PA, according to section 3b.

115	Pipe package for the fixed gas monitoring system.	1	and can be linked to a local area network (LAN) for remote access to alarm details if required. Type: GRM2-104D-108 or equivalent The pipe package for the fixed gas monitoring system with at least 8 channels includes all necessary freeway pipe and spur kit, sample points, user manual, pipe cutters, ties, etc Type: 08SP-PIPE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
116	Service kit	1	Service kit for annually planned preventive maintenance of the fixed channel gas monitoring system with at least 8 channels.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

117	Red beacon for visible leakage alarm	1	The beacon will be installed within the market operators office to indicate that the gas monitoring system noticed a potential HCFC R22 leakage within a specific area.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
118	Red beacon and sounder for visible and acoustic leakage alarm	1	The beacon and sounder will be installed within the market machinery room to indicate that the gas monitoring system noticed a potential HCFC R22 leakage within a specific area.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

Lot 4 Tools and Consumables for Supermarket 1

Flexible twin-flame fork torch, size 2 with thickness of 1-2mm, inlet M15x1 RH for the use with acetylene / oxygen Transport until final destination Flexible twin-flame fork torch, size 2 with thickness of 1-2mm, inlet M15x1 RH for the use with acetylene / oxygen Type: Klein Rista or equivalent Shower-burner set of three. Universal use shower-burner for welding and brazing processes for the use with acetylene and oxygen. Set consisting of three shower-burner set of equivalent Transport until final destination Transport until final destination Transport until final destination Max. 90 days after signing of contract until final destination Transport until final destination Max. 90 days after signing of contract of the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and insurance for the quote may also include costs and i	Position Number	Item/s to be Supplied	Quantity	Description/Specifications of Goods	Related Services	Delivery Date	Other Information
Flexible twin-flame fork torch, size 2 with thickness of 1-2mm, inlet M15x1 RH for the use with acetylene / oxygen Type: Klein Rista or equivalent Shower-burner set of three. Universal use shower-burner for welding and brazing processes for the use with acetylene and oxygen. Flexible twin-flame fork torch, size 2 with thickness of 1-2mm, inlet M15x1 RH for the use with acetylene / oxygen Type: Klein Rista or equivalent Transport until final destination Transport until final destination Max. 90 days after signing of contract variance for transportatic until final destination Besides the roduct prior the quote may also include costs and insurance for transportation in the product prior the quote may also include costs and insurance for transportation in the product prior the quote may also include costs and insurance for transportation in the product prior the quote may also include costs and insurance for transportation in the product prior the quote may also include costs and insurance for the quote may also include costs and insurance for transportation in the product prior transportation in the product prior the quote may also include costs and insurance for transportation in the product prior transportation in the product p	azing Torch						
Shower-burner set of three. Universal use shower-burner for welding and brazing processes for the use with acetylene and oxygen. Set consisting of three shower-burner shower-burner for welding and brazing processes for the use and oxygen. Set consisting of three shower-burner shower-burner for transportation in Belém-PA, according to		torch, size 2 with thickness of 1-2mm, inlet M15x1 RH for the use with acetylene /	2	size 2 with thickness of 1-2mm, inlet M15x1 RH for the use with acetylene / oxygen	until final	•	product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to
	120	three. Universal use shower-burner for welding and brazing processes for the use with acetylene and	1	burner Type: Perplex Klein Rista or	until final	·	product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to

121	torch set for the use with acetylene - oxygen gases, consisting of handle, insert nozzles sizes 1 to 5 / 0,5 to 9mm, nozzles cleaning needles, 10-spanner tool, steal sheet case.		set Type: Klein Rista or equivalent	until final destination	signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
Refrigerant and	Refrigerant and compressor oil contamination detector kit consisting of a brass body, recessed viewing track, stainless steel needles and extension hose. Detection tubes designed as heavy wall Pyrex glass, packed under dry nitrogen charge.	equipmen	RAC industries valid field test for a quick and accurate determination of contaminant levels in oil and refrigerant. Complete set with detection tubes and a set of three acid, moisture and oil test. Detector kit supplied with rugged carrying box. Type: Checkmate RT700K or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
123	Replacement set of three Acid detector tubes	2	For refrigerant detector kit Type: Checkmate RT750A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

				Transport until final	Max. 90 days after signing of contract	transportation until final destination in Belém-PA, according to section 3b. Besides the product price
124	Replacement set of three Acid detector tubes	2	For refrigerant detector kit Type: Checkmate RT751M or equivalent	destination		the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
125	Replacement set of three Acid detector tubes	2	For refrigerant detector kit Type: Checkmate RT752C or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

126 Brazing and tubin	Acid test kit for the use with Mineral and Alkyl Benzene oil	8 ables	Test for contamination in the compressors crankcase which can be indicative of lubricant decomposition. Type: TKO or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
127	Nitrogen pressure regulator for steel cylinders. Regulator from sturdy solid brass design, equipped with protective caps for gauges.	1	Cylinder pressure 0-315/200 bar, 0-60/40 bar working pressure and about 130 Nm³/h maximum. Connection at cylinder, hex nut male for nitrogen bottle norm UNI 4409 (W21.7x1-1/4" anticlockwise)	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
128	Nitrogen test control unit, Nitrogen pressure regulator for steel cylinders. Set consisting of: Pressure regulator max. 220 bar primary and 5 to 50 bar	1	Nitrogen regulator for the use with pressure and tightness tests for medium and large refrigeration cycles. Washing and blowing out of refrigeration cycles. Cylinder connection UNI 4409 (W21.7x1-1/4" anti-	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

	secondary, Pressure control valve adjusted for 55 bar secured, marking gauge including marking indicator, charging hose 900mm with 1/4" connector SAE. Adapter piece with valve deadener 1/4" SAE x 1/2" -20 UNF		clockwise) Cylinder pressure 220 bar, working pressure 5 to 50 bar. Type: PRV 1000 or equivalent			transportation until final destination in Belém-PA, according to section 3b.
129	Nitrogen hoses for pressures up to 60 bar and a length of 5m	1	Hose with textile reinforcement and temperature range from - 20°C up to +50/70°C. Hoses with pressure regulator connection and at the end 1/4" SAE. Hose inner diameter 10 mm.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
130	Heat Protection paste, bucket of 0,9 kg	2	Manually moldable paste designed to divert heat and protect all heat-sensitive materials while brazing and welding with temperatures of up to 3000°C – used paste is reusable.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in

						Belém-PA, according to section 3b.
131	Brazing Paste for Silver- Brazing Alloys	4	Brazing paste acc. DIN EN 1045 for silver-bearing brazing alloys – especially suited for brazing copper (Cu) to brass (Ms) and copper (Cu) to red brass. The flux residue is soluble in cold water and can be removed by rinsing – in tins.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
132	Cleaning Fleeces	10	Cleaning fleece for quick cleaning of soldering spots without scratching – metal-free – 10 units per package.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
133	Torch lighter	3	Gun-shaped gas lighter – refill pack: 12 x 5 mm replacement flints in small holder	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs

						and insurance for transportation until final destination in Belém-PA, according to section 3b.
134	Torch lighter	2	Set of 12 replacement flints	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
135	Safety Goggles	2	Flexible flip-front safety goggles – suitable for spectacle wearers – inner lenses clear and shatter-proof – flip-up lenses protection class DIN 5 green	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

136	Universal deburrer	5	Durable universal deburrer with non-slip soft plastic handle and exchangeable blade designed for easy and quick deburring of tubes, sheet metal and edges. The case can hold up to 4 replacement blades.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
137	Spare blades for universal deburrer	20		Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
138	Leak detection spray	4	Quick and reliable detection of leaks in refrigeration and air conditioning systems as well as gas lines using a foaming spray. Non-flammable, non-corrosive, CFC-free and non-toxic. Temperature range -6°C to 97°C.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation

						until final destination in Belém-PA, according to section 3b.
139	LED work light	2	Battery-operated robust work light with extremely bright light based on LED technology. With 160 installed LEDs the flash lights feature high light efficiency with low power consumption. Lighting duration: 5 h, charging duration: 5-6 h, shock-proof case with suspending hook, on/off switch on non-slip handle, rechargeable via 230 V power supply or 12 V cigarette lighter, splash-proof and oil-resistant. Incl. power supply and car charger.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
140	Torque wrenches set	1	Durable torque wrenches set designed especially for refrigeration and air conditioning systems, featuring 6 different wrenches sizes and adjustable torque lever (10 – 75 newton meter) in sturdy plastic case.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

141	Mini telescopic mirror	2	Round pocket mirror in pen format with a diameter of 32 mm. Extendable to a length of 465 mm, the mirror is adjustable in all directions by means of a double ball-and-socket joint.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA,
142	Heat protection mat, 4-layer, up to 3000°C	6	High quality asbestos-free protection mat for protection against flames and heat, flexible and long-life.	Transport until final destination	Max. 90 days after signing of contract	according to section 3b. Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to
143	Heat protection mat, 2- layer, up to 3000°C	6	High quality asbestos-free protection mat for protection against flames and heat, flexible and long-life.	Transport until final destination	Max. 90 days after signing of contract	section 3b. Besides the product price the quote may also include costs and insurance for transportation

144	Copper Brazing Alloy With 6% Phosphorus and 15% silver According to DIN EN 1044, ISO 3677 and DIN 8513	6	Copper brazing alloy for brazing copper to copper without the use of flux – permissible for refrigeration and airconditioning technology with pipe dimensions > 28 x 1.5 mm, flux is used for brazing copper to brass and copper to red brass – creep-resistant up to 200°C – capillary active and good, square bars in 2.0 x 500 mm lengths. 1 kg/packing unit. Working temperature 710°C, melting range 650°C-800°C, 2,0mm diameter. Type: B-Cu80PAg or equivalent	Transport until final destination	Max. 90 days after signing of contract	until final destination in Belém-PA, according to section 3b. Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
145	Silver Brazing Alloys, Cadmium-Free, Acc. to DIN EN 1044, ISO 3677 and DIN 8513, Bare, 1,5mm ² Acc. to DIN EN 1045 FH 10, 34% silver content	4	Cadmium-free silver brazing alloys (bare) with 34% silver, brazing paste have to be employed with bare rods, permissible for refrigeration and air-conditioning technology down to -200°C, very good flow properties, capillary active and highly fluid creep-resistant up to 200°C – round rods, length 500	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in

			mm. 0,10 kg/packing unit. Working temperature 710°C, melting range 630°C-730°C, 1,5mm diameter. Type: B-Cu36AgZnSn-630/730 or equivalent Cadmium-free silver brazing	Transport	Max. 90 days after	Belém-PA, according to section 3b.
146	Silver Brazing Alloys, Cadmium-Free, Acc. to DIN EN 1044, ISO 3677 and DIN 8513, 'Bare, 2 mm ² Acc. to DIN EN 1045 FH 10	2	alloys (bare) with 34% silver, brazing paste have to be employed with bare rods, permissible for refrigeration and air-conditioning technology down to -200°C, very good flow properties, capillary active and highly fluid creep-resistant up to 200°C – round rods, length 500 mm. 0,10 kg/packing unit. Working temperature 710°C, melting range 650°C-800°C, 2,0mm diameter. Type: B-Cu36AgZnSn-630/730 or equivalent	until final destination	signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

			Durable forged steel tube	Transport	Max. 90 days after	Besides the
			expander designed to expand	until final	signing of contract	product price
			copper, aluminum and soft	destination	Signing of contract	the quote
			metal tubes for the efficient	acstillation		may also
			manufacture of			include costs
	Tube expander set in		standardized tube fittings,			and insurance
147		1	•			for
14/	steel storage case	1	complete set incl. 1 tube expander as well as 6 expander			
						transportation until final
			head replacements in a steel			
			storage case.			destination in
			6: 2/0// 4/2// 5/0// 2/4//			Belém-PA,
			Size: 3/8" -1/2" - 5/8" - 3/4" -			according to
			7/8" - 1"			section 3b.
				Transport	Max. 90 days after	Besides the
				until final	signing of contract	product price
				destination		the quote
			Durable forged steel tube			may also
			expander designed to expand			include costs
148			copper, aluminum and soft			and insurance
	Set of expander heads	1	metal tubes.			for
			metar tabes.			transportation
			Size: 1-1/8" - 1-3/8" - 1-5/8"			until final
			3.20. 1 1/3 1 3/3 1 3/3			destination in
						Belém-PA,
						according to
						section 3b.
			Spring-guided telescopic tube	Transport	Max. 90 days after	Besides the
			cutter for the precise cutting of	until final	signing of contract	product price
			copper, brass,	destination		the quote
149	Tube cutter	2	aluminum and soft steel tubes.			may also
	Tube cutter		The integrated spring ensures			include costs
			automatic application, no			and insurance
			manual readjustment is			for
			necessary.			transportation

