

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Bid Receiving - PWGSC / Réception des
soumissions - TPSGC
11 Laurier St./ 11 rue, Laurier
Place du Portage, Phase III
Core 0A1 / Noyau 0A1
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

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 Non-contact extensometer system	
Solicitation No. - N° de l'invitation 23584-130317/B	Date 2013-03-01
Client Reference No. - N° de référence du client 23584-130317	
GETS Reference No. - N° de référence de SEAG PW-\$\$PV-899-62321	
File No. - N° de dossier pv899.23584-130317	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-03-27	
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: Gauthier, Martin	Buyer Id - Id de l'acheteur pv899
Telephone No. - N° de téléphone (819) 956-5469 ()	FAX No. - N° de FAX (819) 956-3814
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**

Issuing Office - Bureau de distribution
Scientific, Medical and Photographic Division / Division de
l'équipement scientifique, des produits photographiques et
pharmaceutiques
11 Laurier St./ 11 rue, Laurier
6B1, Place du Portage
Gatineau, Québec K1A 0S5

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

See Part 2 for Clauses and Conditions
Voir Partie 2 pour Clauses et Conditions

Item Article	Description	Dest. Code Dest.	Inv. Code Fact.	Qty Qté	U. of I. U. de D.	Unit Price/Prix unitaire FOB/FAM	Destination	Plant/Usine	Delivery Req. Livraison Req.	Del. Offered Liv. offerte
1	Non-contact extensometer system	23584	I - 1	1	LOT	\$	XXXXXXXXXXXX		See Herein	

This bid solicitation cancels and supersedes previous bid solicitation number 23584-130317/A dated 18-12-2012 with a closing of 28-01-2013 at 2:00 pm.

TABLE OF CONTENTS

PART 1 - GENERAL INFORMATION

1. Security Requirement
2. Requirement
3. Debriefings

PART 2 - BIDDER INSTRUCTIONS

1. Standard Instructions, Clauses and Conditions
2. Submission of Bids
3. Enquiries - Bid Solicitation
4. Applicable Laws

PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. Evaluation Procedures
2. Basis of Selection

PART 5 - CERTIFICATIONS

1. Mandatory Certifications Required Precedent to Contract Award
2. Additional Certifications Required with the Bid

PART 6 - RESULTING CONTRACT CLAUSES

1. Security Requirement
2. Requirement
3. Standard Clauses and Conditions
4. Term of Contract
5. Authorities
6. Payment
7. Invoicing Instructions
8. Certifications
9. Applicable Laws
10. Priority of Documents
11. SACC Manual Clauses
12. Shipping Instructions - Delivery at Destination

List of Annexes:

- Annex A Mandatory Specifications for the Non-contact Extensometer System
Annex B Associated Documents

PART 1 - GENERAL INFORMATION

1. Security Requirement

There is no security requirement associated with the requirement.

2. Requirement

The requirement is detailed under the "Line Item Detail", and in accordance with the Mandatory Specifications at Annex "A".

3. Debriefings

After contract award, 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

1.1 SACC Manual Clauses

B1000T	Condition of Material	2007-11-30
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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 six (6) 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 the province of Ontario, Canada.

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 (two (2) copies)
Section II: Financial Bid (one (1) copy)
Section III: Certifications (one (1) 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>). 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.

1.1 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.

The following applies to the Requirement and bidders must provide the following information in the bid where applicable:

1.1.1 Service

Purchase of the equipment must include technical support as either; regional technical support; technical phone support; or support via the Internet.

Communication must begin within 72 hours of the initial request for support.

The system provided must have spare parts and service support available for a minimum of five (5) years after purchase.

- a) Location of available service facilities (after sales service and repair). List the service facilities closest to the destination.

- b) Locations of available replacement parts from consumables to major components.

- c) Response time re: service calls, and escalation schedule, i.e. (how many days with no resolution to a problem until a more experienced person is called in, and from which location).

- d) List the frequency of routine maintenance visits provided by a qualified service technician during the warranty period, if applicable and included in the price.

1.1.2 Product(s) Offered

The Bidder must indicate the make and model number of the products offered (identify specific components which make up the system):

Name of Manufacturer: _____

Model/Part Number: _____

1.1.3 Delivery

While delivery is requested by 15 May 2013, the best delivery that could be offered by the Bidder is _____.

1.1.4 Design and Manufacturing Certifications

The product must meet the listed and any other appropriate standards and regulations and the product must be visibly marked with the CSA or ULC certification, for the intended use. In cases where compliance to an applicable standard will require technical measures or administrative controls that are beyond the scope of supply of the bidder, the bidder must provide this notification in writing at the time of submission of the quotation.

