



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Travaux publics et Services gouvernementaux
Canada

Place Bonaventure, portail Sud-Oue

800, rue de La Gauchetière Ouest

7^e étage, suite 7300

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

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-Oue

800, rue de La Gauchetière Ouest

7^e étage, suite 7300

Montréal

Québec

H5A 1L6

Title - Sujet Brinell & Rockwell Hardness Device	
Solicitation No. - N° de l'invitation 31206-208848/A	Date 2020-01-27
Client Reference No. - N° de référence du client 31206-208848	
GETS Reference No. - N° de référence de SEAG PW-\$MTA-030-15628	
File No. - N° de dossier MTA-9-42106 (030)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2020-03-09	Time Zone Fuseau horaire Heure Avancée de l'Est HAE
F.O.B. - F.A.B. Specified Herein - Précisé dans les présentes Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input checked="" type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Pommet, Bruno André	Buyer Id - Id de l'acheteur mta030
Telephone No. - N° de téléphone (514) 702-9582 ()	FAX No. - N° de FAX (514) 496-3822
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: CONSEIL NATIONAL DE RECHERCHES DU CANADA 435 Ellice Avenue Winnipeg MB R3B1Y6 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée Voir Doc.	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

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PART 1 - GENERAL INFORMATION

1.1 Security Requirements

There is no security requirement applicable to this document.

1.2 Requirement

The requirement is detailed under Annex "A".

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

1.4 Epost Connect service

This bid solicitation allows bidders to use the epost Connect service provided by Canada Post Corporation to transmit their bid electronically. Bidders must refer to Part 2 entitled Bidder Instructions, and Part 3 entitled Bid Preparation Instructions, of the bid solicitation, for further information.

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) (<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](#) ((2019-03-04) 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

2.1.2 Best Delivery Date – Bid *(to be filled by the bidder)*

While delivery is requested as soon as possible, the best delivery that could be offered is _____.

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 in the bid solicitation.

Note: For bidders choosing to submit using epost Connect for bids closing at the Bid Receiving Unit, the email address is:

TPSGC.RQReceptionSoumissions-QRSupplyTendersReception.PWGSC@tpsgc-pwgsc.gc.ca

Note: Bids will not be accepted if emailed directly to this email address. This email address is to be used to open an epost Connect conversation, as detailed in Standard Instructions 2003, or to send bids through an epost Connect message if the bidder is using its own licensing agreement for epost Connect.

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority **no later than seven (7) 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.

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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 Québec.

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

- If the Bidder chooses to submit its bid electronically, Canada requests that the Bidder submits its bid in accordance with section 08 of the 2003 standard instructions. The epost Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

The bid must be gathered per section and separated as follows:

Section I: Technical Bid
Section II: Financial Bid
Section III: Certifications

- If the Bidder chooses to submit its bid in hard copies, Canada requests that the Bidder submits its 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)

- If the Bidder is simultaneously providing copies of its bid using multiple acceptable delivery methods, and if there is a discrepancy between the wording of any of these copies and the electronic copy provided through epost Connect service, the wording of the electronic copy provided through epost Connect service will have priority over the wording of the other copies.

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 hard copy 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 (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573>). 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.

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Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment.

3.1.1 Electronic Payment of Invoices – Bid

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.

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

The technical evaluation will be based on the technical mandatory criteria to be demonstrated detailed in Annex C. Every proposal must meet the technical mandatory criteria described in Annex C in order to be technically compliant.

It is mandatory to provide, with your bid, all technical / descriptive documents / notes that allow the technical evaluation. Failure to comply will render your bid non-responsive.

Bidders should complete the grid in Annex C and include it with their proposal.

4.1.2 Financial Evaluation

Financial evaluation total = Sum of price of **items 1 to 14** indicated in Annex "B".

4.1.2.1 Evaluation of Price - Canadian/Foreign Bidder

1. Bidders must submit firm prices, Customs duties, Excise taxes and Applicable Taxes excluded.
2. Unless the bid solicitation specifically requires bids to be submitted in Canadian currency, bids submitted in foreign currency will be converted to Canadian currency for evaluation purposes. The rate given by the Bank of Canada in effect on the bid solicitation closing date, or on another date specified in the bid solicitation, will be applied as a conversion factor to the bids submitted in foreign currency.
3. Bidders must provide prices Delivered at Place (DAP) **Winnipeg**, MB, Canada Incoterms 2010 for shipments from a commercial contractor. Bids will be assessed on a DAP basis.