			Once applied for cutting, the integrated spring continues to press the cutting wheel against the tube to be cut until it is fully separated. Material hardness adjustable from soft to hard. Size: 4-32mm / 1/8" to 1-1/4"			until final destination in Belém-PA, according to section 3b.
150	Tee-Extractor set 1/2 - 5/8 - 7/8 - 1.1/8", 1.3/8", 1.5/8"	1	Tee-Extractor sets include: special ratchet, cam pincer, special conical drill, UNIDRILL® Automatic, in steel carrying case Size: 1/2 - 5/8 - 7/8 - 1.1/8", 1.3/8", 1.5/8"	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
151	Tube cutter steel spare cutting wheel	2	Tube cutter steel spare cutting wheel Size: 4-32mm / 1/8" to 1-1/4"	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

152	Flaring tool set	1	Flaring tool with eccentric cone and sliding clutch designed for the controlled manufacture of 45° flares without fractures. Suitable for copper, brass, aluminum and soft metal tubes. Size: 3/16" - 1/4" - 5/16" - 3/8" - 1/2" - 5/8" - 3/4" Set consisting of one lead sealing	Transport until final destination	Max. 90 days after signing of contract Max. 90 days after	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b. Besides the
153	Lead Sealing pliers Set	1	pliers, seal wire, nylon nirosta, and lead seals. The lead sealing tool is manufactured from cast carbon steel and chrome plated for protection. The tools are supplied with round dies, plain or corrugated for effective crimping of all Acme Lead Seals, the plastic YP10 and Crimp Seals. Standard non engraved dies to be supplied. The sealing tools may also be used to mark other materials such as aluminum plate or laminated card. Including 100m seal wire, 500 lead seals 10mm diameter.	until final destination	signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

154	Grip- Pliers with curved jaws	3	Pliers made from chrome-molybdenum-steel construction - sturdiness and rust prevention. Anti-Skid surface with safe grip for difficult situations. 10CR 220mm	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
155	Sealant for threaded fitting in refrigeration systems, provided in 10 ml bottle.	6	The sealant is recommended for refrigeration systems and service with strong chemicals. The sealant is used in place of specialty non-hardening compounds, litharge, glycerin, and sealing tape. This product is typically used in applications up to 149 °C. Typical applications include metal and fiber plants, chemical industries. 10 ml bottle. Type: Loctite 554 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

Lot 5 Insulation for Supermarket 1

Position number	Item/s to be Supplied	Quantity	Description/Specifications of Goods	Related Services	Delivery Date	Other Information
Insulation		L				
156	Insulation tube Closed cell, elastomeric, nitrile rubber insulation material with a Class O fire rating and excellent thermal properties. Self-sealed tube in length of 2 meter each. Thickness 25mm, for copper tube outer diameter up to 76mm	20	Insulation used on cold lines must effectively prevent condensation. Typically, in order to achieve this an insulation material should, in addition to excellent technical values, exhibit the following: An effective water vapor barrier, a closed cell structure not prone to "wicking", no obvious potential for thermal bridging, long term stability of thermal values. Type: AF-CO-25X076-A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
157	Insulation tube Closed cell, elastomeric, nitrile rubber insulation material with a Class O fire rating and excellent thermal properties. Self-sealed tube in length of 2 meter	20	Insulation used on cold lines must effectively prevent condensation. Typically, in order to achieve this an insulation material should, in addition to excellent technical values, exhibit the following: An effective water vapor barrier, a closed cell structure not prone to "wicking", no obvious potential for thermal bridging, long term stability of	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to

	each. Thickness 25mm, for copper tube outer		thermal values. Type: AF-CO-25X048-A or			section 3b.
	diameter up to 48mm		equivalent			
158	Insulation tube Closed cell, elastomeric, nitrile rubber insulation material with a Class O fire rating and excellent thermal properties. Self-sealed tube in length of 2 meter each. Thickness 25mm, for copper tube outer diameter up to 22mm	20	Insulation used on cold lines must effectively prevent condensation. Typically, in order to achieve this an insulation material should, in addition to excellent technical values, exhibit the following: An effective water vapor barrier, a closed cell structure not prone to "wicking", no obvious potential for thermal bridging, long term stability of thermal values. Type: AF-CO-25X022-A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
159	Insulation tube Closed cell, elastomeric, nitrile rubber insulation material with a Class O fire rating and excellent thermal properties. Self-sealed tube in length of 2 meter each. Thickness 25mm, for copper	20	Insulation used on cold lines must effectively prevent condensation. Typically, in order to achieve this an insulation material should, in addition to excellent technical values, exhibit the following: An effective water vapor barrier, a closed cell structure not prone to "wicking", no obvious potential for thermal bridging, long term stability of thermal values.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

	tube outer diameter up to 35mm		Type: AF-CO-25X035-A or equivalent			
160	Insulation Sheet endless, Closed cell, elastomeric, nitrile rubber insulation material with a Class O fire rating and excellent thermal properties. Sheet in length of 3 meter each. Thickness 32mm	20	Insulation used on cold lines must effectively prevent condensation. Typically, in order to achieve this an insulation material should, in addition to excellent technical values, exhibit the following: An effective water vapor barrier, a closed cell structure not prone to "wicking", no obvious potential for thermal bridging, long term stability of thermal values. Type: XG-32-99/E or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
161	Insulation Sheet endless, Closed cell, elastomeric, nitrile rubber insulation material with a Class O fire rating and excellent thermal properties. Sheet in length of 7 meter each. Thickness 40mm	4	Insulation used on cold lines must effectively prevent condensation. Typically, in order to achieve this an insulation material should, in addition to excellent technical values, exhibit the following: An effective water vapor barrier, a closed cell structure not prone to "wicking", no obvious potential for thermal bridging, long term stability of thermal values. Type: XG-40-99/E or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
162	Tape for insulation (roll) each 15m length with thickness of 3mm.	6	Insulation used on cold lines must effectively prevent condensation. Typically, in order to achieve this an insulation	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include

	Color black.		material should, in addition to excellent technical values, exhibit the following: An effective water vapor barrier, a closed cell structure not prone to "wicking", no obvious potential for thermal bridging, long term stability of thermal values. Type: AF-Tape-MC or equivalent			costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
163	One - Component adhesive for insulation.	3	Adhesive provided in 1 Liter cans Type: ADH-HT625/1,0 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
164	Protective coat for insulation material color silver grey	2	Protective coat provided in 2,5 Liter bucket Type: FINISH/GY-2,5 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

165	Special cleaner for one-component adhesive	2	Cleaner provided in 1 Liter bucket Type: CLEANER/1,0 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
166	Cutting set consisting of 3 knives and one sharpening stone	1	Complete set	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
167	Brushes for the application of one-component adhesive	5	Brush diameter 25mm Type: GLUEM-BRUSH25MM or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA,

						according to section 3b.
168	Tape for insulation (roll) each 15m length with thickness of 3mm. Color black.	5	Insulation used on cold lines must effectively prevent condensation. Typically, in order to achieve this an insulation material should, in addition to excellent technical values, exhibit the following: An effective water vapor barrier, a closed cell structure not prone to "wicking", no obvious potential for thermal bridging, long term stability of thermal values.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
			Type: AF-Tape-MC or equivalent			

Lot 6 Pipe Support and Fixation for Supermarket 1

Position Number	Item/s to be Supplied	Quantity	Description/Specifications of Goods	Related Services	Delivery Date	Other Information
Pipe Support and Fi	ixation					
169	Pipe rings, galvanized, with EPDM rubber insulation and for clamping screw MS and for connection thread M8/M10	30	Clamping range area 8 to 11 mm Type: MPN-RC 8/11 A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
170	Pipe rings, galvanized, with EPDM rubber insulation and with clamping screw M6 and for connection thread M8/M10	30	Clamping range area 1/4" Temperature range -40°C to 110°C Type: MPN-RC 1/4" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

171	Pipe rings, galvanized, with EPDM rubber insulation and with clamping screw M6 and for connection thread M8/M10	30	Clamping range area 3/8" Temperature range -40°C to 110°C Type: MPN-RC 3/8" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
172	Pipe rings, galvanized, with EPDM rubber insulation and with clamping screw M6 and for connection thread M8/M10	30	Clamping range area 1/2" Temperature range -40°C to 110°C Type: MPN-RC 1/2" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
173	Pipe rings, galvanized, with EPDM rubber insulation and with clamping screw M6 and for connection thread M8/M10	30	Clamping range area 3/4" Temperature range -40°C to 110°C Type: MPN-RC 3/4" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA,

						according to section 3b.
174	Pipe rings, galvanized, with EPDM rubber insulation and with clamping screw M6 and for connection thread M8/M10	40	Clamping range area 29 to 32 mm Temperature range -40°C to 110°C Type: MPN-RC 29/32 A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
175	Pipe rings, galvanized, with EPDM rubber insulation and with clamping screw M6 and for connection thread M8/M10	60	Clamping range area 1-1/4" Temperature range -40°C to 110°C Type: MPN-RC 1 1/4" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
176	Pipe rings, galvanized, with EPDM rubber insulation and with clamping screw M6 and for connection thread M8/M10	50	Clamping range area 2-1/2" Temperature range -40°C to 110°C Type: MPN-RC 2 1/2" B or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final

						destination in Belém-PA, according to section 3b.
177	Pipe rings, galvanized, and with clamping screw MS and for connection thread M8/M10	35	Clamping range area 3/8" Type: MPN-S 3/8" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
178	Pipe rings, galvanized, and with clamping screw MS and for connection thread M8/M10	25	Clamping range area 1/2" Type: MPN-S 1/2" or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
179	Pipe rings, galvanized, and with clamping screw MS and for connection thread M8/M10	35	Clamping range area 3/4" Type: MPN-S 3/4" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

						transportation until final destination in Belém-PA, according to section 3b.
180	Pipe rings, galvanized, and with clamping screw MS and for connection thread M8/M10	30	Clamping range area 1" Type: MPN-S 1" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
181	Pipe rings, galvanized, and with clamping screw MS and for connection thread M8/M10	30	Clamping range area 35 to 39 mm Type: MPN-S 35/39 A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
182	Pipe rings, galvanized, and with clamping screw MS and for	40	Clamping range area 1-1/4" Type: MPN-S 1 1/4" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include

	connection thread M8/M10					costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
183	Pipe rings, galvanized, and with clamping screw MS and for connection thread M8/M10	35	Clamping range area 2" Type: MPN-S 2" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
184	Pipe rings, galvanized, with SILICON rubber insulation and with clamping screw M6 and for connection thread M8/M10	10	Clamping range area 29 to 32 mm Temperature range -60°C to 200°C Type: MP-MIS or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

185	Pipe rings, galvanized, with EPDM rubber insulation and with clamping screw M6 and for connection thread M8/M10	50	Clamping range area 8-12mm Temperature range -40°C to 110°C Type: MP-LHI or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
186	Pipe rings, galvanized, with rubber insulation EPDM and with clamping screw M8 / M11. For application at insulated refrigeration tubes.	50	Clamping range area 45-50mm Temperature range -45°C to 105°C. Type: MP-LHI or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
187	Pipe rings, galvanized, with rubber insulation EPDM and with clamping screw M8 / M11. For application at insulated refrigeration tubes.	50	Clamping range area 55-60mm Temperature range -45°C to 105°C. Type: MP-LHI or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA,