1.1.5 Equipment Constraints

CANMET-MTL will not accept any prototypes, demonstration models, used or refurbished equipment.

1.1.6 Contacts

Bidders are requested to provide the following: Information pertaining to Article 5.3 Contractor Representatives under Part 6, Resulting Contract Clauses.

1.2 Section II: Financial Bid

The bidder must quote a firm lot price all inclusive of supply, installation and manuals, DDP (Hamilton, Ontario) Incoterms 2000, the Goods and Services Tax (GST) and/or the Harmonized Sales Tax (HST) extra, as applicable. Freight charges to destination and all applicable Customs duties and taxes must be included.

1.2.1 Exchange Rate Fluctuation

C3011T

Exchange Rate Fluctuation

2010-01-11

1.3 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

All proposals submitted must be completed in full and provide all of the information requested in the Request for Proposal (RFP) package to enable a full and complete evaluation. If the requirement is not addressed in the bidder's proposal, the proposal will be considered incomplete or non-responsive and will be rejected. The onus is on the bidder to provide all the information necessary to ensure a complete and accurate assessment.

Factors for Evaluation

1. **PRICING BASIS (MANDATORY):** Prices must be firm, DDP Delivered Duty Paid.
2. **ABILITY TO MEET THE TECHNICAL REQUIREMENT (MANDATORY):**
 - a) **For Items Defined by Specifications:**

The bidder is requested to cross reference the mandatory technical criteria contained herein to their supporting technical documentation.
 - b) **Provision of Supporting Technical Documentation:**

Supporting technical documentation for the stores offered must be provided with the bid at time of bid closing.

Technical brochures or technical data **MUST** be provided to verify compliancy to the technical mandatory specifications.
3. **COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS REQUEST FOR PROPOSAL (MANDATORY)**
4. **FOR CANADIAN SUPPLIERS ONLY:** Please note that the requirements of the Federal Contractors Program for Employment Equity may apply - see herein. (MANDATORY if applicable)
5. **Quality Management Systems (QMS)**

The Bidder must be actively certified to the current version and provide proof of certification to a Quality Management System such as ISO 9001 or equivalent.
6. The Bidder must provide the name of two (2) different clients for which they have designed and manufactured the same or similar system within the last 5 years of bid closing. Company name, location, contact name, current telephone number and current email address must be provided.

1.1.1 Mandatory Technical Criteria

See Annex A.

1.2 Financial Evaluation

The lowest evaluated price will be established using the following criteria:

- a) prices will be evaluated in Canadian Funds including any applicable Taxes and Canadian Customs Duty (if applicable) and excluding the Goods and Services Tax (GST) or Harmonized Sales Tax (HST). For evaluation purposes, bids received in a foreign currency will be converted to Canadian funds using the appropriate rate of exchange using the rate quoted by the Bank of Canada as being in effect on date of bid closing.
- b) prices will be evaluated DDP Hamilton, Ontario Incoterms 2000

2. Basis of Selection

A0031T	Basis of Selection - Mandatory Technical Criteria	2010-08-16
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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**

- 1.1.1** By submitting a bid, the Bidder certifies, for himself and his affiliates, to be in compliance with the Code of Conduct and Certifications clause of the Standard instructions. The related documentation hereinafter mentioned will help Canada in confirming that the certifications are true. By submitting a bid, the Bidder certifies that it is aware, and that its affiliates are aware, that Canada may request additional information, certifications, consent forms and other evidentiary elements proving identity or eligibility. Canada may also verify the information provided by the Bidder, including the information relating to the acts or convictions specified herein, through independent research, use of any government resources or by contacting third parties. Canada will declare non-responsive any bid in respect of which the information requested is missing or inaccurate, or in respect of which the information contained in the certifications is found to be untrue, in any respect, by Canada. The Bidder and any of the Bidder's affiliates, will also be required to remain free and clear of any acts or convictions specified herein during the period of any contract arising from this bid solicitation.

Bidders who are incorporated, including those bidding as a joint venture, must provide with their bid or promptly thereafter a complete list of names of all individuals who are currently directors of the Bidder. Bidders bidding as sole proprietorship, including those bidding as a joint venture, must provide the name of the owner with their bid or promptly thereafter. Bidders bidding as societies, firms, partnerships or associations of persons do not need to provide lists of names. If the required names have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply will render the bid non-responsive. Providing the required names is a mandatory requirement for contract award.

