



**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 0B2 / Noyau 0B2
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 Wire Cut EDM	
Solicitation No. - N° de l'invitation 23240-160835/A	Date 2015-12-08
Client Reference No. - N° de référence du client 23240-160835	
GETS Reference No. - N° de référence de SEAG PW-\$\$HN-460-68578	
File No. - N° de dossier hn460.23240-160835	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2016-01-20	
Time Zone Fuseau horaire Eastern Standard Time EST	
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: Guertin, Benoit	Buyer Id - Id de l'acheteur hn460
Telephone No. - N° de téléphone (819) 420-0331 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Specified Herein Précisé dans les présentes	

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

Electrical & Electronics Products Division
11 Laurier St./11, rue Laurier
7B3, Place du Portage, Phase III
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

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PART 1 - GENERAL INFORMATION

1. Security Requirement

There is no security requirement associated with the requirement.

2. Requirement

The contractor must provide the goods and/or services in accordance with the technical requirements stated herein at Annex "A".

2.1 Delivery Requirement

Delivery **MUST** to be completed by 2016-03-31.

Installation **MUST** to be completed by 2016-04-14.

If the delivery and/or installation are not completed by these dates, the contract will be terminated by way of default.

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.

4. Trade Agreements

The requirement is subject to the provisions of the World Trade Organization Agreement on Government Procurement (WTO-AGP), the North American Free Trade Agreement (NAFTA), and the Agreement on Internal Trade (AIT).

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) (<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](#) (2015-07-03) 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) calendar days

(End of page)

1.1 SACC Manual Clauses

SACC Reference	Section	Date
A9033T	Financial Capability	2012-07-16
B1000T	Condition of Material	2014-06-26

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 copies)
- Section II: Financial Bid (1 copy)
- Section III: Certifications (1 copy)
- Section IV: Additional Information (1 copy)

If there is a discrepancy between the wording of the soft copy and the hard copy, the wording of the hard copy will have priority over the wording of the soft 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 are encouraged to:

- 1) use paper containing fibre certified as originating from a sustainably-managed forest and/or 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.

1.1 Technical Documentation

Technical/descriptive literature must be submitted as part of the technical bid package prior to the bid closing date. Simply stating a compliancy is insufficient. Bidders must present a clearly organized, printed (i.e., not handwritten) proposal that includes all necessary technical and descriptive information, in order to clearly demonstrate their compliancy to all items presented in the Statement of Work (SOW, Annex "A").

Section II: Financial Bid

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

1.2 Exchange Rate Fluctuation Risk Mitigation

1. The Bidder may request Canada to assume the risks and benefits of exchange rate fluctuations. If the Bidder claims for an exchange rate adjustment, this request must be clearly indicated in the bid at time of bidding. The Bidder must submit form PWGSC-TPSGC 450, Claim for Exchange Rate Adjustments with its bid, indicating the Foreign Currency

-
- Component (FCC) in Canadian dollars for each line item for which an exchange rate adjustment is required.
2. The FCC is defined as the portion of the price or rate that will be directly affected by exchange rate fluctuations. The FCC should include all related taxes, duties and other costs paid by the Bidder and which are to be included in the adjustment amount.
 3. The total price paid by Canada on each invoice will be adjusted at the time of payment, based on the FCC and the exchange rate fluctuation provision in the contract. The exchange rate adjustment will only be applied where the exchange rate fluctuation is greater than 2% (increase or decrease).
 4. At time of bidding, the Bidder must complete columns (1) to (4) on form PWGSC-TPSGC 450, for each line item where they want to invoke the exchange rate fluctuation provision. Where bids are evaluated in Canadian dollars, the dollar values provided in column (3) should also be in Canadian dollars, so that the adjustment amount is in the same currency as the payment.
 5. Alternate rates or calculations proposed by the Bidder will not be accepted for the purposes of this exchange rate fluctuation provision.

Section III: Certifications

Bidders must submit the certifications required under Part 5.

Section IV: Additional Information

1.3 Contractor Representatives

Name and telephone number of the person responsible for:

General enquiries

Name: _____
Telephone: _____
Facsimile: _____
E-mail: _____

Delivery follow-up

Name: _____
Telephone: _____
Facsimile: _____
E-mail: _____

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.

Evaluation Criteria

All bids must be completed in full and provide all of the information requested in the bid solicitation to enable full and complete evaluation.

1.1 Mandatory Technical Criteria

The following Mandatory requirements must be submitted with the bid for evaluation:

- * Technical compliance (description of requirement in Annex "A");
- * Delivery **MUST** be completed by 2016-03-31;
- * Installation **MUST** to be completed by 2016-04-14.

1.2 Financial Evaluation

The following Mandatory factors will be taken into consideration in the evaluation of each offer: * Compliance with Pricing Basis;

The Offer price will be determined as follows:

- * Sum of all items total price (unit price x qty.);

1.2.1 Pricing Basis

The bidder must quote firm unit prices in Canadian dollars, DDP Delivered Duty Paid (destination). Applicable Taxes extra, as applicable. Freight charges to destination and all applicable Custom duties and Excise taxes must be included.

2. Basis of Selection

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 on an aggregate basis will be recommended for award of a contract.

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

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

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. 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.

1. Certifications Required with the Bid

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

- 1.1 Declaration of Convicted Offences** As applicable, pursuant to subsection Declaration of Convicted Offences of section 01 of the Standard

Instructions, the Bidder must provide with its bid, a completed [Declaration Form](#), to be given further consideration in the procurement process.

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.

2.1 Integrity Provisions – List of Names

- Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder.
- Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).
- Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

2.2 General Environmental Criteria Certification

The Bidder must select and complete one of the following two certification statements.