188	Pipe rings, galvanized, with rubber insulation EPDM and with clamping screw M8 / M11. For application at insulated refrigeration tubes.	50	Clamping range area 65-70mm Temperature range -45°C to 105°C. Type: MP-LHI or equivalent Clamping range area 75-80mm	Transport until final destination	Max. 90 days after signing of contract	according to section 3b. Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b. Besides the
189	Pipe rings, galvanized, with rubber insulation EPDM and with clamping screw M8 / M11. For application at insulated refrigeration tubes.	50	Temperature range -45°C to 105°C. Type: MP-LHI or equivalent	final destination	after signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
190	Pipe retaining clips in accordance with DIN 3016. Clamping range 1/4" (6mm)	100	Pipe retaining clip for all suitable kinds of retaining applications such as cables, cable protection pipes, hoses and other lines. Clip with 15mm band width, M6 bolt, rubber band (polychloropren) and steel galvanized adjustable band. Temperature range -35°C	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final

			to 100°C. Resistant against oil, alcohol, acids and fat. Type: RSGU 1.6/15 W1 or equivalent			destination in Belém-PA, according to section 3b.
191	Pipe retaining clips in accordance with DIN 3016. Clamping range 3/8" (10mm)	100	Pipe retaining clip for all suitable kinds of retaining applications such as cables, cable protection pipes, hoses and other lines. Clip with 15mm band width, M6 bolt, rubber band (polychloropren) and steel galvanized adjustable band. Temperature range -35°C to 100°C. Resistant against oil, alcohol, acids and fat. Type: RSGU 1.10/15 W1 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

Lot 7 Compression Fitting and accessories for Supermarket 1

Position Number	Item/s to be Supplied	Quantity	Description/Specifications of Goods	Related Services	Delivery Date	Other Information
Compression Fitting	and accessories	•				
192	Gaugeable brass tube adapter fittings with nutferrule attachments. Reducer fitting 1/4" nut-ferrule to 1/4" AN - (1/4" SAE)	40	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-400-A-4ANF or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
193	Gaugeable brass tube female connector fittings with nut-ferrule attachments. Connector fitting 1/4" nut-ferrule to 1/4" pipe OD	50	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-400-7-4ST or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

194	Gaugeable brass tube adapter fittings with nut- ferrule attachments. Reducer fitting 3/8" nut-ferrule to 3/8" AN - (3/8"" SAE)	20	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-600-A-6ANF or equivalent Leak-tight design of the tube	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
195	Gaugeable brass tube straight fittings union with 1/4" nut-ferrule attachments.	15	fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-400-6 or equivalent	final destination	after signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
196	Gaugeable brass tube straight fittings union with 3/8" nut-ferrule attachments.	15	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

			(tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-600-6 or equivalent			transportation until final destination in Belém-PA, according to section 3b.
197	Gaugeable brass tube fittings T union with 1/4"" nut-ferrule attachments.	10	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-400-3 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
198	Gaugeable brass tube fittings T union with 3/8" nut-ferrule attachments.	10	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-600-3 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

199	Gaugeable brass tube fittings Cross union with 1/4" nut-ferrule attachments.	5	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-400-4 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
200	Gaugeable brass tube fittings Cross union with 3/8" nut-ferrule attachments.	5	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-600-4 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
201	Gaugeable Nut- ferrule replacement set 1/4"	1	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

			(tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-400-NFSET or equivalent			transportation until final destination in Belém-PA, according to section 3b.
202	Gaugeable Nut- ferrule replacement set 3/8"	1	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-600-NFSET or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
203	RAC Tubing Copper Tubes in straight lengths (rigid) 1/4" in length of 4m	10	Copper tubes according EN 12735-1. Diameter 1/4", 4m length, wall with 1mm thickness Type: ITE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

204	RAC Tubing Copper Tubes in straight lengths (rigid) 3/8" in length of 4m	10	Copper tubes according EN 12735-1. Diameter 3/8", 4m length, wall with 1mm thickness Type: ITE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
205	RAC Tubing Copper Tubes in straight lengths (rigid) 1/2" in length of 4m	10	Copper tubes according EN 12735-1. Diameter 1/2", 4m length, wall with 1mm thickness Type: ITE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
206	Assembly Carrying Case - Bending Machines	1	Rugged carrying case with a set of four bending machines, heavy duty tube reamer tube cutter and tube fixation rubber. Set of bending machines in 1/4", 5/16", 3/8", 12". Transport case with wheels and telescope handle. The case is air-tight, dust-tight, water-tight and with air-compensating valve. Maximum	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA,

207	Assembly Carrying Case - Tool Box	1	ambient temperature for the carrying case is -40°C to 80°C, weight including tools is 20 kg. Type: ASK Bending Machines Carrying Case -Z or equivalent Rugged carrying case with a set of tools for Gaugeable Tube Fittings and Adapter Fittings, consisting of four ratchet wrenches 1/4", 5/16", 3/8", and 1/2". Further one check-gauge, tube-cutting support, tube reamer, tube cutter, Snoop Leak Detection Fluid and SWAK thread tightening paste. The case is airtight, dust-tight, water-tight and with air-compensating valve. Maximum ambient temperature for the carrying case is -40°C to 80°C, weight including tools is 8.2 kg. Type: ASK Tool-Box Carrying Case -Z or equivalent	Transport until final destination	Max. 90 days after signing of contract	according to section 3b. Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.
208	Leak Check Fluid for application on tubes and fitting at temperatures - 54°C to 93°C	1	Consisting of tenside, etylene glycol, and deionized water. Type: Swagelok MS-CR-SNOOP-GAL or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in

						Belém-PA, according to section 3b.
209	PTTFE Thread Sealant Tape	10	Thread Sealant Tape for thread fittings 1/8", 1/4" and 3/8" Type: Swagelok MS-STR-4 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Belém-PA, according to section 3b.

Lot 8 Components for cooling positions for Supermarket 2

Position Number	Item/s to be Supplied	Quantity	Description/Specifications of Goods	Related Services	Delivery Date	Other Information
Expansion Valves						
210	Thermostatic Expansion Valve (TEV). Refrigerant HCFC R22.	120	Stainless steel TEV body with bimetal (stainless steel/copper) connections for brazing into a refrigeration system, PS 34 bar. Valve for interchangeable orifice assembly and external pressure equalization. Range -40°C / +10°C Size: ¾ x ½ (Ext. ¼) Type: TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-

211	Thermostatic Expansion Valve (TEV). Refrigerant HCFC R22.	10	Stainless steel TEV body with bimetal (stainless steel/copper) connections for brazing into a refrigeration system, PS 50 bar. Valve for interchangeable orifice assembly and internal pressure equalization. Range -40°C / +10°C Size: 1/2" x 5/8" (Ext. ¼) Type: TCAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	SP, according to section 3b. Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
212	Orifice for Thermostatic Expansion Valve with stainless steel body.	10	Orifice assembly with filter and gasket. Nom. Capacity R22 0,9 kW, Size: 1, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Hortolândia- SP, according to section 3b.
213	Orifice for Thermostatic Expansion Valve with stainless steel body.	15	Orifice assembly with filter and gasket. Nom. Capacity R22 1,3 kW, Size: 2,	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs

			Type: TUA/TUAE or equivalent			and insurance for transportation until final destination in Hortolândia- SP, according to section 3b.
214	Orifice for Thermostatic Expansion Valve with stainless steel body.	10	Orifice assembly with filter and gasket. Nom. Capacity R22 1,8 kW, Size: 3, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
215	Orifice for Thermostatic Expansion Valve with stainless steel body.	25	Orifice assembly with filter and gasket. Nom. Capacity R22 2,6 kW, Size: 4, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

216	Orifice for Thermostatic Expansion Valve with stainless steel body.	25	Orifice assembly with filter and gasket. Nom. Capacity R22 3,5 kW, Size: 5, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
217	Orifice for Thermostatic Expansion Valve with stainless steel body.	25	Orifice assembly with filter and gasket. Nom. Capacity R22 5,3 kW, Size: 6, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
218	Orifice for Thermostatic Expansion Valve with stainless steel body.	25	Orifice assembly with filter and gasket. Nom. Capacity R22 7,0 kW, Size: 7, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation

						until final destination in Hortolândia- SP, according to section 3b.
219	Orifice for Thermostatic Expansion Valve with stainless steel body.	25	Orifice assembly with filter and gasket. Nom. Capacity R22 11,0 kW, Size: 8, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
220	Orifice for Thermostatic Expansion Valve with stainless steel body.	15	Orifice assembly with filter and gasket. Nom. Capacity R22 16,0 kW, Size: 9, Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
221	Orifice for Thermostatic Expansion Valve with	5	Orifice assembly with filter and gasket. Nom. Capacity R22 18,0 kW,	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote

	stainless steel body.		Size: 1, Type: TCAE or equivalent			may also include costs and insurance for transportation until final destination in Hortolândia-SP, according
222	Orifice for Thermostatic Expansion Valve with stainless steel body.	5	Orifice assembly with filter and gasket. Nom. Capacity R22 21,0 kW, Size: 2, Type: TCAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	to section 3b. Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
223	Orifice for Thermostatic Expansion Valve with stainless steel body.	5	Orifice assembly with filter and gasket. Nom. Capacity R22 21,0 kW, Size: 3, Type: TCAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-

						SP, according to section 3b.
224	Spare gasket	100	Orifice assembly. Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
225	Spare filter	100	Orifice assembly. Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
226	Bulb Strap	100	Sensor bulb fixation for max. 28mm tube diameter. Bulb strap with nut lock, strap and screw. Size: 0,4 - max 28 mm Tube Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance

						for transportation until final destination in Hortolândia- SP, according to section 3b.
227	Bulb Strap	5	Sensor bulb fixation for max. 50mm tube diameter. Bulb strap with nut lock, strap and screw. Size: 0,4 - max 50 mm Tube Type: TUA/TUAE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
Strainer						_
228	Y- Filter Strainer with flanges for brazing connections for cooling positions	10	Removal of debris from refrigerant and oil, PS = 34,5 bar and for temperatures -29°C to 93°C. The strainer assembly is made from brass with a stainless steel mesh screen. The O-ring is made from neoprene. Area 2030 mm² Mesh 100 Size: 3/8 ODS	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

229	Y- Filter Strainer with flanges for brazing connections	2	Removal of debris from refrigerant and oil, PS = 34,5 bar and for temperatures -29°C to 93°C. The strainer assembly is made from brass with a stainless steel mesh screen. The O-ring is made from neoprene. Area 2030 mm² Mesh 100 Size: ½ ODS	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
230	Permanent copper Strainer, hermetically, for brazing connections, PS = 30 bar	60	Permanent copper strainers are used for filtering particles and contaminants with a stainless steel screen in the filter body. Brazed-in connections at in- and outlet side. Size: 1/4"	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
231	Permanent copper Strainer, hermetically, for brazing connections, PS = 30 bar	130	Permanent copper strainers are used for filtering particles and contaminants with a stainless steel screen in the filter body. Brazed-in connections at in- and outlet side. Size: 3/8"	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation

232	Permanent copper Strainer, hermetically, for brazing connections, PS = 30 bar	15	Permanent copper strainers are used for filtering particles and contaminants with a stainless steel screen in the filter body. Brazed-in connections at in- and outlet side. Size: 1/2"	Transport until final destination	Max. 90 days after signing of contract	until final destination in Hortolândia- SP, according to section 3b. Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia- SP, according to section 3b.
Solenoid Valves						
233	Solenoid Valve, without Coil, with flanges for brazing connections.	25	Normally closed, direct operated solenoid valve for liquid, suction and hot gas lines with fluorinated refrigerants, PS 42,5 bar. Kv value 0,270 m³/h Size: ¼ Type: EVR 3 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

