

**RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:**

**Bid Receiving
PWGSC
33 City Centre Drive
Suite 480
Mississauga
Ontario
L5B 2N5
Bid Fax: (905) 615-2095**

**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

| | |
|--|--|
| Title - Sujet Sintering Mould System | |
| Solicitation No. - N° de l'invitation 23584-130710/A | Date 2013-05-15 |
| Client Reference No. - N° de référence du client 23584-130710 | |
| GETS Reference No. - N° de référence de SEAG PW-\$TOR-024-6278 | |
| File No. - N° de dossier TOR-3-36011 (024) | CCC No./N° CCC - FMS No./N° VME |
| Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-06-26 | Time Zone Fuseau horaire Eastern Daylight Saving Time EDT |
| F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/> | |
| Address Enquiries to: - Adresser toutes questions à: Somaratna, Chinthaka | Buyer Id - Id de l'acheteur tor024 |
| Telephone No. - N° de téléphone (905) 615-2062 () | FAX No. - N° de FAX (905) 615-2060 |
| Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF NATURAL RESOURCES 183 LONGWOOD RD SOUTH HAMILTON Ontario L8P0A5 Canada | |

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

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

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

Issuing Office - Bureau de distribution

Public Works and Government Services Canada
Ontario Region
33 City Centre Drive
Suite 480
Mississauga
Ontario
L5B 2N5

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PART 1 - GENERAL INFORMATION**1. Security Requirement**

There is no security requirement associated with this bid solicitation.

2. Requirement

The requirement is detailed under Article 2 of the resulting contract clauses.

3. 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 of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

PART 2 - BIDDER INSTRUCTIONS**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 (2012-11-19) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: sixty (60) days

Insert: ninety (90) days

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.

3. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than ten (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 questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

4. Applicable Laws

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

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

1. Bid Preparation Instructions

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

Section I: Technical Bid (2 hard copies)

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

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

Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Goods and Services Tax (GST) or Harmonized Sales Tax (HST) must be shown separately, if applicable.

Section III: Certifications

Bidders must submit the certifications required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**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.

1.1 Technical Evaluation**1.1.1 Mandatory Technical Criteria**

See Annex C, Mandatory Technical Evaluation Criteria.

1.2 Financial Evaluation

SACC Manual Clause A0220T (2013-04-25), Evaluation of Price

2. Basis of Selection - Mandatory Technical Criteria

- 2.1** 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

Bidders must provide the required certifications and related documentation to be awarded a contract. Canada will declare a bid non-responsive if the required certifications and related documentation are not completed and submitted as requested.

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before award of a contract) and after award of a contract. The Contracting Authority will have the right to ask for additional information to verify bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications,

to provide the related documentation or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive.

1. Mandatory Certifications Required Precedent to Contract Award

1.1 Code of Conduct and Certifications - Related documentation

By submitting a bid, the Bidder certifies that the Bidder and its affiliates are in compliance with the provisions as stated in Section 01 Code of Conduct and Certifications - Bid of Standard Instructions 2003. The related documentation therein required will assist Canada in confirming that the certifications are true.

2. Additional Certifications Precedent to Contract Award

The certifications listed below should be completed and submitted with the bid, but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.

2.1 Federal Contractors Program - Certification

Suppliers who are subject to the Federal Contractors Program (FCP) and have been declared ineligible contractors by Human Resources and Skills Development Canada (HRSDC) are no longer eligible to receive federal government contracts over the threshold for solicitation of bids as set out in the *Government Contracts Regulations*. Suppliers may be declared ineligible contractors either as a result of a finding of non-compliance by HRSDC, or following their voluntary withdrawal from the FCP for a reason other than the reduction of their workforce to less than 100 employees. Any bids from ineligible contractors, including a bid from a joint venture that has a member who is an ineligible contractor, will be declared non-responsive.

The Bidder, or, if the Bidder is a joint venture the member of the joint venture, certifies its status with the FCP, as follows:

The Bidder or the member of the joint venture

- () is not subject to the FCP, having a workforce of less than 100 full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada;
- () is not subject to the FCP, being a regulated employer under the *Employment Equity Act*, S.C. 1995, c. 44;
- () *is subject to the requirements of the FCP, having a workforce of 100 or more full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada, but has not previously obtained a certificate number from HRSDC, having not bid on requirements of \$200,000 or more;*
- () *has not been declared an ineligible contractor by HRSDC, and has a valid certificate number as follows: _____ .*

Further information on the FCP is available on the HRSDC Web site.

PART 6 - RESULTING CONTRACT CLAUSES

1. Security Requirement

There is no security requirement applicable to this Contract.

2. Requirement

The Contractor must provide Sintering Mould System for Hot Press in accordance with the Requirement at Annex " A "

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>) issued by Public Works and Government Services Canada.