Canada may, at any time, request that a Bidder provide properly completed and Signed Consent Forms (Consent to a Criminal Record Verification form- PWGSC-TPSGC 229) (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>) for any or all individuals aforementioned within the time specified. Failure to provide such Consent Forms within the time period provided will result in the bid being declared non-responsive.

2. Additional Certifications Required with the Bid

Bidders must submit the following duly completed certifications with their bid.

2.1 Federal Contractors Program for Employment Equity - Certification

2.1.1 Federal Contractors Program - over \$25,000 and below \$200,000

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

- (a) () is not subject to the FCP, having a workforce of less than 100 full-time or part-time permanent employees, or temporary employees having worked 12 weeks or more in Canada;
- (b) () is not subject to the FCP, being a regulated employer under the Employment Equity Act, S.C. 1995, c. 44;
- (c) () is subject to the requirements of the FCP, having a workforce of 100 or more full-time or part-time permanent employees, 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;

Solicitation No. - N° de l'invitation

23584-130317/B

Amd. No. - N° de la modif.

File No. - N° du dossier

pv89923584-130317

Buyer ID - Id de l'acheteur

pv899

CCC No./N° CCC - FMS No/ N° VME

23584-130317

(d) () 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:

[Http://www.hrsdc.gc.ca/eng/labour/equality/fcp/index.shtml](http://www.hrsdc.gc.ca/eng/labour/equality/fcp/index.shtml)

PART 6 - RESULTING CONTRACT CLAUSES

1. Security Requirement

There is no security requirement associated with the requirement.

2.1 Requirement

The requirement is detailed under the "Line Item Detail", and in accordance with the Mandatory Specifications at Annex "A".

2.2 Manuals

The Contractor is to provide to NRCan, two (2) hard copies and one (1) electronic copy, in MS Word or PDF format, of the manuals, which must include, but not limited to:

- Installation and startup manuals
- User Manuals including electrical, hydraulic and pneumatic schematics
- OEM certifications
- Maintenance, Troubleshooting & Parts manual
- Procedure to place the system into a safe and reliable shutdown state
- Emergency procedures

Manuals must be provided to NRCan in both English and French.

The Contractor is to provide to NRCan, electronic copies, in AutoCAD or PDF format, of the system schematics, layouts, and equipment detail drawings.

2.3 Service

Purchase of the equipment must include technical support as either; regional technical support; technical phone support; or support via the Internet.

Communication must begin within 72 hours of the initial request for support.

The system provided must have spare parts and service support available for a minimum of five (5) years after purchase.

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 (2012-11-19) General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

Solicitation No. - N° de l'invitation
23584-130317/B

Amd. No. - N° de la modif.
pv899

Buyer ID - Id de l'acheteur
pv899

Client Ref. No. - N° de réf. du client
23584-130317

File No. - N° du dossier
pv89923584-130317

CCC No./N° CCC - FMS No/ N° VME

4. Term of Contract

4.1 Delivery Date

All the deliverables must be received on or before _____ **(to be filled in only at contract award)**.

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Martin Gauthier
Public Works and Government Services Canada
Acquisitions Branch
Commercial Consumer Products Directorate
11 Laurier Street, 6A2, Phase III
Place du Portage, Hull, Quebec, K1A 0S5
Telephone: (819) 956-5469
Facsimile: (819) 956-3814
E-mail address: martin.gauthier@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.

5.2 Technical Authority (to be filled in only at contract award)

The Technical Authority for the Contract is:

Name: _____
Telephone: (____) _____
Facsimile: (____) _____
E-mail address: _____

The Technical Authority named above 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 Technical Authority, however the Technical 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 (fill in)

The telephone number of the person responsible for:

General enquiries

Name: _____
Telephone No. _____
Facsimile No. _____
E-mail address: _____

Delivery Follow-up

Name: _____
Telephone No. _____
Facsimile No. _____
E-mail address: _____

6. Payment

6.1 Basis of Payment - Firm Price

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 the contract for a cost of \$_____ **(to be filled in only at contract award)**. Customs duties are included, and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

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 Milestone Payments

Canada will make milestone payments in accordance with the Schedule of Milestones detailed in the Contract and the payment provisions of the Contract if:

- a) all work associated with the milestone and as applicable any deliverable required have been completed and accepted by Canada;
- b) the total amount for all milestone payments paid by Canada does not exceed 100 percent of the total amount to be paid under the Contract;
- c) an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- d) all such documents have been verified by Canada.