234	Solenoid Valve, without Coil, with flanges for brazing connections.	25	Normally closed, direct operated solenoid valve for liquid, suction and hot gas lines with fluorinated refrigerants, PS 42,5 bar. Kv value 0,270 m³/h Size: ¾ Type: EVR 3 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
235	Solenoid Valve, without Coil, with flanges for brazing connections.	10	Normally closed, servo operated solenoid valve for liquid, suction and hot gas lines with fluorinated refrigerants, PS 42,5 bar. Kv value 0,800 m³/h Size: ½ Type: EVR 6 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
236	Solenoid Valve, without Coil, with flanges for brazing connections.	10	Normally closed, servo operated solenoid valve for liquid, suction and hot gas lines with fluorinated refrigerants, PS 42,5 bar. Kv value 0,800 m³/h Size: 3/8 Type: EVR 6 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation

						until final destination in Hortolândia- SP, according to section 3b.
237	Coil for solenoid valve.	25	Coil for clip-on fastening without tools. Leads are connected to terminal screws in the terminal box. The box is fitted with Pg. 13.5 screwed entry for 6 to 14 mm cable, coil enclosure IP 67. 10 Watt, 220-230 Volts, 60 Hz Type: BF or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
238	Service Kit for solenoid valve (Kv 0,160 - 0,270 m³/h)	50	The service kit is consisting of the O-ring, screw, armature assembly, rubber gasket, and compress spring. Type: EVR 2&3 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

239	Service Kit for solenoid valve (Kv 0,800 m³/h)	10	The service kit is consisting of the diaphragm assembly, the O-ring for armature tube, screw T20, Screw T15, armature assembly, rubber gasket, O-ring for steal cover, support ring, compress ring. Type: EVR 6 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
240	Seal Kit for solenoid valve (Kv 0,160 - 0,270 m ³ /h)	50	The seal kit is consisting of the Oring and the rubber gasket. Type: EVR 2&3 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
Brazing Adapters		ı			1	
241	Flare - Brazing adapter, size ¼"/¼"	50	Industrial manufactured flare/brazing adapter containing a copper seal which protects the flare collar against wear and fatigue. The copper seal ensures a tightness similar to that of brazed joints, PS 46 bar.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

			Size: ¼ / ¼ Type: FSA 22 or equivalent			transportation until final destination in Hortolândia- SP, according to section 3b.
242	Flare - Brazing adapter, size ¾"/¼"	50	Industrial manufactured flare/brazing adapter containing a copper seal which protects the flare collar against wear and fatigue. The copper seal ensures a tightness similar to that of brazed joints, PS 46 bar. Size: 3/4 / 1/4 Type: FSA 32 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
243	Flare - Brazing adapter, size ¾" / ¾"	50	Industrial manufactured flare/brazing adapter containing a copper seal which protects the flare collar against wear and fatigue. The copper seal ensures a tightness similar to that of brazed joints, PS 46 bar. Size: % / % Type: FSA 33 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

244	Flare - Brazing adapter, size ½" / ½"	25	Industrial manufactured flare/brazing adapter containing a copper seal which protects the flare collar against wear and fatigue. The copper seal ensures a tightness similar to that of brazed joints, PS 46 bar. Size: ½" / ½" Type: FSA 44 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
245	Flare - Brazing adapter, size ¾" / ¾"	20	Industrial manufactured flare/brazing adapter containing a copper seal which protects the flare collar against wear and fatigue. The copper seal ensures a tightness similar to that of brazed joints, PS 46 bar. Size: 1/8" / 1/8" Type: FSA 516m or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
246	Flare - Brazing adapter, size ¾" / ¾"	20	Industrial manufactured flare/brazing adapter containing a copper seal which protects the flare collar against wear and fatigue. The copper seal ensures a tightness similar to that of brazed joints, PS 46 bar.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation

			Size: ¾" / ¾"			until final
			Type: FSA 66 or equivalent			destination in
						Hortolândia-
						SP, according
						to section 3b.
				Transport	Max. 90 days	Besides the
				until final	after signing of	product price
				destination	contract	the quote
						may also
						include costs
	Solder Adaptor		Packaging unit of 300 pieces 1/4"			and insurance
2.47	Copper Gasket	1				for
247	Replacement 1/4"		Type: B2-4 or equivalent			transportation
						until final
						destination in
						Hortolândia-
						SP, according
						to section 3b.
				Transport	Max. 90 days	Besides the
				until final	after signing of	product price
				destination	contract	the quote
						may also
						include costs
	Solder Adaptor		Packaging unit of 300 pieces %"			and insurance
248	Copper Gasket	1				for
240	Replacement %"		Type: B2-6 or equivalent			transportation
						until final
						destination in
						Hortolândia-
						SP, according
						to section 3b.
	Solder Adaptor		Packaging unit of 200 pieces ½"	Transport	Max. 90 days	Besides the
249	Copper Gasket	1		until final	after signing of	product price
243	Replacement ½"		Type: B2-8 or equivalent	destination	contract	the quote

						mayalsa
						may also include costs
						and insurance
						for
						transportation
						until final
						destination in
						Hortolândia-
						SP, according
						to section 3b.
				Transport	Max. 90 days	Besides the
				until final	after signing of	product price
				destination	contract	the quote
						may also
						include costs
	Solder Adaptor		Packaging unit of 100 pieces %"			and insurance
250	Copper Gasket	2				for
250	Replacement ¾"		Type: B2-10 or equivalent			transportation
						until final
						destination in
						Hortolândia-
						SP, according
						to section 3b.
				Transport	Max. 90 days	Besides the
				until final	after signing of	product price
			Packaging unit of 50 pieces ¾"	destination	contract	the quote
			rackaging unit of 50 pieces 74			may also
	Solder Adaptor		Type: B2-12 or equivalent			include costs
	Copper Gasket	2	Type. bz-12 of equivalent			and insurance
251	Replacement ¾"					for
						transportation
						until final
						destination in
						Hortolândia-

Ball Valves						SP, according to section 3b.
252	Ball -Valve Spare Service Kit	1	Valves from 1/4" to 7/8" - 21mm Multi Pack Type: GBC 6s to 22s or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
253	Ball -Valve Spare Service Kit	1	Valves from 1%" to 1%" - 31mm Multi Pack Type: GBC 25s to 35s or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
254	Ball -Valve Spare Service Kit	1	Valves from 1¾" to 3½"- 42mm, Multi Pack Type: GBC 38s to 79s or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs

	T	ı		I	-	1
						and insurance
						for
						transportation
						until final
						destination in
						Hortolândia-
						SP, according
						to section 3b.
				Transport	Max. 90 days	Besides the
				until final	after signing of	product price
				destination	contract	the quote
						may also
						include costs
			Valves from 1/4" to 7/8" - 21mm,			and insurance
255	Ball-Valve Spare Cap	1	Multi Pack			for
255			Type: GBC 6s to 22s or equivalent			transportation
						until final
						destination in
						Hortolândia-
						SP, according
						to section 3b.
				Transport	Max. 90 days	Besides the
				until final	after signing of	product price
				destination	contract	the quote
						may also
			Values from 11/" to 13/" 21 mm			include costs
			Valves from 1½" to 1¾" - 31mm, Multi Pack			and insurance
256	Ball-Valve Spare Cap	1				for
250			Type: GBC 25s to 35s or			transportation
			equivalent			until final
						destination in
						Hortolândia-
						SP, according
						to section 3b.

257 Sight Glasses	Ball-Valve Spare Cap	1	Valves from 1½" to 3½"- 42mm, Multi Pack Type: GBC 38s to 79s or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
258	Sight glass for HCFC R22 with brazing adapters and humidity indicator.	5	The sight glass will be used to indicate the condition of the refrigerant (including moisture content) and/or the flow in the oil return line from the oil separator. The maximum working pressure PS is 35 bar. Size: 3/8" x 3/8" Type: SGI 10s or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
259	Sight glass for HCFC R22 with flaring connections and humidity indicator.	5	The sight glass will be used to indicate the condition of the refrigerant (including moisture content) and/or the flow in the oil return line from the oil separator. The maximum working pressure PS is 35 bar.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

Tubing Component	is s		Size: 3/8" x 3/8" Type: SGI 10 or equivalent			transportation until final destination in Hortolândia- SP, according to section 3b.
260	Flare Nut	100	Flare Nut ¼" / 7/16" UNF Type: DIN8912 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
261	Copper Cap (Gasket)	100	Copper Cap (Gasket) ¼" / 7/16" UNF Type: DIN8912 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

262	Shutoff Valve with flare/solder and T-connection	10	Shutoff Valve with flare/solder and T-connection ¼ - Charging Type: HBLK6 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
263	Shutoff Valve with flare/solder and T-connection	5	Shutoff Valve with flare/solder and T-connection 3/4 - Evacuation Type: HBLK10 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
264	Copper Gasket	100	Copper Gasket 7/16"	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation

						until final destination in Hortolândia- SP, according to section 3b.
265	Copper Gasket	100	Copper Gasket 5/8"	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
266	Copper Seal	300	Copper Seal 1/4" Type: CUD-06 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

Lot 9 General Refrigeration Circuit Components for Supermarket 2

Position Number	Item/s to be Supplied	Quantity	Description/Specifications of Goods	Related Services	Delivery Date	Other Information			
Flexible Process Control Lines and Adapter									
267	Flexible process line with inner diameter of 4 mm, color orange.	15	Flexible refrigerant transfer line for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is -45°C to 130°C. Diffusion tight and oil resistant. Length of 10 meter	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportati on until final destination in Hortolândia -SP, according to section 3b.			
268	Pressing connector without core depressor, straight, in set of ten pieces.	15	Flexible refrigerant transfer line accessories for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is -45°C to 130°C. 7/16", 4mm	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportati on until final			

						destination in Hortolândia -SP, according to section 3b.
269	Pressing connector without core depressor, elbow 90°, in set of ten pieces.	15	Flexible refrigerant transfer line accessories for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is -45°C to 130°C. 7/16", 4mm	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportati on until final destination in Hortolândia -SP, according to section 3b.
270	Pressing connector without core depressor, straight, in set of ten pieces.	15	Flexible refrigerant transfer line accessories for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is -45°C to 130°C. 5/8", 4mm	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportati

271	Pressing connector without core depressor, elbow 90°, in set of ten pieces.	15	Flexible refrigerant transfer line accessories for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is -45°C to 130°C. 5/8", 4mm	Transport until final destination	Max. 90 days after signing of contract	on until final destination in Hortolândia -SP, according to section 3b. Besides the product price the quote may also include costs and insurance for transportati on until final destination in Hortolândia -SP, according to section
			Flexible refrigerant transfer line	Transport until	Max. 90 days	3b. Besides the
272	Pressing connector T-fitting, in set of ten pieces.	6	accessories for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is -45°C to 130°C.	final destination	after signing of contract	product price the quote may also include costs and insurance

			4mm			for
						transportati
						on until
						final
						destination
						in
						Hortolândia
						-SP,
						according
						to section
						3b.
				Transport until	Max. 90 days	Besides the
				final	after signing	product
				destination	of contract	price the
						quote may
			Flexible refrigerant transfer line			also include
			accessories for connection of			costs and
			pressure limiter and controller.			insurance
	I to advantile management		Maximum operational pressure PS is			for
273	Hydraulic pressing	2	60 bar, operation range is -45°C to			transportati
	pliers for DN 4mm	3	130°C.			on until
	pressing operation					final
			4mm			destination
						in
						Hortolândia
						-SP,
						according
						to section
						3b.
			Flexible refrigerant transfer line	Transport until	Max. 90 days	Besides the
	Core depressor		accessories for connection of	final	after signing	product
274	opener in set of 50	3	pressure limiter and controller.	destination	of contract	price the
	pieces		Maximum operational pressure PS is			quote may
			60 bar, operation range is -45°C to			also include

			130°C.			costs and insurance for transportati on until final destination in Hortolândia -SP, according to section 3b.
275 1	Tube cutter	3	Flexible refrigerant transfer line connection tool	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportati on until final destination in Hortolândia -SP, according to section 3b.