3.1 General Conditions

2010A (2013-04-25), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

4. Term of Contract

4.1 Delivery Date

All the deliverables must be received on or before 90 days after date of contract award.

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

| | |
|-----------------|---|
| Name: | Chinthaka Somaratna |
| Title: | Supply Officer Public Works and Government Services Canada Acquisitions Branch Ontarion Region |
| Address: | Suite 480C, 33 City Centre Drive Mississauga, ON - L5B 2N5 |
| Telephone: | (905) 615-2062 |
| Facsimile: | (905) 615-2060 |
| E-mail address: | chinthaka.somaratna@pwgsc-tpsgc.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.

5.2 Project Authority

The Project Authority for the Contract is: (TBA at the time of award)

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.

5.3 Contractor's Representative

Name: _____
Title: _____
Organization: _____
Address: _____
Telephone : _____
Facsimile: _____
E-mail address: _____

6. Payment

6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a "firm lot price", as specified in contract for a cost of \$ _____. (insert the amount at contract award) Customs duties are included, and applicable taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.2 Limitation of Price

SACC Manual clause C6000C (2011-05-16) Limitation of Price

6.3 Single Payment

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

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 following address for certification and payment.
 _____ (*Insert the name of the organization*)
 _____ (*Insert the address of the organization*)
 - B. One (1) copy must be forwarded to the Contracting authority identified under the section entitled "Authorities" of the Contract

8. Certifications

8.1 Compliance

Compliance with the certifications and related documentation provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification, provide the related documentation or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

9. Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____.

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 (2013-04-25) General Conditions-Goods (*Medium Complexity*);
- (c) Annex A, Requirement;
- (d) Annex B, Basis of Payment; and;
- (e) the Contractor's bid dated _____

11. Insurance

G1005C (2008-05-12) Insurance

ANNEX "A"

REQUIREMENT

The contractor must fabricate, supply and ***deliver*** of one (1) **sintering mould with inserts for hot pressing** at high temperatures (up to a maximum of and including 2300°C) and high pressures (minimum of 30 Mpa) of advanced technical ceramics (Silicon Carbide, Boron Carbide, Alumina), powder metallurgical material as well as other novel high-performance materials:

- i. For hot pressing of one (1) piece of 101.6 mm x 101.6 mm, up to 15mm thickness square plate, corner radius of greater than 12mm ; and
- ii. For hot pressing of one (1) piece of 150 mm diameter, up to 15 mm thickness round plate.

A graphite and Carbon Fibre (CFC) reinforcement jacket that works with both inserts must be supplied.

The mould set must include all necessary connection pieces and graphite foils required to hot press the above pieces in Canmets 400 Ton Hot Press.

The sintering mould system must consists at least of the following components:

- 1) Top stamp (piece to connect the hot press top punch with the mould);
- 2) Bottom stamp (piece to connect the hot press bottom punch with the mould);
- 3) Graphite slide;
- 4) Wear and tear plate;
- 5) Carbon Fibre jacket;
- 6) Graphite Mould;
- 7) Inside segments: two sets, one to produce 101.6 mm x 101.6mm square pieces and one to produce 150 mm round pieces;
- 8) Carbon Fibre base plate;
- 9) Set of graphite foils sufficient for producing 100 parts.

The mould set must be capable to be expanded in the future to produce multiple parts.

Detail on the CMATs 400 Ton Hot Press is provided in Appendix A: 400 Ton Hot Press Specifications.

Method and Source of Acceptance

All components must meet their acceptance test requirements.

Site Acceptance Testing

On-site testing will be performed by Natural Resources Canada (NRCan) CanmetMATERIALS (CMAT) technical authority to ensure the mould system is capable to produce square and round shape pieces as per specifications, with Alumina (Al₂O₃) or Silicon Carbide (SiC) or Boron Carbide (B₄C). Alumina, Silicon Carbide and Boron Carbide powders will be supplied by CMAT.

Manuals & Equipment Drawings

The Contractor must provide to NRCan, CanmetMATERIALS, two (2) hard copies and one (1) electronic copy of:

- Mould System Assembly drawings;
- Bill of Materials including supplier part numbers where applicable;
- Drawings of mould components, CFC jackets, base plate, stamp, inside segments, slides, wear and tear plates, graphite foils showing sufficient detail so that replacements can be purchased when required.

Documentation must be provided to NRCan CanmetMATERIALS in the English language.

Loading Dock Limitations

The loading dock limits at NRCan CanmetMATERIALS are:

The pinch point for truck unloading directly from a box or flat bed is the inner door and dock leveller:

- The overhead door is 2.3 m wide x 3.0 m high;
- The dock floor is 1.2 m below finish floor of the ground floor level ;
- The dock leveller has a 20 Ton capacity with a platform 2.1 m wide x 2.1 m long plus a drop down lip 2.14 m wide x 2.22 m deep. The hydraulic leveller range is +/- 0.3 m; and
- The door at the top of the ramp is 2.3 m wide x 3 m high.