4.2 Basis of Selection

4.2.1 SACC Manual Clause

A0031T (2010-08-16), Basis of Selection - Mandatory Technical Criteria

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 (see Annex E)

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), 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)

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real property agreement of 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.

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](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#>).

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. Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list during the period of the Contract.

The Bidder must provide the Contracting Authority with a completed annex titled Federal Contractors Program for Employment Equity - Certification, before contract award. If the Bidder is a Joint Venture, the

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Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

5.2.3 Additional Certifications Precedent to Contract Award

5.2.3.1 Certification

Original equipment manufacturer

Any bidder that is not the original equipment manufacturer (OEM) for every item proposed as part of its bid is required to submit a certificate signed by the OEM (not the bidder) certifying the bidder's authority to provide and maintain the OEM's items. No contracts will be awarded to a bidder that is not the original equipment manufacturer of the items proposed to Canada unless the manufacturer certification has been provided to Canada.

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 Requirement

The Contractor must provide the items detailed under the "Requirement" at Annex "A".

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](#) (2018-06-21), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

6.3.1.1 Warranty Period:

Section 09 of general conditions [2010A](#) is amended by replacing the period of 12 months **by 24 months**. All other provisions of the warranty section remain in effect.

6.4 Term of Contract

6.4.1 Period of the Contract

The period of the Contract is from the date of Contract award until March 31, 2022 (inclusive).

6.4.2 Delivery Date

The system and all accessories (items # 1-2-7-8-9-10-11-12-13-14 of Annex B – Basis of payment) must be received on or before _____. *(To be filled at contract award)*

Installation, commissioning as well as training (item # 5 & 6 of Annex B – Basis of payment) must be completed within 30 business days following PWGSC's notice during the following period: **between January 1, 2021 and December 31, 2021**.

6.4.3 Delivery Points

Delivery of the requirement will be made to delivery point specified at Annex "A" of the Contract.

6.5 Authorities

6.5.1 Contracting Authority

Name: **Bruno André Pommet**

Title: Supply specialist

Public Works and Government Services Canada

Acquisitions Branch Directorate Supply

Address: 800 de la Gauchetière Ouest, suite 7300, Montréal (Québec), Canada, H5A 1L6

Telephone: 514-702-9582

Facsimile: 514-496-3822

E-mail address: brunoandre.pommet@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.

6.5.2 Project Authority *(to be filled at 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.

6.5.3 Contractor's Representative *(to be filled by the bidder)*

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

6.6 Payment

6.6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid firm unit prices, as specified in Annex B for a cost of \$ _____ *(amount will be inserted at contract award)*. Customs duties are excluded 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.

6.6.2 Multiple Payments

SACC Manual clause [H1001C](#) (2008-05-12) Multiple payments

6.6.3 SACC Manual Clauses

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

6.6.4 Electronic Payment of Invoices – Contract *(As per bidder's choice-s in Annex D)*

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).

6.6.5 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 has been completed.
2. Invoices must be distributed as follows:
 - a. The original and one (1) copy must be forwarded to the following e-mail address for certification and payment:

NRC.Invoice-Facture.CNRC@nrc-cnrc.gc.ca

- b. One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

6.7 Certifications and Additional Information

6.7.1 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.

6.8 Applicable Laws *(to be filled by the bidder)*

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____ *(insert the name of a province or territory of CANADA).*

6.9 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 (2018-06-21), General conditions: Goods (medium complexity)
- (c) Annex A, Requirement;
- (d) Annex B, Basis of payment;
- (e) 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)).*

6.10 SACC Manual Clauses

A2000C (2006-06-16), Foreign Nationals (Canadian Contractor)
A2001C (2006-06-16), Foreign Nationals (Foreign Contractor)
A9068C (2010-01-11), Government Site Regulations
B1501C (2018-06-21), Electrical equipment
D0018C (2007-11-30), Delivery and Unloading
G1005C (2016-01-28), Insurance - No Specific Requirement

ANNEX "A"

REQUIREMENT

1. Object

The National Research Council of Canada (NRC) Winnipeg- Additive Manufacturing site is seeking to acquire a Brinell and Rockwell hardness device with a motorized stage and acquisition software.

NRC's positioning in advanced manufacturing, in the automotive and aeronautical sectors, requires precise and reproducible metallographic preparation of various multilayer materials and high value-added parts.

The scope of work includes supply, transport/shipping, delivery and installation of the device as well as the documentation and training.