276	Spare blade for tube cutter in set of two pieces	6	Flexible refrigerant transfer line accessories	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportati on until final destination in Hortolândia -SP, according to section 3b.
277	Copper gaskets in set of 50 pieces	6	Flexible refrigerant transfer line accessories for connection of pressure limiter and controller. Maximum operational pressure PS is 60 bar, operation range is -45°C to 130°C. 7/16" UNF	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportati on until final destination in Hortolândia -SP, according

						to section 3b.
Safety and Control	Overflow Safety Valve, Set pressure 28 bar	2	Counter pressure independent overflow safety valve to avoid emission of refrigerant to the environment. In case of activation, the refrigerant is leaded into the low-pressure side of the refrigeration system. Safety valve is led sealed and with acceptance test certificate (TUV / DEKRA or equivalent). Permissible temperature range is -30°C to +120°C and the valve is suitable for all halogenated refrigerants. Set pressure 28 bar Type: Hansa ÜSV or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportati on until final destination in Hortolândia -SP, according to section
279	Overflow safety valve discharge tube, complete assembly set.	2	Assembly set consists of: Gauge, double nut, connection tube, brazing adapter Type: Hansa ÜSV or equivalent	Transport until final destination	Max. 90 days after signing of contract	3b. Besides the product price the quote may also include costs and insurance for transportati on until final destination in

Vibration Eliminat	Vibration eliminator for installation at the compressor and between the compressor and the suction/discharge line.	4	The body of the eliminator is made of stainless steel while the brazing connectors are made of copper. The allowable operating temperature is 140°C to -50°C and the maximum admissible operating pressure PS = 60bar. Size: 28mm / 1-1/8" Type: VAFS-91 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Hortolândia -SP, according to section 3b. Besides the product price the quote may also include costs and insurance for transportati on until final destination in Hortolândia -SP, according to section
281	Vibration eliminator for installation at the oil-return line	8	The body of the eliminator is made of stainless steel while the brazing connectors are made of copper. The allowable operating temperature is 140°C to -50°C and the maximum admissible operating pressure PS = 60bar.	Transport until final destination	Max. 90 days after signing of contract	3b. Besides the product price the quote may also include costs and insurance for
			Size: 2-1/8" Type: VAFS-12 or equivalent			transportati on until

Suction Filters						final destination in Hortolândia -SP, according to section 3b.
282	Cartridge strainer for mounting in suction line	12	Diameter of suction line: 2 1/8" Type: F-48P or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportati on until final destination in Hortolândia -SP, according to section 3b.
283	Cartridge strainer for mounting in suction line	12	Diameter of suction line: 1 1/8" Type: F-48P or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance

Liquid Line Filter						for transportati on until final destination in Hortolândia -SP, according to section 3b.
284	Solid core filter with gasket	24	Solid core with 30% molecular sieve and 70% activated alumina. High acid adsorption and standard water adsorption. Size: diameter liquid line 2 1/8" Type: W-48HH or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportati on until final destination in Hortolândia -SP, according to section 3b.
285	Solid core filter with gasket	24	Solid core with 30% molecular sieve and 70% activated alumina. High acid adsorption and standard water adsorption.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may

287	Bitzer compressor		6H-25.2	final	after signing	product
	6H-25.2			destination	of contract	price the
						quote may
						also include
						costs and
						insurance
						for
						transportati
						on until
						final
						destination
						in
						Hortolândia
						-SP,
						according
						to section
						3b.
				Transport until	Max. 90 days	Besides the
				final	after signing	product
				destination	of contract	price the
						quote may
						also include
						costs and
						insurance
	Spare gasket for		Construction Discourse			for
200	Bitzer compressor	4	Spare gasket for Bitzer compressor			transportati
288	4VCS-6.2		4VCS-6.2			on until
						final
						destination
						in
						Hortolândia
						-SP,
						according
						to section

						3b.
289	Spare gasket for Bitzer compressor 6H-35.2	4	Spare gasket for Bitzer compressor 6H-35.2	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportati on until final destination in Hortolândia -SP, according to section 3b.
290	Spare gasket for Bitzer compressor 6J-33.2	4	Spare gasket for Bitzer compressor 6J-33.2	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportati on until final destination in Hortolândia -SP,

			according
			to section
			3b.

Lot 10 Supermarket Gas Detection System for Supermarket 2

Position Number	Item/s to be Supplied	Quantity	Description/Specifications of Goods	Related Services	Delivery Date	Other Information
Supermarket Gas D	etection System					
291	Fixed gas detection system for leakages monitoring in cooling positions and within the machinery room.	1	The Infrared Monitoring system is comprising of a Refrigerant Leak Detection device utilizing infrared absorption sensors to analyze air samples. The monitor has at least 12 individual sampling Channels (SAMMs), each having their own pump and filter. Each SAMM is connected to the area to be sampled by 6mm semi-rigid nylon pipework. The specific area can then be further subdivided into small regions using a manifold with up to 4 sampling pipes, known as spur kits. This multi sampling technique ensures that likely sources of refrigerant leakage can be specifically targeted. Each spur is 5 meters in length. Alarms can be generated	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote ma also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

	1	I	T	I	
			at three different levels described		
			as 'Alert', 'Alarm' and 'Critical',		
			these alarms can be signaled to		
			other devices using the 16		
			configurable relays. The current		
			alarm status is indicated on a TFT		
			LCD display and a Traffic Light		
			Display provides the user with an		
			instant visual status of the		
			system.		
			Details of System Alarms, Events		
			and Faults are stored within the		
			internal PC and can be accessed		
			using the Operators Keypad. The		
			monitor is IP addressable and can		
			be linked to a local area network		
			(LAN) for remote access to alarm		
			details if required.		
			details if required.		
			Type: GRM2-104D2-112 or		
			equivalent		
			The Infrared Monitoring system is		Besides the
			comprising of a Refrigerant Leak		product price
	Final sas		Detection device utilizing infrared		the quote may
	Fixed gas		absorption sensors to analyze air		also include
	detection system		samples. The monitor has 16		costs and
	for leakages	4	individual sampling Channels		insurance for
292	monitoring in	1	(SAMMs), each having their own		transportation
	cooling positions and within the		pump and filter. Each SAMM is		until final
			connected to the area to be		destination in
	machinery room.		sampled by 6mm semi-rigid nylon		Hortolândia-
			pipework. The specific area can		SP, according
			then be further subdivided into		to section 3b.

			small regions using a manifold with up to 4 sampling pipes, known as spur kits. This multi sampling technique ensures that likely sources of refrigerant leakage can be specifically targeted. Each spur is 5 meters in length. Alarms can be generated at three different levels described as 'Alert', 'Alarm' and 'Critical', these alarms can be signaled to other devices using the 16 configurable relays. The current alarm status is indicated on a TFT LCD display and a Traffic Light Display provides the user with an instant visual status of the system. Details of System Alarms, Events and Faults are stored within the internal PC and can be accessed using the Operators Keypad. The monitor is IP addressable and can be linked to a local area network (LAN) for remote access to alarm details if required. Type: GRM2-104D2-116 or equivalent		Besides the
293	Pipe package for the fixed gas monitoring system.	1	The pipe package for the fixed gas monitoring system with at least 12 channels includes all necessary freeway pip and spur kits, sample		product price the quote may also include costs and

	1					:
			points, user manual, pipe cutters,			insurance for
			ties, etc.			transportation
						until final
			Type: 12SP-PIPE or equivalent			destination in
						Hortolândia-
						SP, according
						to section 3b.
				Transport until	Max. 90 days	Besides the
				final	after signing of	product price
			The pipe package for the fixed gas	destination	contract	the quote may
			monitoring with 16 channels			also include
	Pipe package for		includes all necessary freeway			costs and
294	the fixed gas	1	pipe and spur kit, sample points,			insurance for
	monitoring	1	user manual, pipe cutters, ties,			transportation
	system.		etc.			until final
						destination in
			Type: 16SP-PIPE or equivalent			Hortolândia-
						SP, according
						to section 3b.
				Transport until	Max. 90 days	Besides the
				final	after signing of	product price
				destination	contract	the quote may
						also include
			Service kit for annually planned			costs and
295			preventive maintenance of the			insurance for
	Service kit	1	fixed gas monitoring systems with			transportation
			at least 28 channels.			until final
						destination in
						Hortolândia-
						SP, according
						to section 3b.
	Red beacon for		The beacon will be installed	Transport until	Max. 90 days	Besides the
	visible leakage	1	within the market operators	final	after signing of	product price
296	alarm	_	office to indicate that the gas	destination	contract	the quote may
		I .	1 10	1	1 - 3 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 -	40.000

			monitoring system noticed a potential HCFC R22 leakage			also include costs and
			within a specific area.			insurance for
						transportation until final
						destination in
						Hortolândia-
						SP, according
						to section 3b.
				Transport until	Max. 90 days	Besides the
				final	after signing of	product price
				destination	contract	the quote may
			The beacon and sounder will be			also include
	Red beacon and		installed within the market			costs and
297	sounder for visible	1	machinery room to indicate that			insurance for
	and acoustic	1	the gas monitoring system			transportation
	leakage alarm		noticed a potential HCFC R22			until final
			leakage within a specific area.			destination in
						Hortolândia-
						SP, according
						to section 3b.

Lot 11 Tools and Consumables for Supermarket 2

Position Number	Item/s to be Supplied	Quantity	Description/Specifications of Goods	Related Services	Delivery Date	Other Information
Brazing Torch	L		l			L
298	Flexible twin- flame fork torch, size 2 with thickness of 1- 2mm, inlet M15x1 RH for the use with acetylene / oxygen	4	Flexible twin-flame fork torch, size 2 with thickness of 1-2mm, inlet M15x1 RH for the use with acetylene / oxygen Type: Klein Rista or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
299	Shower-burner set of three. Universal use shower-burner for welding and brazing processes for the use with acetylene and oxygen.	2	Set consisting of three shower- burner Type: Perplex Klein Rista or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

300	Welding and brazing torch set for the use with acetylene - oxygen gases, consisting of handle, insert nozzles sizes 1 to 5 / 0,5 to 9mm, nozzles cleaning needles, 10-spanner tool, steal sheet case.	2	Complete welding and brazing set Type: Klein Rista or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.			
Refrigerant and oil	Refrigerant and oil contamination detection equipment								
301	Refrigerant and compressor oil contamination detector kit consisting of a brass body, recessed viewing track, stainless steel needles and extension hose. Detection tubes designed as heavy wall Pyrex glass, packed under dry nitrogen charge.	4	RAC industries valid field test for a quick and accurate determination of contaminant levels in oil and refrigerant. Complete set with detection tubes and a set of three acid, moisture and oil test. Detector kit supplied with rugged carrying box. Type: Checkmate RT700K or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.			
302	Replacement set of three Acid detector tubes	6	For refrigerant detector kit Type: Checkmate RT750A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for			

						transportation until final destination in Hortolândia- SP, according to section 3b.
303	Replacement set of three Acid detector tubes	6	For refrigerant detector kit Type: Checkmate RT751M or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
304	Replacement set of three Acid detector tubes	6	For refrigerant detector kit Type: Checkmate RT752C or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

305	Acid test kit for the use with Mineral and Alkyl Benzene oil	30	Test for contamination in the compressors crankcase which can be indicative of lubricant decomposition. Type: TKO or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.			
Brazing and tubing	Brazing and tubing equipment and consumables								
306	Nitrogen pressure regulator for steel cylinders. Regulator from sturdy solid brass design, equipped with protective caps for gauges.	1	Cylinder pressure 0-315/200 bar, 0-60/40 bar working pressure and about 130 Nm³/h maximum. Connection at cylinder, hex nut male for nitrogen bottle norm UNI 4409 (W21.7x1-1/4" anticlockwise)	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.			
307	Nitrogen test control unit, Nitrogen pressure regulator for steel cylinders. Set consisting of: Pressure regulator max. 220 bar primary and 5 to	1	Nitrogen regulator for the use with pressure and tightness tests for medium and large refrigeration cycles. Washing and blowing out of refrigeration cycles. Cylinder connection UNI 4409 (W21.7x1-1/4" anticlockwise)	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in			

