



**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSIONS À:**  
Travaux publics et Services gouvernementaux  
Canada  
Place Bonaventure, portail Sud-Est  
800, rue de La Gauchetière Ouest  
7<sup>ème</sup> étage  
Montréal  
Québec  
H5A 1L6  
FAX pour soumissions: (514) 496-3822

**REQUEST FOR PROPOSAL**  
**DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

**Comments - Commentaires**

<b>Title - Sujet</b> Rotating tube furnace	
<b>Solicitation No. - N° de l'invitation</b> 31026-165796/B	<b>Date</b> 2016-12-21
<b>Client Reference No. - N° de référence du client</b> 31026-165796	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$MTA-060-14168	
<b>File No. - N° de dossier</b> MTA-6-39160 (060)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2017-01-17</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Heure Normale du l'Est HNE
<b>F.O.B. - F.A.B. Specified Herein - Précisé dans les présentes</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input checked="" type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Brunet, Luc	<b>Buyer Id - Id de l'acheteur</b> mta060
<b>Telephone No. - N° de téléphone</b> (514) 496-3370 ( )	<b>FAX No. - N° de FAX</b> (514) 496-3822
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> CONSEIL NATIONAL DE RECHERCHES DU CANADA 75 BOUL.DE MORTAGNE Édifice Boucherville BOUCHERVILLE Québec J4B6Y4 Canada	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

**Vendor/Firm Name and Address**

**Raison sociale et adresse du fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**

Travaux publics et Services gouvernementaux Canada  
Place Bonaventure, portail Sud-Est  
800, rue de La Gauchetière Ouest  
7<sup>ème</sup> étage  
Montréal  
Québec  
H5A 1L6

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

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**This Request for Proposal (RFP) cancels and supersedes previous RFP number 31026-165796/A dated October 26th 2016 with a closing date of December 7th 2016 at 14:00 Eastern Standard Time (EST)**

## **PART 1 - GENERAL INFORMATION**

### **1.1 Statement of Requirement**

The requirement is detailed under Article 6.2 of the resulting contract clauses.

### **1.2 Debriefings**

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

### **1.3 Trade Agreements**

"The requirement is subject to the provisions of the North American Free Trade Agreement (NAFTA), and the Agreement on Internal Trade (AIT).

## **PART 2 - BIDDER INSTRUCTIONS**

### **2.1 Standard Instructions, Clauses and Conditions**

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2016-04-04) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

#### **2.1.1 SACC Manual Clauses B1000T (2014-06-26), Condition of Material - Bid**

### **2.2 Submission of Bids**

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

### **2.3 Enquiries - Bid Solicitation**

All enquiries must be submitted in writing to the Contracting Authority no later than 10 calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as

such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

## 2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Quebec

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

## PART 3 - BID PREPARATION INSTRUCTIONS

### 3.1 Bid Preparation Instructions

Canada requests that Bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid (2 hard copy)

Section II: Financial Bid (1 hard copy)

Section III: Certifications (1 hard copy)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that Bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, Bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

#### **Section I: Technical Bid (Refer to Annexes A and C attached)**

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

#### **Section II: Financial Bid (Refer to Annex B attached)**

Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Applicable Taxes must be shown separately.

### 3.1.1 Electronic Payment of Invoices – Bid (Refer to Annex D attached)

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex “D” Electronic Payment Instruments, to identify which ones are accepted.

If Annex “D” Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

### 3.1.2 Exchange Rate Fluctuation

#### 3.1.3 SACC Manual Clauses [C3011T](#) (2013-11-06), Exchange Rate Fluctuation

### Section III: Certifications

Bidders must submit the certifications and additional information required under Part 5.

## PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

### 4.1 Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

#### 4.1.1 Technical Evaluation

***It is mandatory to provide technical specification sheets/ descriptive documents for products and optional goods offered as part of your technical proposal to permit the technical evaluation. Failure to comply will render your proposal non responsive.***

***You must demonstrate that your technical proposal, the products and optional goods you offer, are compliant with every characteristics and criteria mentioned at section 3 of Annex «A».***

##### 4.1.1.1 Mandatory Technical Criteria

- a) Compliance with the work and requirement description provided at Annex « A »;
- b) Acceptance of the conditions established in the Standing Offer;
- c) Provide technical specification sheets/ descriptive documents for products and optional goods offered as part of your technical proposal
- d) Capacity to deliver all optional goods at the same proposed prices if ordered prior to March 31<sup>st</sup> 2018 and provide specification sheets/ descriptive documents related to optional goods and confirming that they meet the description of their requirement as described at Annex A attached

#### 4.1.2 Financial Evaluation

- a) Bidders must provide a financial offer in compliance with Annex B, Basis of Payment attached.
- b) Bidders must provide firm prices for all goods and optional goods listed at Annex «B» attached.

- c) The financial evaluation of the most cost-effective proposals will be based on lowest total estimated costs of all items and optional goods combined as listed at Annex B attached.

SACC Manual Clause [A0222T](#) (2014-06-26), Evaluation of Price - Canadian / Foreign Bidders

**NOTE: The contract will be award in Canadian currency for vendors and suppliers established in Canada**

## **4.2 Basis of Selection**

### **4.2.1 [A0031T](#) (2010-08-16) Basis of Selection - Mandatory Technical Criteria**

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

## **PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION**

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

### **5.1 Certifications Required with the Bid**

Bidders must submit the following duly completed certifications as part of their bid.

#### **5.1.1 Integrity Provisions - Declaration of Convicted Offences**

In accordance with the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide with its bid the required documentation, as applicable, to be given further consideration in the procurement process.

### **5.2 Certifications Precedent to Contract Award and Additional Information**

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

#### **5.2.1 Integrity Provisions – Required Documentation (See Annex E attached)**

In accordance with the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

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## 5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969) website ([http://www.esdc.gc.ca/en/jobs/workplace/human\\_rights/employment\\_equity/federal\\_contractor\\_program.page?&\\_ga=1.229006812.1158694905.1413548969](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969)).

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.

## PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

### 6.1 Security Requirements

6.1.1 There is no security requirement applicable to the Contract.

### 6.2 Statement of Requirement

The Contractor must provide a Rotating tube furnace and optional goods in accordance with the Requirement at Annexes "A" and the Contractor's technical bid entitled \_\_\_\_\_, dated \_\_\_\_\_.

#### 6.2.1 SACC Manual Clauses [A0070C](#) (2007-11-30), Optional Goods and/or Services

The Contractor grants to Canada the irrevocable option to acquire the goods, services or both described at Annex A of the Contract under the same conditions and at the prices and/or rates stated in the Contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the option at any time before the expiry of the Contract by sending a written notice to the Contractor.

### 6.3 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

#### 6.3.1 General Conditions

[2010A](#) (2016-04-04), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

### 6.4 Term of Contract

#### 6.4.1 Period of the Contract

The period of the Contract is from date of Contract to March 31<sup>st</sup> 2018 inclusive

Solicitation No. - N° de l'invitation  
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31026-16-5796

Amd. No. - N° de la modif.  
File No. - N° du dossier  
MTA-6-39160

Buyer ID - Id de l'acheteur  
mta060  
CCC No./N° CCC - FMS No./N° VME

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#### 6.4.2 Delivery Date

All the deliverables excluding optional goods, must be received on or before March 31<sup>st</sup> 2017

The bidder must identify the best date possible, that is anticipated: \_\_\_\_\_

#### 6.4.3 Delivery Points

Delivery of the requirement will be made to delivery point(s) specified at Annex "B" of the Contract.