2. Mandatory technical specifications

2.1. The hardness device must be equipped with an automatic motorized turret of at least 6 positions including:

2.1.1. One (1) Brinell 5mm indenter with adapter:

The adapter will be used when required for insertion of the indenter into the equipment.

2.1.2. One (1) Brinell 10mm indenter with adapter:

The adapter will be used when required for insertion of the indenter into the equipment.

2.1.3. One (1) Rockwell cone type diamond indenter with adapter:

The adapter will be used when required for insertion of the indenter into the equipment.

2.1.4. An observation camera of at least 5 MP (2560 x 1920pixels);

2.1.5. Positioning function by laser;

2.1.6. Two (2) objectives:

- One (1) 2.5x objective with annular lighting;
- One (1) 5x objective.

2.1.7. Integrated load cell (s) corresponding to these values:

- Loads required between 10gf-250 kgf.

2.1.8. Reception capacity for samples:

- A minimum of 300mm in height;
- At least 200mm deep.

2.1.9. A motorized stage in XYZ axes with a minimum of 300 x 200 mm:

- Effective displacement in XY axes of a minimum of 200 x 100 mm;

- An effective automatic movement in Z axis of a minimum of 140 mm.

2.1.10. A collision protection system.

2.1.11. An integrated LED type light source.

2.2. The hardness device must be equipped with an acquisition system including:

2.2.1. One (1) computer:

- Windows 10;
- 64-bit version.

2.2.2. One (1) screen at least 15 inches;

2.2.3. One (1) acquisition software allowing to do in manual mode and in automatic mode:

2.2.3.1. Load programming;

2.2.3.2. Programming of the preload time from a minimum of 1 to 99 seconds;

2.2.3.3. Programming of the charging time from a minimum of 1 to 99 seconds;

2.2.3.4. Automatic recognition functions:

- Of the objective;
- Load.

2.2.3.5. Automatic calibration according to the objective;

2.2.3.6. Autofocus function;

2.2.3.7. Adjusting the light intensity:

- Manual mode ;
- Automatic mode.

2.2.3.8. Programming of indentation tolerances.

2.2.3.9. Programming an indentation pattern for automatic analysis:

- Linear;
- Multilinear;
- Matrix;
- Point by point adjustment (addition or removal);
- Indentation only function;
- Read only function;
- Combined indent / read function.

2.2.3.10. Brinell hardness indentation:

- Meets ISO 6506-1 and ASTM E10 standards;
- Automatic charge recognition and backup;
- In manual mode with autofocus;
- In automatic mode with autofocus;
- Automatic recording of readings and pattern:
 - XY manual diameter measurement function;
 - Review function;

-
- Remove reading function;
 - Export in MS Excel format and CSV format.

2.2.3.11. Rockwell hardness indentation:

- Meets ISO 6508-1 and ASTM E18 standards;
- Automatic charge recognition and backup;
- Automatic indentation depth measurements;
- Automatic recording of indentations and pattern:
 - Review function;
 - Remove reading function;
- Export in MS Excel format and CSV format.

2.3 The hardness device must be equipped:

2.2.4. An emergency button located on the front of the device.

3. Deliverables

3.1 The supplier must include these items in the proposal:

- Standard certified for Brinell HBW 140-300
- Standard certified for Rockwell - HRC 22-80
- Single sample holder: 40 mm in diameter
- Single sample holder: 50 mm in diameter
- Multiple sample holder with a minimum of four (4) 40 mm diameter samples
- Anvil / Form V for 25 mm round samples
- Anvil / Form V for 40 mm round samples
- Anvil / Form V for 250 mm round samples

3.2 The following documentation must be supplied in English in paper and electronic format **upon delivery**. A French version must be provided if available in paper and electronic format.

3.2.1 User manual including risks and Health and Safety instructions.

3.2.2 Service and maintenance manual including:

- Component lists for troubleshooting;
- Electrical diagrams.

4. Delivery – Installation – Training

4.1 The system must be delivered at the following address (where it will be stored):

NRC - Winnipeg Site
435 Ellice Avenue
Winnipeg, Manitoba, R3B 1Y6

4.2 The supplier must install and commission the equipment later at the NRC-Winnipeg-Fabrication Additive site (**address to be determined, the site is under construction**).

4.2.1 Installation must take place **between January 1 and December 31, 2021** and within a maximum of thirty (30) working days after confirmation by the new NRC-Winnipeg-Fabrication Additive site.

4.2.2 For installation:

- The supplier must **specify and indicate** all the services required (ex: water-air-electricity) as well as the special requirements in the proposal and provide the necessary connections;
- Water, air, electricity and building modifications will be provided and / or carried out by the NRC.