	50 bar secondary, Pressure control valve adjusted for 55 bar secured, marking gauge including marking indicator, charging hose 900mm with 1/4" connector SAE. Adapter piece with valve deadener 1/4" SAE x 1/2" -20 UNF		Cylinder pressure 220 bar, working pressure 5 to 50 bar. Type: PRV 1000 or equivalent			Hortolândia- SP, according to section 3b.
308	Nitrogen hoses for pressures up to 60 bar and a length of 5m	1	Hose with textile reinforcement and temperature range from - 20°C up to +50/70°C. Hoses with pressure regulator connection and at the end 1/4" SAE. Hose inner diameter 10 mm.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
309	Heat Protection paste, bucket of 0,9 kg	2	Manually moldable paste designed to divert heat and protect all heat-sensitive materials while brazing and welding with temperatures of up to 3000°C – used paste is	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

			reusable.			transportation until final destination in Hortolândia- SP, according to section 3b.
310	Brazing Paste for Silver- Brazing Alloys	4	Brazing paste acc. DIN EN 1045 for silver-bearing brazing alloys – especially suited for brazing copper (Cu) to brass (Ms) and copper (Cu) to red brass. The flux residue is soluble in cold water and can be removed by rinsing – in tins.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
311	Cleaning Fleeces	20	Cleaning fleece for quick cleaning of soldering spots without scratching – metal-free – 10 units per package.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
312	Torch lighter	5	Gun-shaped gas lighter – refill pack: 12 x 5 mm replacement flints in small holder	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include

						costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
313	Torch lighter	52	Set of 12 replacement flints	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
314	Safety Goggles	2	Flexible flip-front safety goggles – suitable for spectacle wearers – inner lenses clear and shatter-proof – flip-up lenses protection class DIN 5 green	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

315	Universal deburrer	10	Durable universal deburrer with non-slip soft plastic handle and exchangeable blade designed for easy and quick deburring of tubes, sheet metal and edges. The case can hold up to 4 replacement blades.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
316	Spare blades for universal deburrer	50		Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
317	Leak detection spray	10	Quick and reliable detection of leaks in refrigeration and air conditioning systems as well as gas lines using a foaming spray. Non-flammable, non-corrosive, CFC-free and non-toxic. Temperature range -6°C to 97°C.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-

318	LED work light	2	Battery-operated robust work light with extremely bright light based on LED technology. With 160 installed LEDs the flash lights feature high light efficiency with low power consumption. Lighting duration: 5 h, charging duration: 5-6 h, shock-proof case with suspending hook, on/off switch on non-slip handle, rechargeable via 230 V power supply or 12 V cigarette lighter, splash-proof and oil-resistant. Incl. power supply and car charger.	Transport until final destination	Max. 90 days after signing of contract	SP, according to section 3b. Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
319	Torque wrenches set	2	Durable torque wrenches set designed especially for refrigeration and air conditioning systems, featuring 6 different wrenches sizes and adjustable torque lever (10 – 75 newton meter) in sturdy plastic case.	final destination	after signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Hortolândia- SP, according to section 3b.
320	Mini telescopic mirror	2	Round pocket mirror in pen format with a diameter of 32 mm. Extendable to a length of 465 mm, the mirror is adjustable in all directions by means of a double	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

			ball-and-socket joint.			transportation until final
						destination in Hortolândia-
						SP, according
						to section 3b.
				Transport until	Max. 90 days	Besides the
				final	after signing of	product price
				destination	contract	the quote may
						also include
			High quality asbestos-free			costs and
321	Heat protection	10	protection mat for protection			insurance for
	mat, 4-layer, up to	10	against flames and heat, flexible			transportation
	3000°C		and long-life.			until final
						destination in
						Hortolândia-
						SP, according
						to section 3b.
				Transport until	Max. 90 days	Besides the
				final	after signing of	product price
				destination	contract	the quote may
						also include
	Heat protection		High quality asbestos-free			costs and
322	mat, 2-layer, up to	10	protection mat for protection			insurance for
	3000°C	10	against flames and heat, flexible			transportation
	3000 C		and long-life.			until final
						destination in
						Hortolândia-
						SP, according
						to section 3b.
	Copper Brazing		Copper brazing alloy for brazing	Transport until	Max. 90 days	Besides the
	Alloy With 6%	6	copper to copper without the use	final	after signing of	product price
	Phosphorus and		of flux – permissible	destination	contract	the quote may
323	15% silver		for refrigeration and air-			also include

	According to DIN EN 1044, ISO 3677 and DIN 8513		conditioning technology with pipe dimensions > 28 x 1.5 mm, flux is used for brazing copper to brass and copper to red brass — creep-resistant up to 200°C — capillary active and good, square bars in 2.0 x 500 mm lengths. 1 kg/packing unit. Working temperature 710°C, melting range 650°C-800°C, 2,0mm diameter. Type: B-Cu80PAg or equivalent Cadmium-free silver brazing	Transport until	Max. 90 days	costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
324	Silver Brazing Alloys, Cadmium- Free, Acc. to DIN EN 1044, ISO 3677 and DIN 8513, Bare, 1,5mm² Acc. to DIN EN 1045 FH 10, 34% silver content	4	alloys (bare) with 34% silver, brazing paste have to be employed with bare rods, permissible for refrigeration and air-conditioning technology down to -200°C, very good flow properties, capillary active and highly fluid creep-resistant up to 200°C – round rods, length 500 mm. 0,10 kg/packing unit. Working temperature 710°C, melting range 630°C-730°C, 1,5mm diameter.	final destination	after signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Hortolândia- SP, according to section 3b.

325	Silver Brazing Alloys, Cadmium- Free, Acc. to DIN EN 1044, ISO 3677 and DIN 8513,	2	Type: B-Cu36AgZnSn-630/730 or equivalent Cadmium-free silver brazing alloys (bare) with 34% silver, brazing paste have to be employed with bare rods, permissible for refrigeration and air-conditioning technology down to -200°C, very good flow properties, capillary active and highly fluid creep-resistant up to 200°C – round rods, length 500 mm.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
	'Bare, 2 mm ² Acc. to DIN EN 1045 FH 10		0,10 kg/packing unit. Working temperature 710°C, melting range 650°C-800°C, 2,0mm diameter. Type: B-Cu36AgZnSn-630/730 or equivalent			to section 3b.
	Tube expander set		Durable forged steel tube expander designed to expand copper, aluminium and soft metal tubes for the efficient	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include
326	in steel storage case	1	manufacture of standardized tube fittings, complete set incl. 1 tube expander as well as 6 expander head replacements in a steel			costs and insurance for transportation until final destination in

			storage case.			Hortolândia-
			Size: 3/8" -1/2" - 5/8" - 3/4" - 7/8" - 1"			SP, according to section 3b.
327	Set of expander heads	1	Durable forged steel tube expander designed to expand copper, aluminium and soft metal tubes. Size: 1-1/8" - 1-3/8" - 1-5/8"	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
328	Tube cutter	2	Spring-guided telescopic tube cutter for the precise cutting of copper, brass, aluminium and soft steel tubes. The integrated spring ensures automatic application, no manual readjustment is necessary. Once applied for cutting, the integrated spring continues to press the cutting wheel against the tube to be cut until it is fully separated. Material hardness adjustable from soft to hard.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
329	Tee-Extractor set 1/2 - 5/8 - 7/8 - 1.1/8", 1.3/8",	1	Tee-Extractor sets include: special ratchet, cam pincer, special conical drill, UNIDRILL®	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may

	1.5/8"		Automatic, in steel carrying case Size: 1/2 - 5/8 - 7/8 - 1.1/8", 1.3/8", 1.5/8"			also include costs and insurance for transportation until final destination in Hortolândia- SP, according
330	Tube cutter steel spare cutting wheel	2	Tube cutter steel spare cutting wheel Size: 4-32mm / 1/8" to 1-1/4"	Transport until final destination	Max. 90 days after signing of contract	to section 3b. Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according
331	Flaring tool set	1	Flaring tool with eccentric cone and sliding clutch designed for the controlled manufacture of 45° flares without fractures. Suitable for copper, brass, aluminum and soft metal tubes. Size: 3/16" - 1/4" - 5/16" - 3/8" - 1/2" - 5/8" - 3/4"	Transport until final destination	Max. 90 days after signing of contract	to section 3b. Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

332	Lead Sealing pliers Set	1	Set consisting of one lead sealing pliers, seal wire, nylon nirosta, and lead seals. The lead sealing tool is manufactured from cast carbon steel and chrome plated for protection. The tools are supplied with round dies, plain or corrugated for effective crimping of all Acme Lead Seals, the plastic YP10 and Crimp Seals. Standard non engraved dies to be supplied. The sealing tools may also be used to mark other materials such as aluminum plate or laminated card. Including 100m seal wire, 500 lead seals 10mm diameter. Set with led seals.	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
333	Grip- Pliers with curved jaws	3	Pliers made from chrome-molybdenum-steel construction -sturdiness and rust prevention. Anti-Skid surface with safe grip for difficult situations. 10CR 220mm	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

334	Sealant for threaded fitting in refrigeration systems, provided in 10 ml bottle.	20	The sealant is recommended for refrigeration systems and service with strong chemicals. The sealant is used in place of specialty non-hardening compounds, litharge, glycerin, and sealing tape. This product is typically used in applications up to 149 °C. Typical applications include metal and fiber plants, chemical industries	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according
			1			
			industries.			to section 3b.
			10 ml bottle.			
			Type: Loctite 554 or equivalent			

Lot 12 Pipe Support and Fixation for Supermarket 2

Position Number	Item/s to be Supplied	Quantity	Description/Specifications of Goods	Related Services	Delivery Date	Other Information
Pipe Support and Fi	xation	L				
335	Pipe rings, galvanized, with EPDM rubber insulation and for clamping screw MS and for connection thread M8/M10	30	Clamping range area 8 to 11 mm Type: MPN-RC 8/11 A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
336	Pipe rings, galvanized, with EPDM rubber insulation and with clamping screw M6 and for connection thread M8/M10	30	Clamping range area 1/4" Temperature range -40°C to 110°C Type: MPN-RC 1/4" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
337	Pipe rings, galvanized, with EPDM rubber insulation and	30	Clamping range area 3/8" Temperature range -40°C to 110°C	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include

	with clamping		Type: MPN-RC 3/8" A or			costs and
	screw M6 and for		equivalent			insurance for
	connection thread M8/M10					transportation until final
						destination in
						Hortolândia-
						SP, according
						to section 3b.
				Transport until	Max. 90 days	Besides the
				final	after signing of	product price
	Pipe rings,			destination	contract	the quote may
	galvanized, with		Clamping range area 1/2"			also include
	EPDM rubber					costs and
338	insulation and	20	Temperature range -40°C to			insurance for
	with clamping	30	110°C			transportation
	screw M6 and for		Type: MPN-RC 1/2" A or			until final
	connection thread		equivalent			destination in
	M8/M10					Hortolândia-
						SP, according
						to section 3b.
				Transport until	Max. 90 days	Besides the
				final	after signing of	product price
				destination	contract	the quote may
	Pipe rings,					also include
	galvanized, with		Clamping range area 3/4"			costs and
339	EPDM rubber					insurance for
	insulation and	40	Temperature range -40°C to			transportation
	with clamping	40	110°C			until final
	screw M6 and for		Type: MPN-RC 3/4" A or			destination in
	connection thread		equivalent			Hortolândia-
	M8/M10					SP, according
						to section 3b.