6.3 Schedule of Milestones

The schedule of milestones for which payments will be made in accordance with the Contract is as follows:

Milestone No.	Deliverables	Delivery Date	Firm Amount	Remarks
1	100% Delivery of item	Before 15 May 2013	80% of contract value(_____) insert at contract award	
2	Certifications/ Final Acceptance	Before 15 May 2013	20% of contract value (_____) insert at contract award	100% completion/acce ptance

6.4 SACC Manual Clauses

C2000C Taxes - Foreign-Based Contractor

2007-11-30

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.

8. Certifications

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.

8.1 Equipment Certifications

NRCan requires that equipment be CSA certified. Standard equipment will typically be certified in its entirety and have a visible CSA marking. Custom built equipment will require that all individual components are CSA certified such that the system's bill of materials (BOM) and schematics can be reviewed by a certifying inspector for compliance with Ontario's Electrical Safety Authority (ESA), CSA, QSI, ULC and TUV.

8.2 Occupational Health & Safety Environment

Occupational Health and Safety Responsibilities for Contractors and Their Subtrades, Equipment Installers, and Service Representatives

Occupational health and safety for all employees, contractors and their subtrades, equipment installers, service representatives and visitors is of utmost importance to the CanmetMATERIALS (CMAT) Technology Laboratory. Occupational health and safety is a shared responsibility of all personnel on site to ensure that risk is minimized, and that a safe workplace results from the due diligence of all personnel. An effective occupational health and safety policy and program will motivate and empower all staff to work safely to protect their long-term health, not simply to avoid accidents.

Everyone who enters CMAT's premises, including its laboratory, must, at a minimum:

- Adhere to CMAT's health and safety directives, policies, standards, practices and procedures;

- Adhere to the Canada Labour Code, Part II;

- Adhere to Ontario's Occupational Health and Safety Act and Regulations for industrial establishments and construction projects; and

- Co-operate with various governing authorities, such as the Ontario Ministry of Labour, the Ontario Ministry of Environment, the Electrical Safety Authority, (ESA), and the Technical Standards & Safety Authority, (TSSA), that have the authority to inspect or audit the job site (co-operation with government inspectors and immediate compliance with any directions or orders from these authorities is essential in order to limit potential downtime resulting from work stoppages or assessed penalties).

All personnel must demonstrate that they have the following.

- Up-to-date licenses for trades' personnel.

- The appropriate training for the equipment they will be operating, with copies of up-to-date training certificates that may apply to the following, (this list is not exhaustive):

- Use of compressed gasses;

- Personal protective equipment;

- Up-to-date Workplace Hazardous Materials Information System, (WHMIS) training.

Contractors must demonstrate that they employ:

- An occupational health and safety program for themselves and their subcontractors;

- Adequate inspection, investigation and orientation programs with penalties for non-compliance;

- Licensed professional services personnel; and

- Adequate supervisory personnel for the project.

The Contractor must make sufficient documentation available as deemed necessary to properly conduct these audits and/or the pre-start health and safety review and/or establish the exemption from the pre-start health and safety review requirements. This may include, but is not limited to:

Electrical schematics

Specifications for safety-related components used in the safety system

Declarations of conformity of safety-related components and systems to the applicable standards

The integrity of all safety equipment must be checked before initiating any work or installation activity

All personal protective equipment in use by the Vendor must comply with CAN/CSA Z94.1-4, CSA Z195 and CSA Z259 standards

The Contractor must address all the corrective actions mandated by this auditing body and/or by the pre-start health and safety review, at no additional cost.

All costs associated with the on-site installation must be included in the firm lot price.

8.3 Regulation, Guidelines and Standards

The equipment must meet the regulations, guidelines, and standards for design, manufacturing, and installation as outlined in "Annex B - Associated Document. Where there is a conflict between the various regulations, guidelines, and standards, the supplier must comply with the machine specific requirements for that type of machine.

Standards order of precedence:

Canadian,
US/ NA,
ISO/ EN,
Other.

8.4 Design and Manufacturing Certifications

The product must meet the listed and any other appropriate standards and regulations and the product must be visibly marked with the CSA or ULC certification, for the intended use.

9. Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in the province of Ontario, Canada.

10. Priority of Documents

If there is a discrepancy between the wordings 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) 2010A (2012-11-19) General Conditions - Goods (Medium Complexity);
- (c) Annex A, Mandatory Specifications for the Non-contact Extensometer System;
- (d) the Contractor's bid dated (to be filled in at contract award) .