Warranty, Service, Support & Updates

The Contractor must provide **1-year parts and labour warranty** on the entire equipment. Warranty will begin on the day that the acceptance tests are completed and the deliverables are accepted by NRCan CanmetMATERIALS. Contractor must provide one-year technical support service including:

- on site technical support;
- technical phone support; and
- support via the Internet.

Contractor must respond within **72 hours** of the initial request for support.

Appendix: A

400 Ton Hot Press Specifications

1. Technical Data

Vacuum Hot Pressing System Resistance heated HP W 400 KD/SD

| | | | | |
|------|-----------------------------------|---|---|-------------------|
| 1.01 | Pressing Force | : | 4000 | kN |
| 1.02 | Pressing Stroke | : | 250 | mm |
| 1.03 | Inner Diameter of heating element | : | 490 | mm |
| 1.04 | Height of the heating element | : | 790 | mm |
| 1.05 | Usable hot zone | : | 470 \varnothing X 650 | mm |
| 1.06 | Max pressing diameter | : | 400 | mm (CFC-mould) |
| 1.07 | Working Temperature | : | 2300 | °C |
| 1.08 | Heating Rate | : | 10 | K/min |
| 1.09 | Temperature homogeneity | : | +/- 10 | K |
| 1.10 | Working pressure | : | +20...+60 | mbar |
| 1.11 | Ultimate vacuum (cold furnace) | : | 5×10^{-2} | mbar |
| 1.12 | Leak rate | : | $< 5 \times 10^{-2}$ | mbar l/s |
| 1.13 | Heating Principle | : | resistance heating | |
| 1.14 | Heating Power | : | 180 | kW |
| 1.15 | Working gases | : | Argon, Nitrogen, Helium, Gas mixture with Hydrogen less than 5% Hydrogen | |
| 1.16 | Heating element | : | high-dense graphite | |
| 1.17 | Insulation | : | Graphite felt | |
| 1.18 | Cooling water consumption(4 bar) | : | 10 | m ³ /h |
| 1.19 | Cooling capacity | : | 100 | kW |
| 1.20 | Power Supply | : | 3 x 480 V.60Hz, 250 kVA | |

ANNEX "B"**BASIS OF PAYMENT**

The firm lot price must be an all inclusive price for the supply and delivery of goods and services, in accordance with Annex A Requirement in Canadian funds including Canadian customs duties, applicable taxes extra.

Contractor must complete delivery within ninety (90) days from the date of award of the contract.

Goods Must be Delivered to:

CanmetMATERIALS,
183 Longwood Rd.South,
Hamilton,
Ontario - L8P 0A5,
CANADA.

Delivery Required is:

Delivery Duty Paid (DDP), Incoterms 2000.

The Contractor will be responsible for all delivery charges, costs, and risks of transport, shipping insurance, and customs clearance, including the payment of customs duties.

Firm Requirement

| Item | Description | Quantity | Firm Lot Price (CDN\$, Applicable taxes are extra) |
|------|--|----------|---|
| 1 | Supply and delivery of Sintering Mould System for Hot Press in accordance with Annex A, Requirement. One year parts and labour warranty and one year technical support service in accordance with Annex A, Requirement are included. | 1 Lot | \$ |

ANNEX " C "**MANDATORY TECHNICAL EVALUATION CRITERIA**

The bidder must demonstrate that they meet every mandatory technical criteria in their bid by submitting supporting documentation. Failure to provide supporting documentation by bid closing date may result in the bid being deemed non-responsive.

| Mandatory Technical Evaluation Criteria | Identify where the supporting documentation is located in the bid (page #) |
|---|--|
| <p><u>Criteria # 1</u></p> <p>The bidder must certify in its bid that bidder will submit two(2) hard copies and one (1) electronic copy of the following documents in English with the delivery of the final product:</p> <ul style="list-style-type: none"> - Mould System Assembly drawings; - Bill of Materials including supplier part numbers where applicable; and - Drawings of mould components, CFC jackets, base plate, stamp, inside segments, slides, wear and tear plates, graphite foils with showing sufficient detail so that replacements can be purchased when required. | |
| <p><u>Criteria # 2</u></p> <p>The bidder must demonstrate that they had designed and manufactured two(2) sintering mould for hot pressing for two (2) different clients, within the last 5 years from the bid closing date.</p> <p>The following information must be provided for each client:</p> <ul style="list-style-type: none"> - Company name; - Company location; - Project name; - Contact person(s) name; - Current telephone number; and - Current email address. <p>Canada reserves the right to contact the references to verify the information provided in the bidders bid.</p> | |