#### 6.5 Authorities

##### 6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Luc Brunet  
Title: Supply Specialist,  
Public Works and Government Services Canada  
Acquisitions Branch  
Directorate: Acquisitions Branch - Purchasing and Supply  
Address: Place Bonaventure 800, rue De La Gauchetière Ouest,  
bureau 7300 Montréal (Québec) H5A 1L6  
Telephone: 514- 496-3370  
Facsimile: 514- 496-3822  
E-mail address: Luc.Brunet@tpsgc-pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

##### 6.5.2 Project Authority

*(will be identified upon contract award)*

The Project Authority for the Contract is:

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_  
  
Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

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31026-16-5796

Amd. No. - N° de la modif.  
File No. - N° du dossier  
MTA-6-39160

Buyer ID - Id de l'acheteur  
mta060  
CCC No./N° CCC - FMS No./N° VME

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**6.5.3 Contractor's Representative**  
(will be identified upon contract award)

Name: \_\_\_\_\_ Title: \_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_

Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

**6.5.4 Customer Billing Contact**  
(Will be completed upon contract award)

Name: \_\_\_\_\_ Title: \_  
\_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ - \_\_\_\_\_ -  
Facsimile: \_\_\_\_\_ - \_\_\_\_\_ -  
E-mail address: \_\_\_\_\_

**6.6 Payment**

**6.6.1 Basis of Payment**

**6.6.2 Limitation of Price**

SACC Manual clause [C6000C](#) (2011-05-16), Limitation of Price

**6.6.3 Single Payment**

SACC Manual clause [H1000C](#) (2008-05-12), Single Payment

**6.6.4 Taxes - entrepreneur établi à l'étranger**

SACC Manual clause [C2000C](#) (2007-11-30), Taxes - Foreign-based Contractor

**6.6.5 Electronic Payment of Invoices – Contract**

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;
- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);

**6.7 Invoicing Instructions**

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed

2. Invoices must be distributed as follows:
- a) The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.
  - b) One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

## 6.8 Certifications and Additional Information

### 6.8.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

### 6.9 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in \_\_\_\_\_. (*Insert the name of the province or territory as specified by the Bidder in its bid, if applicable*)

### 6.10 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the general conditions 2010A (2016-04-04), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.
- (c) Annex A, Statement Requirement;
- (d) Annex B, Basis of payment;
- (e) Annex D, Part 3 of the Bid solicitation Electronic Payment instruments
- (f) the Contractor's bid dated \_\_\_\_\_ (*insert date of bid*) (*If the bid was clarified or amended, insert at the time of contract award: “, as clarified on \_\_\_\_\_” or “, as amended on \_\_\_\_\_” and insert date(s) of clarification(s) or amendment(s)*)

### 6.11 SACC Manual Clauses

SACC Reference	Title	Date
<u>A2000C</u>	Foreign Nationals (Canadian Contractor)	(2006-06-16)
<u>A2001C</u>	Foreign Nationals (Foreign Contractor)	(2006-06-16)
<u>A9068C</u>	Government Site Regulations	(2010-01-11)
<u>B1501C</u>	Electrical Equipment	(2006-06-16)
<u>D0018C</u>	Delivery and Unloading	(2007-11-30)
<u>G1005C</u>	Insurance - No Specific Requirement	(2016-01-28)

## **ANNEX A: STATEMENT OF REQUIREMENT**

### **1.0 Object**

The National Research Council of Canada (NRC) possesses a unique powder metallurgy platform dedicated to develop and support the Canadian industry. With this purchase, NRC would like to upgrade its park of powder processing equipment facilities by purchasing a larger rotary tube furnace unit to be able to produce sufficient amount of heat treated metallic powders for different industrial projects and facilitate technological transfer to the industry. This system will be used to perform heat or agglomeration treatments of different metallic/ceramic powder mixes that are aimed to be shaped by different powder metallurgy processing technologies.

The NRC wishes to purchase a rotating tube furnace capable of up-scaling successfully the processing of powders previously developed on a laboratory furnace unit. The wanted equipment must not be a prototype.

The work consists of the supply and delivery of the unit at the NRC address, with a detailed document of installation and use. NRC staff will perform the installation of the unit, but the sales and engineering departments of the supplier must be available during this installation for guidance and support through daytime direct phone calls and e-mails.