340	Pipe rings, galvanized, with EPDM rubber insulation and with clamping screw M6 and for connection thread M8/M10	40	Clamping range area 29 to 32 mm Temperature range -40°C to 110°C Type: MPN-RC 29/32 A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
341	Pipe rings, galvanized, with EPDM rubber insulation and with clamping screw M6 and for connection thread M8/M10	30	Clamping range area 1-1/4" Temperature range -40°C to 110°C Type: MPN-RC 1 1/4" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
342	Pipe rings, galvanized, with EPDM rubber insulation and with clamping screw M6 and for connection thread M8/M10	50	Clamping range area 2-1/2" Temperature range -40°C to 110°C Type: MPN-RC 2 1/2" B or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final

						destination in Hortolândia- SP, according to section 3b.
343	Pipe rings, galvanized, and with clamping screw MS and for connection thread M8/M10	35	Clamping range area 3/8" Type: MPN-S 3/8" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
344	Pipe rings, galvanized, and with clamping screw MS and for connection thread M8/M10	25	Clamping range area 1/2" Type: MPN-S 1/2" or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
345	Pipe rings, galvanized, and with clamping screw MS and for connection thread M8/M10	35	Clamping range area 3/4" Type: MPN-S 3/4" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

						transportation until final destination in Hortolândia- SP, according to section 3b.
346	Pipe rings, galvanized, and with clamping screw MS and for connection thread M8/M10	30	Clamping range area 1" Type: MPN-S 1" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
347	Pipe rings, galvanized, and with clamping screw MS and for connection thread M8/M10	30	Clamping range area 35 to 39 mm Type: MPN-S 35/39 A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
348	Pipe rings, galvanized, and with clamping screw MS and for	30	Clamping range area 1-1/4" Type: MPN-S 1 1/4" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include

	connection thread M8/M10					costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
349	Pipe rings, galvanized, and with clamping screw MS and for connection thread M8/M10	35	Clamping range area 2" Type: MPN-S 2" A or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
350	Pipe rings, galvanized, with SILICON rubber insulation and with clamping screw M6 and for connection thread M8/M10	10	Clamping range area 29 to 32 mm Temperature range -60°C to 200°C Type: MP-MIS or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

351	Pipe rings, galvanized, with EPDM rubber insulation and with clamping screw M6 and for connection thread M8/M10	50	Clamping range area 8-12mm Temperature range -40°C to 110°C Type: MP-LHI or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
352	Pipe retaining clips in accordance with DIN 3016. Clamping range 1/4" (6mm)	200	Pipe retaining clip for all suitable kinds of retaining applications such as cables, cable protection pipes, hoses and other lines. Clip with 15mm band width, M6 bolt, rubber band (polychloropren) and steel galvanized adjustable band. Temperature range -35°C to 100°C. Resistant against oil, alcohol, acids and fat. Type: RSGU 1.6/15 W1 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
353	Pipe retaining clips in accordance with DIN 3016. Clamping range 3/8" (10mm)	200	Pipe retaining clip for all suitable kinds of retaining applications such as cables, cable protection pipes, hoses and other lines. Clip with 15mm band width, M6 bolt, rubber band (polychloropren) and steel galvanized adjustable band. Temperature range -35°C to 100°C. Resistant against oil,	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in

alcohol, acids and fat.	Hortolândia-
	SP, according
Type: RSGU 1.10/15 W1 or	to section 3b.
equivalent	!

Lot 13 Compression Fitting and accessories for Supermarket 2

Position Number	Item/s to be Supplied	Quantity	Description/Specifications of Goods	Related Services	Delivery Date	Other Information
Compression Fitting	and accessories					
354	Gaugeable brass tube adapter fittings with nut- ferrule attachments. Reducer fitting 1/4" nut-ferrule to 1/4" AN - (1/4" SAE)	100	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-400-A-4ANF or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
355	Gaugeable brass tube female connector fittings with nut-ferrule attachments. Connector fitting 1/4" nut-ferrule to 1/4" pipe OD	100	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-400-7-4ST or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

356	Gaugeable brass tube adapter fittings with nut- ferrule attachments. Reducer fitting 3/8" nut-ferrule to 3/8" AN - (3/8"" SAE)	50	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-600-A-6ANF or equivalent Leak-tight design of the tube	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
357	Gaugeable brass tube straight fittings union with 1/4" nut-ferrule attachments.	40	fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-400-6 or equivalent	final destination	after signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Hortolândia- SP, according to section 3b.
358	Gaugeable brass tube straight fittings union with 3/8" nut-ferrule attachments.	40	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

			(tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-600-6 or equivalent			transportation until final destination in Hortolândia- SP, according to section 3b.
359	Gaugeable brass tube fittings T union with 1/4"" nut-ferrule attachments.	30	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-400-3 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
360	Gaugeable brass tube fittings T union with 3/8" nut-ferrule attachments.	30	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-600-3 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

361	Gaugeable brass tube fittings Cross union with 1/4" nut-ferrule attachments.	20	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-400-4 or equivalent Leak-tight design of the tube	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b. Besides the
362	Gaugeable brass tube fittings Cross union with 3/8" nut-ferrule attachments.	20	fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-600-4 or equivalent	final destination	after signing of contract	product price the quote may also include costs and insurance for transportation until final destination in Hortolândia- SP, according to section 3b.
363	Gaugeable Nut- ferrule replacement set 1/4"	5	Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design criteria for critical issues such as: Leakage proved, highly vibration	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for

364			(tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-400-NFSET or equivalent Leak-tight design of the tube fitting for use in process instrumentation for refrigerant and oil applications. Design	Transport until final destination	Max. 90 days after signing of contract	transportation until final destination in Hortolândia- SP, according to section 3b. Besides the product price the quote may also include
	Gaugeable Nut- ferrule replacement set 3/8"	5	criteria for critical issues such as: Leakage proved, highly vibration (tube grip) resistant, thermal shock resistant, compliance with industry standards, ease of installation and corrosion resistant. Type: Swagelok B-600-NFSET or equivalent			costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
365	RAC Tubing Copper Tubes in straight lengths (rigid) 1/4" in length of 4m	15	Copper tubes according EN 12735-1. Diameter 1/4", 4m length, wall with 1mm thickness Type: ITE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

366	RAC Tubing Copper Tubes in straight lengths (rigid) 3/8" in length of 4m	15	Copper tubes according EN 12735-1. Diameter 3/8", 4m length, wall with 1mm thickness Type: ITE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
367	RAC Tubing Copper Tubes in straight lengths (rigid) 1/2" in length of 4m	15	Copper tubes according EN 12735-1. Diameter 1/2", 4m length, wall with 1mm thickness Type: ITE or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
368	Assembly Carrying Case - Bending Machines	1	Rugged carrying case with a set of four bending machines, heavy duty tube reamer tube cutter and tube fixation rubber. Set of bending machines in 1/4", 5/16", 3/8", 12". Transport case with wheels and telescope handle. The case is air-tight, dust-tight, water-tight and with air-compensating valve. Maximum	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-

369	Assembly Carrying Case - Tool Box	1	ambient temperature for the carrying case is -40°C to 80°C, weight including tools is 20 kg. Type: ASK Bending Machines Carrying Case -Z or equivalent Rugged carrying case with a set of tools for Gaugeable Tube Fittings and Adapter Fittings, consisting of four ratchet wrenches 1/4", 5/16", 3/8", and 1/2". Further one check-gauge, tube-cutting support, tube reamer, tube cutter, Snoop Leak Detection Fluid and SWAK thread tightening paste. The case is airtight, dust-tight, water-tight and with air-compensating valve. Maximum ambient temperature for the carrying case is -40°C to 80°C, weight including tools is 8.2 kg. Type: ASK Tool-Box Carrying Case -Z or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.
370	Leak Check Fluid for application on tubes and fitting at temperatures - 54°C to 93°C	1	Consisting of tenside, etylene glycol, and deionized water. Type: Swagelok MS-CR-SNOOP-GAL or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in

						Hortolândia- SP, according to section 3b.
371	PTTFE Thread Sealant Tape	20	Thread Sealant Tape for thread fittings 1/8", 1/4" and 3/8" Type: Swagelok MS-STR-4 or equivalent	Transport until final destination	Max. 90 days after signing of contract	Besides the product price the quote may also include costs and insurance for transportation until final destination in Hortolândia-SP, according to section 3b.

Section 3b: Related Services

Further to the Schedule of Requirements in the preceding Table, Bidders are requested to take note of the following additional requirements, conditions, and related services pertaining to the fulfillment of the requirements:

	☐ FCA					
Delivery Term	☐ CPT					
[INCOTERMS 2010]	☐ CIP					
(Pls. link this to price schedule)	⊠ DAP					
	☐ Other <i>Click here</i>	to specify				
Exact Address of	Lots 1-7:					
Delivery/Installation Location	Y.Yamada Express					
	A/C Rafael Yamada					
	Av. Nazaré, 140					
	Belém-PA – Brazil					
	CEP: 66.035-170					
	1.1.0.42					
	Lots 8-13:	iconto				
	Supermercado São V A/C Thiago Pietrobor					
	Rua Orestes Denadai					
	Jardim das Palmeiras,					
	Hortolândia-SP – Bra					
	CEP: 13.184-270	- '				
Mode of Transport Preferred	⊠ AIR	∠ LAND				
	⊠ SEA	☐ OTHER [pls. specify]				
UNDP Preferred Freight	N/A					
Forwarder, if any ⁸						
Distribution of shipping						
documents (if using freight	N/A					
forwarder)	14/7					
Delivery Date	Maximum of 90 days after the signing of the contract					
Customs, if needed, clearing	⊠ UNDP	-				
shall be done by:	☐ Supplier					
	☐ Freight Forwarder					
Inspection upon delivery	-	asonable time after delivery of the goods to				
		reject and refuse acceptance of goods not				

⁸A factor of the Incoterms stipulated in the ITB. The use of a UNDP preferred courier may be considered for purposes of ensuring forwarder's familiarity with procedures and processing of documentary requirements applicable to UNDP when clearing with customs authority of the country of destination.

	conforming to this Purchase Order. Payment for goods pursuant to this Purchase Order shall not be deemed an acceptance of the goods.
Technical Support Requirements	Technical Support and assistance
1.	
Payment Terms (max. advanced	delivered as specified and receipt of invoice
payment is 20% of total price as	☐ Max of 20% upon issuance of PO and the rest within 30 days
per UNDP policy)	from UNDP's acceptance of goods as specified and receipt of
	invoice
	☐ Others [pls. specify]
	☐ Pre-shipment inspection [pls. provide details]
Conditions for Release of	☐ Inspection upon arrival at destination. UNDP shall have a
Payment	reasonable time after delivery of the goods to inspect them and to
	reject and refuse acceptance of goods not conforming to this
	Purchase Order. Payment for goods pursuant to this Purchase
	Order shall not be deemed an acceptance of the goods.
	☐ Installation [pls. provide details]
	☐ Testing [pls. provide details]
	☐ Training on Operation and Maintenance [pls. provide details] ☐ Written Acceptance of Goods based on full compliance with
	RFQ requirements
	☐ Others [pls. specify]
After-sale services required	✓ Others [pis. specify] ✓ Warranty on Parts and Labor for minimum period of 12 months
Arter-sale services required	☑Technical Support and Assistance
All documentations, including	⊠ English
catalogs, instructions and	☐ French
operating manuals, shall be in	□ Spanish
this language	

Section 4: Bid Submission Form⁹

(This should be written in the Letterhead of the Bidder. Except for indicated fields, no changes may be made in this template.)

Insert: Location
Insert: Date

To
JOF - Joint Operations Facility
Ref. JOF-0131-29582/2016
Casa das Nações Unidas no Brasil
Setor de Embaixadas Norte, Quadra 802, Conjunto C, Lote 17
Complexo Sergio Vieira de Mello, Módulo I, Prédio Zilda Arns, Salas 117 a 123
CEP 70800-400 – Brasília, DF - Brasil

Dear Sir(s)/Madam(s),

We, the undersigned, hereby offer to supply the goods and related services required for [insert: title of goods and services required as per ITB] in accordance with your Invitation to Bid dated [insert date]. We are hereby submitting our Bid, which includes the Technical Bid and Price Schedule.

We hereby declare that:

- a) All the information and statements made in this Bid are true and we accept that any misrepresentation contained in it may lead to our disqualification;
- b) We are currently not on the removed or suspended vendor list of the UN or other such lists of other UN agencies, nor are we associated with, any company or individual appearing on the 1267/1989 list of the UN Security Council;
- c) We have no outstanding bankruptcy or pending litigation or any legal action that could impair our operation as a going concern; and
- d) We do not employ, nor anticipate employing, any person who is or was recently employed by the UN or UNDP.

We confirm that we have read, understood and hereby fully accept the Schedule of Requirements and Technical Specifications describing the duties and responsibilities required of us in this ITB, and the General Terms and Conditions of UNDP's Standard Contract for this ITB.

We agree to abide by this Bid for [insert: period of validity as indicated in Data Sheet].

We undertake, if our Bid is accepted, to initiate the supply of goods and provision of related services not later than the date indicated in the Data Sheet.

 $^{^{9}}$ No deletion or modification may be made in this form. Any such deletion or modification may lead to the rejection of the Bid.

We fully understand and recognize that UNDP is not bound to accept this Bid, that we shall bear all costs associated with its preparation and submission, and that UNDP will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the evaluation.