4.3 One (1) day comprehensive training in English must be provided, during the day, to a minimum of three (3) users **following installation**. The training must, as a minimum, cover the following:

- Operation;
- Programming and other functions;
- Interview.

The training must take place **between January 1 and December 31, 2021** and in a maximum of thirty (30) working days after confirmation by the new NRC-Winnipeg-Fabrication Additive site.

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File No. - N° du dossier
MTA-9-42106

Buyer ID - Id de l'acheteur
MTA030
CCC No./N° CCC - FMS No./N° VME

ANNEX "B" - BASIS OF PAYMENT

Item	Item Description	Quantity	Unit Price *
1	Brinell and Rockwell hardness device with a motorized stage and acquisition software, including a computer and a screen.	1	\$ _____
2	User manual & service and maintenance manual (1 each).	1	\$ _____
3	A 24 month warranty period for the polisher and for all accessories (item 1 and items 7 to 14).	1	\$ _____
4	All packaging, transport and shipping costs.	1	\$ _____
5	Installation and commissioning (<i>date and address to be confirmed by NRC</i>).	1	\$ _____
6	On-site 1 day training (<i>date and address to be confirmed by NRC</i>).	1	\$ _____
7	Brinell certified stallion - HBW 140-300.	1	\$ _____
8	Rockwell certified stallion - HRC 22-80.	1	\$ _____
9	Single sample holder: 40 mm in diameter.	1	\$ _____
10	Single sample holder: 50 mm in diameter.	1	\$ _____
11	Multiple sample holder of a minimum of four (4) 40 mm diameter samples.	1	\$ _____
12	Anvil / Form V for 25 mm round samples.	1	\$ _____
13	Anvil / Form V for 40 mm round samples.	1	\$ _____
14	Anvil / Form V for round samples of 250 mm.	1	\$ _____
Total			\$ _____ *

* Currency (if other than CAD\$): _____

* Applicable taxes extra.

ANNEX "C"

MANDATORY TECHNICAL CRITERIA TO BE DEMONSTRATED

No.	MANDATORY TECHNICAL SPECIFICATIONS (Reference to Annex A)	Reference: Please specify where these technical criteria are demonstrated within your technical bid and/or technical notes.
2.1.1	<p>The hardness device must be equipped with an automatic motorized turret of at least 6 positions including:</p> <p>One (1) Brinell 5mm indenter with adapter; The adapter will be used when required for insertion of the indenter into the equipment.</p>	
2.1.2	<p>One (1) Brinell 10mm indenter with adapter; The adapter will be used when required for insertion of the indenter into the equipment.</p>	
2.1.3	<p>One (1) Rockwell cone type diamond indenter with adapter; The adapter will be used when required for insertion of the indenter into the equipment.</p>	
2.1.4	<p>An observation camera of at least 5 MP (2560 x 1920pixels).</p>	
2.1.5	<p>Positioning function by laser.</p>	
2.1.6	<p>Two (2) objectives:</p> <ul style="list-style-type: none">• One (1) 2.5x objective with annular lighting;• One (1) 5x objective.	

2.1.7	Integrated load cell (s) corresponding to these values: <ul style="list-style-type: none"> • Loads required between 10gf-250 kgf. 	
2.1.9	A motorized stage in XYZ axes with a minimum of 300 x 200 mm: <ul style="list-style-type: none"> • Effective displacement in XY axes of a minimum of 200 x 100 mm; • An effective automatic movement in Z axis of a minimum of 140 mm. 	
2.2.3.9	Programming an indentation pattern for automatic analysis: <ul style="list-style-type: none"> • Linear; • Multilinear; • Matrix; • Point by point adjustment (addition or removal); • Indentation only function; • Read only function; • Combined indent / read function. 	
2.2.3.10	Brinell hardness indentation: <ul style="list-style-type: none"> • Meets ISO 6506-1 and ASTM E10 standards. 	
2.2.3.11	Rockwell hardness indentation: <ul style="list-style-type: none"> • Meets ISO 6508-1 and ASTM E18 standards. 	

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ANNEX "D"

ELECTRONIC PAYMENT INSTRUMENT

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 COMPANY BOARD OF DIRECTORS

NOTE TO BIDDERS

WRITE ALL DIRECTOR'S FULL NAMES IN BLOCK LETTERS

PROCUREMENT – BUSINESS NUMBER (PBN) : _____