11. SACC Manual clause

A9068C Government Site Regulations	2010-01-11
A2000C Foreign Nationals (Canadian Contractor)	2006-06-16
A2001C Foreign Nationals (Foreign Contractor)	2006-06-16
B1501C Electrical Equipment	2006-06-16

12. Shipping Instructions - Delivery at Destination

1. Goods must be consigned to the destination specified in the Contract and delivered:

Delivered Duty Paid (DDP) Hamilton, Ontario Incoterms 2000 for shipments from a commercial contractor.
2. The Contractor will be responsible for all delivery charges, administration, costs and risk of transport and customs clearance, including the payment of customs duties and taxes.

ANNEX A

MANDATORY SPECIFICATIONS FOR THE NON-CONTACT EXTENSOMETER SYSTEM.

Bidders must cross reference the mandatory technical criteria in a concise format by using page, paragraph(s) & sub-paragraphs as applicable to their supporting technical documentation.

CanmetMATERIALS requires a non-contact extensometer to measure strains in tensile test specimens as they are being tested at elevated temperatures in an environmental chamber. This extensometer will be first used to measure strains for 0.2 mm thick aluminium sheet samples tested at elevated temperatures, which could not be measured using another means.

CanmetMATERIALS will be responsible for the integration of the non-contact strain measurement system with the testing machines and environmental chambers.

1. For use in a materials testing laboratory, in room temperature air, to measure test specimens in Environmental Chambers through more than one pane of glass.
 - a. Minimum sample testing temperature -90° C
 - b. Maximum sample testing temperature 600° C

Reference in Contractors Proposal: _____

2. System must have a dedicated lighting mechanism to ensure that the various test specimen materials, and the target markers on the specimens can be illuminated and recognized by the measurement system for both longitudinal and transverse displacement / strain measurements

Reference in Contractors Proposal: _____

3. The system must be able to make bi-axial strain measurement; longitudinal and transverse

Reference in Contractors Proposal: _____

4. The Non-Contact Extensometer system will test specimen materials:

- a. Ceramics
- b. Aluminium
- c. Steel
- d. Magnesium

Reference in Contractors Proposal: _____

5. The measurement system must be able to achieve ASTM E83 Longitudinal Strain Classification to B-1 for:
 - a. 2" (50 mm), gauge length
 - b. 1" (25), gauge length

Reference in Contractors Proposal: _____

6. The test specimen geometries will conform with ASTM E8 standard and sub-standard test specimens

Reference in Contractors Proposal: _____

7. Sample Gauge Width range:

- a. 0.5" (12.5 mm)
- b. 0.2" (5.1 mm)

Reference in Contractors Proposal: _____

8. Sample Gauge Length range:

- a. 0.25" (6.4 mm)
- b. 2" (50 mm)

Reference in Contractors Proposal: _____

9. Elongation for a 1" (25 mm), gauge length test sample up to 500%

Reference in Contractors Proposal: _____

10. The strain measurement system must be capable interfacing with 3rd party controllers and materials testing equipment with an analogue output option or equivalent

- a. The interfacing function with 3rd party equipment must not degrade the measurement capability, (resolution and accuracy), of the system when compared to the measurement capability using "native" system controllers.

Reference in Contractors Proposal: _____

11. ELECTRICAL REQUIREMENTS

11.1 The equipment must be suitable for use with power supply of:

- 4.1.1 60 Hz
- 4.1.2 600V/ 3 phase
- 4.1.3 208V 1 phase
- 4.1.4 208V 3 phase
- 4.1.5 120V 1 phase

Reference in Contractors Proposal: _____

Solicitation No. - N° de l'invitation

23584-130317/B

Client Ref. No. - N° de réf. du client

23584-130317

Amd. No. - N° de la modif.

File No. - N° du dossier

pv89923584-130317

Buyer ID - Id de l'acheteur

pv899

CCC No./N° CCC - FMS No/ N° VME

ANNEX B

ASSOCIATED DOCUMENTS

REGULATIONS, GUIDELINES, AND STANDARDS

Safety Standards

ANSI

ANSI/ASSE Z244.1-2003: Control of Hazardous Energy - Lockout/Tagout and Alternative Methods (Note: CSA Z460-05 prevails)

ANSI Z136.1-2007: Safe Use of Lasers

CSA

Z432-04: Safeguarding of Machinery

CAN/ CSA-Z434-03: Industrial Robots and Robot Systems - General Safety Requirements

Ontario Electrical Safety Code 23rd edition (current) and 24th edition.