Yours sincerely,
Authorized Signature [In full and initials]: Name and Title of Signatory: Name of Firm: Contact Details:
[Please mark this letter with your corporate seal, if available]

Section 5: Documents Establishing the Eligibility and Qualifications of the Bidder

Bidder Information Form¹⁰

Date: [insert date (as day, month and year] of Bid Submission]
ITB No.: [insert number of bidding process]

		Page	of	pages			
1. Bidder's Legal Name [insert Bidde	er's legal name]						
2. In case of Joint Venture (JV), legal	2. In case of Joint Venture (JV), legal name of each party: [insert legal name of each party in JV]						
3. Actual or intended Country/ies of	3. Actual or intended Country/ies of Registration/Operation: [insert actual or intended Country of Registration]						
4. Year of Registration in its Location	: [insert Bidder's year of registration	<u>, </u>					
5. Countries of Operation	6. No. of staff in each Country	7.Years of Ope	eration in each C	ountry			
8. Legal Address/es in Country/ies of registration]	Registration/Operation:[insert Bido	ler's legal addre	ess in country of				
9. Value and Description of Top three	(3) Biggest Contract for the past fiv	e (5) years					
10. Latest Credit Rating (Score and Sc	ource, if any)						
11. Brief description of litigation his outcomes, if already resolved.	tory (disputes, arbitration, claims, e	tc.), indicating c	current status an	d			
12. Bidder's Authorized Representati	ve Information						
Name: [insert Authorized Represen	tative's name]						
Address: [insert Authorized Repres							
-	uthorized Representative's telephon	e/fax numbers]	1				
Email Address: [insert Authorized F							
13. Are you in the UNPD List 1267.1989 or UN Ineligibility List? \square YES or \square NO							
14. Attached are copies of original documents of:							
\square All eligibility document requirements listed in the Data Sheet							
☐ If Joint Venture/Consortion	☐ If Joint Venture/Consortium – copy of the Memorandum of Understanding/Agreement or Letter of						
Intent to form a JV/Consorti	um, or Registration of JV/Consortiu	m, if registered	_				
\square If case of Government co	rporation or Government-owned/c	ontrolled entity	, documents est	ablishing			
legal and financial autonomy and compliance with commercial law.							

 $^{^{10}}$ The Bidder shall fill in this Form in accordance with the instructions. Apart from providing additional information, no alterations to its format shall be permitted and no substitutions shall be accepted.

Joint Venture Partner Information Form (if Registered)¹¹

Date: [insert date (as day, month and year) of Bid Submission]
ITB No.: [insert number of bidding process]

		Page _	of	pages			
1. Bidder's Legal Name: [insert Bi	dder's legal name]						
2. JV's Party legal name: [insert JV	/'s Party legal name]						
3. JV's Party Country of Registration: [insert JV's Party country of registration]							
4. Year of Registration: [insert Party	's year of registration]						
5. Countries of Operation	6. No. of staff in each Country		7.Years of Operation in Country	n each			
8. Legal Address/es in Country/ies of registration]	f Registration/Operation: [insert	Party's I	egal address in count	ry of			
9. Value and Description of Top thre	e (3) Biggest Contract for the pa	st five (5)	years				
10. Latest Credit Rating (if any): Cli	ck here to enter text.						
 Brief description of litigation his outcomes, if already resolved. 	istory (disputes, arbitration, clair Click here to enter text.	ns, etc.),	indicating current sta	tus and			
13. JV's Party Authorized Represer	tative Information						
Name: [insert name of JV's Party authorized representative] Address: [insert address of JV's Party authorized representative] Telephone/Fax numbers: [insert telephone/fax numbers of JV's Party authorized representative] Email Address: [insert email address of JV's Party authorized representative]							
14. Attached are copies of original documents of: [check the box(es) of the attached original documents]							
 ☐ All eligibility document requirement ☐ Articles of Incorporation or Regis ☐ In case of government owned entering with commercial law. 	tration of firm named in 2.	al and fin	ancial autonomy and	compliance			

 $^{^{11}}$ The Bidder shall fill in this Form in accordance with the instructions. Apart from providing additional information, n_0 alterations to its format shall be permitted and no substitutions shall be accepted.

Section 6: Technical Bid Form¹²

JOF-0131-29582/2016

Name of Bidding Organization / Firm:	
Country of Registration:	
Name of Contact Person for this Bid:	
Address:	
Phone / Fax:	
Email:	

SECTION 1: EXPERTISE OF FIRM/ ORGANISATION

This section should fully explain the Bidder's resources in terms of personnel and facilities necessary for the performance of this requirement.

- 1.1 Brief Description of Bidder as an Entity: Provide a brief description of the organization / firm submitting the Bid, its legal mandates/authorized business activities, the year and country of incorporation, and approximate annual budget, etc. Include reference to reputation, or any history of litigation and arbitration in which the organisation / firm has been involved that could adversely affect or impact the delivery of goods and/or performance of related services, indicating the status/result of such litigation/arbitration.
- <u>1.2. Financial Capacity:</u> Based on the latest Audited Financial Statement (Income Statement and Balance Sheet) describe the financial capacity (liquidity, stand-by credit lines, etc.) of the bidder to engage into the contract. Include any indication of credit rating, industry rating, etc.
- 1.3. Track Record and Experiences: Provide the following information regarding corporate experience within at least the last five (5) years which are related or relevant to those required for this Contract.

Name of project	Client	Contract Value	Period of activity	Types of activities undertaken	Status or Date Completed	References Contact Details (Name, Phone, Email)

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 $^{^{12}}$ Technical Bids not submitted in this format may be rejected.

SECTION 2 - SCOPE OF SUPPLY, TECHNICAL SPECIFICATIONS, AND RELATED SERVICES

This section should demonstrate the Bidder's responsiveness to the specification by identifying the specific components proposed, addressing the requirements, as specified, point by point; providing a detailed description of the essential performance characteristics proposed; and demonstrating how the proposed bid meets or exceeds the specifications.

<u>2.1. Scope of Supply</u>: Please provide a detailed description of the goods to be supplied, indicating clearly how they comply with the technical specifications required by the ITB (see below table); describe how the organisation/firm will supply the goods and any related services, keeping in mind the appropriateness to local conditions and project environment.

Item No.	Description/ Specification of Goods	Source/ Manufacturer	Country of Origin	Qty	Quality Certificate/ Export Licences, etc. (indicate all that applies and if attached)

A supporting document with full details may be annexed to this section

- <u>2.2. Technical Quality Assurance Mechanisms</u>: The bid shall also include details of the Bidder's internal technical and quality assurance review mechanisms, all the appropriate quality certificates, export licenses and other documents attesting to the superiority of the quality of the goods and technologies to be supplied.
- <u>2.3.</u> Reporting and Monitoring: Please provide a brief description of the mechanisms proposed for this project for reporting to the UNDP and partners, including a reporting schedule.
- <u>2.4. Subcontracting</u>: Explain whether any work would be subcontracted, to whom, how much percentage of the work, the rationale for such, and the roles of the proposed sub-contractors. Special attention should be given to providing a clear picture of the role of each entity and how everyone will function as a team.
- <u>2.5. Risks / Mitigation Measures</u>: Please describe the potential risks for the implementation of this project that may impact achievement and timely completion of expected results as well as their quality. Describe measures that will be put in place to mitigate these risks.
- <u>2.6 Implementation Timelines:</u> The Bidder shall submit a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing.
- 2.7. Partnerships (Optional): Explain any partnerships with local, international or other organizations that are planned for the implementation of the project. Special attention should be given to providing a clear picture of the role of each entity and how everyone will function as a team. Letters of commitment from partners and an indication of whether some or all have successfully worked together on other previous projects is encouraged.
- <u>2.8. Anti-Corruption Strategy (Optional)</u>: Define the anti-corruption strategy that will be applied in this project to prevent the misuse of funds. Describe the financial controls that will be put in place.
- <u>2.9 Statement of Full Disclosure</u>: This is intended to disclose any potential conflict in accordance with the definition of "conflict" under Section 4 of this document, if any.
- <u>2.10 Other:</u> Any other comments or information regarding the bid and its implementation.

SECTION 3: PERSONNEL

- <u>3.1 Management Structure</u>: Describe the overall management approach toward planning and implementing the contract. Include an organization chart for the management of the contract, if awarded.
- <u>3.2 Staff Time Allocation</u>: Provide a spreadsheet will be included to show the activities of each personnel involved in the implementation of the contract. Where the expertise of the personnel is critical to the success of the contract, UNDP will not allow substitution of personnel whose qualifications had been reviewed and accepted during the bid evaluation. (If substitution of such a personnel is unavoidable, substitution or replacement will be subject to the approval of UNDP. No increase in costs will be considered as a result of any substitution).
- <u>3.3 Qualifications of Key Personnel.</u> Provide the CVs for key personnel (Team Leader, Managerial and general staff) that will be provided to support the implementation of this project. CVs should demonstrate qualifications in area of expertise relevant to the Contract. Please use the format below:

Name:					
Role in Contract Implementation:	:				
Nationality:					
Contact information:					
Countries of Relevant Work Expe	rience:				
Language Skills:					
Education and other Qualifications:					
Summary of Experience: Highlight experience		in the region and on similar projects.			
Relevant Experience (From most	recent):				
Period: From – To	Name of acti	vity/ Project/ funding	Job Title and Activities		
	organisation	t experience in the region and on similar projects. It experience in the region and on similar projects. It experience in the region and on similar projects. It experience in the region and on similar projects. It is experience in the region and on similar projects. It is experience in the region and on similar projects. It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region and on similar projects. It is experience in the region and on similar projects. It is experience in the region and on similar projects. It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region and Activities undertaken/Description of actual role performed: It is experience in the region actual role performed: It is experience in the region actual role performe			
			actual role performed:		
e.g. June 2010-January 2011					
Etc.					
Etc.					
References (minimum of 3):	Name				
	Designation				
	Organization				
	Contact Infor	mation – Address; Phone; E	mail; etc.		
Declaration:					
I confirm my intention to serve in the stated position and present availability to serve for the term of the proposed contract. I also understand that any wilful misstatement described above may lead to my disqualification, before or during my engagement.					
Signature of the Nominated Team Leader/Member Date Signed			Date Signed		

Section 7: Price Schedule Form¹³

The Bidder is required to prepare the Price Schedule as indicated in the Instruction to Bidders.

The Price Schedule must provide a detailed cost breakdown of all goods and related services to be provided, from unit price to lot prices. Separate figures must be provided for each functional grouping or category, if any.

Any estimates for cost-reimbursable items, such as travel of experts and out-of-pocket expenses, should be listed separately.

The format shown on the following pages is suggested for use as a guide in preparing the Price Schedule. The format includes specific expenditures, which may or may not be required or applicable but are indicated to serve as examples.

A. Cost Breakdown per Deliverable Items*

No.	Deliverables			Price
	[list them as referred to	Expected Date of	Percentage of Total	(Lump Sum, All
	in the ITB]	Delivery/Completion	Price	Inclusive)
1	Deliverable 1		[Percentage (weight) of each deliverable over the total price for the payment purposes, as per ITB)	
2	Deliverable 2			
3				_
	Total		100%	

^{*} This shall be the basis of payment tranches

B. Cost Breakdown by Cost Component:

The Bidders are requested to provide the cost breakdown for the above given prices for each deliverable based on the following format. UNDP shall use the cost breakdown for the price reasonability assessment purposes as well as the calculation of price in the event that both parties have agreed for additional set of goods and/or related services.

Deliverables and	(a)		(b)	(c) = (a)x(b)	Brief	(d)	(c) + (d)
Sub-Components	Quantity	Country	Unit	Total Cost of	Description	Cost of	Total

 $^{^{13}}$ No deletion or modification may be made in this form. Any such deletion or modification may lead to the rejection of the Bid.

	of Origin	Price	Goods	of Related Services	Related Services	Price
I. Deliverable 1						
Sub-Component 1						
Sub-Component 2						
Sub-Component 3						
II. Deliverable 2						
Sub-Component 1						
Sub-Component 2						
Sub-Component 3						
III. Other Related						
Costs						
GRAND TOTAL PRICE						

Section 8: FORM FOR BID SECURITY

NOT APPLICABLE

Section 9: FORM FOR PERFORMANCE SECURITY

NOT APPLICABLE

NOT APPLICABLE