### **2.0 Constraints**

The space available in our laboratories requires that the rotating tube furnace dimensions, including the mechanical and electrical components respect the maximum following dimensions:

Maximum length: 2100mm

Maximum width: 900mm

Maximum height: 1900mm

The maximum tube length permitted: 2500mm

### **3.0 Mandatory technical specifications:**

3.1 Split type clam shell rotating tube furnace to enable faster cooling and easy operation;

3.2 Continuous operating temperature of the rotating tube furnace must be as high as 1200°C;

3.3 Heating zone length: 45" minimum (1150mm). Three heating zones minimum with one independent controller for each zone to ensure temperature uniformity;

3.4 1400C grade refractory lining minimum or equivalent;

3.5 Stainless steel tube having a minimum internal diameter of 8inch (200mm) that must be able to withstand a minimum load of 25kgs at a continuous operating temperature of 1050 deg. Celsius;

3.6 Vacuum and atmosphere sealing plates and rotating joining to allow furnace to be operated under vacuum ( $10^{-1}$  torr minimum) or under inert gas pressure up to 5 PSI for the stainless steel tube;

3.7 Ceramic plugs inserted in the tube to maintain the heat treated materials in the heating zone area during rotation;

3.8 Rotary device that can handle the weight of the stainless tube and a minimum of 25 kgs of material and that enables a variable speed up to 10 RPM minimum;

3.09 Tilting device that allows the furnace to be tilted on one side up to 15 degree min.

3.10 Thermocouples – One certified type K thermocouple or equivalent for each heating zone is required with one terminal block for each thermocouple to connect to customer's data logger system or computer to record furnace temperature profiles;

3.11. Programmable Controller, 20 segments program minimum;

3.12 Voltage – 208/240V – Three Phases. Power 25 to 30 KW;

3.13 Optional goods: The following items must be available to be purchased separately and at the same price given in Annex B until March 31, 2018:

3.13.1 Three or four mixing blades/bars that can be installed directly on the interior of the tube to enable homogeneous mixing of the material during rotation of the tube. The mixing blades/bars are to be made from the same type of stainless steel that the one used for the manufacture of the tube that must be able to withstand, as mentioned in 3.5, a minimum load of 25kgs at a continuous operating temperature of 1100 deg. Celsius. These mixing blades/bars must be able to be installed by the NRC and must have therefore a fixation system to be able to fix them on the tube. But they will be delivered alone and fixed on the tube by NRC;

3.13.2 Quartz tube with rotary flanges and sealing plates that allows a quick and easy change of tube by the operator; this item will be installed in the furnace by NRC;

3.13.3 Thermocouple with gas tight sealing fixed inside the stainless steel tube that allows direct temperature reading of the tube and recording during heat treatment for continuous rotating operation at 1050 deg. Celsius; this item will be fixed by the manufacturer on the stainless tube and further be installed in the furnace by NRC;

3.13.4 Oxygen sensor in the tube that can record oxygen in inert gas; this item will be installed in the furnace by NRC.

#### **4.0 Deliverables:**

4.1 The bidder must demonstrate that the proposed equipment, optional goods and parts of the control system are certified as per the Quebec electric code C22.10. The equipment must be CSA or ULC approved upon delivery

4.2 Technical documentation: The rotating tube furnace must include at least one operating manual in English or French upon delivery of the unit. The equipment must be delivered with detailed documents describing the initial setup and the instructions to operate the furnace.

4.3 Machine start-up and personal training: The supplier must provide daytime training and guidance required for start-up and normal operation of the rotating tube furnace, within 6 weeks of equipment delivery. This service must be offered in French or English and between 8:00 and 16:00 (EST).

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4.4 For twelve months following the delivery of the equipment, the supplier must be available by phone and email between 8:00 and 16:00 (EST) in order to offer troubleshooting services and guidance if problems of operation are encountered or if furnace modifications are required to optimize our processes. The services must be offered in French or English

4.5 In case of parts breakage, replacement parts must be shipped quickly to NRC to prevent any delay in our operations and any prejudice in our industrial contracts. Replacements parts will be sent and received at NRC inside 5 working days when in stock.

### **5.0 Delivery**

The system must be delivered at 75, Mortagne Boulevard, Boucherville, Québec, J4B 6Y4.

## ANNEX B: BASIS OF PAYMENT

Item	Qty	Unit price	Total price
<b>A) Rotating tube furnace</b>  Proposed brand : _____  Proposed model : _____	1	_____ \$	_____ \$
<b>B) Training and guidance at distance to operate the system (ex: 8:00 to 16:00 for Montreal, phone and e-mail)</b>	1	_____ \$	_____ \$
<b>C) Delivery DAP Destination 75, Mortagne Boulevard, Boucherville, Québec, J4B 6Y4, according to incoterms 2010</b>	1	_____ \$	_____ \$
<b>Total (A+B+C):</b>		_____ \$	

Prices must not include taxes if applicable

### Optional goods :

Item	Qty	Unit price including delivery	Total price
<b>A) Mixing blades/bars</b> Delivery DAP Destination 75, Mortagne Boulevard, Boucherville, Québec, J4B 6Y4. According to incoterms 2010	1	_____ \$	_____ \$
<b>B) Quartz tube</b> Delivery DAP Destination 75, Mortagne Boulevard, Boucherville, Québec, J4B 6Y4. According to incoterms 2010	1	_____ \$	_____ \$
<b>C) Thermocouple inside the tube</b> Delivery DAP Destination 75, Mortagne Boulevard, Boucherville, Québec, J4B 6Y4. According to incoterms 2010	1	_____ \$	_____ \$
<b>D) Oxygene sensor</b>	1	_____ \$	_____ \$

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Delivery DAP Destination 75, Mortagne Boulevard, Boucherville, Québec, J4B 6Y4. According to incoterms 2010			
<b>Total (A+B+C+D):</b> _____ \$			

\*Note : Prices for optional goods are valid until Mars 31, 2018

Prices do not include taxes if applicable

### **ANNEX C: MANDATORY TECHNICAL EVALUATION CRITERIA**

It is mandatory that the bidder provide with the quote, any documentation and/or technical datasheets to permit the technical evaluation. These documents must demonstrate clearly that the equipment meet the mandatory criteria and specifications mentioned at Annex «A»

Bidders must fill this annex thoroughly and include it with their quote.

<b>Mandatory Technical Specifications</b>	<b>Met</b>	<b>Non met</b>	<b>Specify the area in the documentation or the technical datasheets supplied with the quote that enable the technical evaluation of the mandatory components needed</b>
3.1			
3.2			
3.3			
3.4			
3.5			
3.6			
3.7			
3.8			
3.9			
3.10			
3.11			

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**Optional goods:**

The bidder must be able to provide the equipment and the optional goods having specifications mentioned at Annex «A» - Section 3.13 – Optional goods. These descriptions and specifications are indicated in Annex A by numbers ranging from 3.13.1. to 3.13.4

<b>Optional goods Technical Specifications for evaluation</b>	<b>Met</b>	<b>Non met</b>	<b>Specify the area in the documentation or the technical datasheets supplied with the quote that enable the technical evaluation of the optional components needed</b>
3.13.1			
3.13.2			
3.13.3			
3.13.4			

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## **ANNEX D: to PART 3 OF THE BID SOLICITATION**

### **ELECTRONIC PAYMENT INSTRUMENTS**

The Bidder accepts any of the following Electronic Payment Instrument(s):

- VISA Acquisition Card;
- MasterCard Acquisition Card;
- Direct Deposit (Domestic and International);
- Electronic Data Interchange (EDI);

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**ANNEX E: COMPLETE LIST OF ADMINISTRATION**

***NOTICE TO OFFERORS***

***PLEASE ENTER THE NAME, SURNAME OF ADMINISTRATION PERSONNEL  
PLEASE ENTER IN PRINT***

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