- a) The Bidder certifies that the Bidder is registered or meets ISO 14001.

Bidders' Authorized Representative Signature

Date

or

- b) The Bidder certifies that the Bidder meets and will continue to meet throughout the duration of the contract, a minimum of four (4) out of six (6) criteria identified in the table below.

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File No. - N° du dossier
hm460.23240-160835

Buyer ID - Id de l'acheteur
hn460
CCC No./N° CCC - FMS No./N° VME

The Bidder must indicate which four (4) criteria, as a minimum, are met.

Green Practices within the Bidders' organization	Insert a checkmark for each criterion that is met
Promotes a paperless environment through directives, procedures and/or programs	
All documents are printed double sided and in black and white for day to day business activity unless otherwise specified by your client	
Paper used for day to day business activity has a minimum of 30% recycled content and has a sustainable forestry management certification	
Utilizes environmentally preferable inks and purchase remanufactured ink cartridges or ink cartridges that can be returned to the manufacturer for reuse and recycling for day to day business activity.	
Recycling bins for paper, newsprint, plastic and aluminum containers available and emptied regularly in accordance with local recycling program.	
A minimum of 50% of office equipment has an energy efficient certification.	

Bidders' Authorized Representative Signature

Date

2.3 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](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" list (http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) available from [Employment and Social Development Canada \(ESDC\) - Labour's website](#).

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.

(End of page)

PART 6 - RESULTING CONTRACT CLAUSES

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

1. Security Requirement

There is no security requirement associated with the requirement.

2. Requirement

The contractor must provide the goods and/or services in accordance with the technical requirements stated herein at Annex "A"

2.1 SACC Manual Clauses

SACC Reference	Section	Date
B1501C	Electrical Equipment	2006-06-16
B7500C	Excess Goods	2006-06-16

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](#) (2015-09-03), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

3.2 Warranty Period

Section 09 of general conditions 2010A is amended by replacing the period of twelve (12) months by twenty-four (24) months.

All other provisions of the warranty section remain in effect.

4. Term of Contract - Delivery Date

Delivery **MUST** to be completed by 2016-03-31.

Installation **MUST** to be completed by 2016-04-14.

If the delivery and/or installation are not completed by these dates, the contract will be terminated by way of default.

(End of page)

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Benoit Guertin – Supply Specialist
Public Works and Government Services Canada - Acquisitions Branch
Logistics, Electrical, Fuel and Transportation Directorate - "HN" Division
7B3, Place du Portage, Phase III, 11 Laurier Street, Gatineau, QC, K1A 0S5
Telephone: (819) 420-0331
E-mail address: benoit.quertin@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:

Name: will be inserted at contract
Title: will be inserted at contract
Telephone: (xxx) xxx-xxxx Facsimile: (xxx) xxx-xxxx
E-mail: will be inserted at contract

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 and telephone number of the person responsible for:

General enquiries

Name: _____
Telephone: _____
Facsimile: _____
E-mail: _____

Delivery follow-up

Name: _____
Telephone: _____
Facsimile: _____
E-mail: _____

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 the firm lot prices, as specified in

Annex "A" 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

6.4 Insurance

SACC Manual clause [G1005C](#) (2008-05-12) Insurance

6.5 Exchange Rate Fluctuation Adjustment (if applicable)

1. The foreign currency component (FCC) is defined as the portion of the price or rate that will be directly affected by exchange rate fluctuation. The FCC should include all related taxes, duties and other costs paid by the Bidder and which are to be included in the adjustment amount.

2. For each line item where a FCC is identified, Canada assumes the risks and benefits for exchange rate fluctuation, as shown in the Basis of Payment. For such items, the exchange rate fluctuation amount is determined in accordance with the provision of this clause.

3. The total price paid by Canada on each invoice will be adjusted at the time of payment, based on the FCC and the exchange rate fluctuation provisions in the contract. The exchange rate adjustment amount will be calculated in accordance with the following formula:

$$\text{Adjustment} = \text{FCC} \times \text{Qty} \times (i_1 - i_0) / i_0$$

where formula variables correspond to:

FCC: Foreign Currency Component (per unit)

i_0 : Initial exchange rate (CAN\$ per unit of foreign currency
[e.g. US\$1])

i_1 : exchange rate for adjustments (CAN\$ per unit of foreign currency
[e.g. US\$1])

Qty: quantity of units

4. The initial exchange rate is typically set as the noon rate as published by the Bank of Canada on the solicitation closing date.

5. For goods, the exchange rate for adjustment will be the noon rate as published by the Bank of Canada on the date the goods were delivered. For services, the exchange rate for adjustment will be the noon rate on the last

business day of the month for which the services were performed. For advance payments, the exchange rate for adjustment will be the noon rate on the date the payment was due. The most recent noon rate will be used for non-business days.

6. The Contractor must indicate the total exchange rate adjustment amount (either upward, downward or no change) as a separate item on each invoice or claim for payment submitted under the Contract. Where an adjustment applies, the Contractor must submit with their invoice form PWGSC-TPSGC 450, Claim for Exchange Rate Adjustments.

7. The exchange rate adjustment will only be applied where the exchange rate fluctuation is greater than 2% (increase or decrease), calculated in accordance with column 8 of form PWGSC-TPSGC 450 (i.e. $[i_1 - i_0] / i_0$).

8. Canada reserves the right to audit any revision to costs and prices under this clause.

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 must be fax to 1-877-947-0987 or emailed in PDF format to: NRCan.invoice_imaging-service_dimagerie_des_factures.RNCan@canada.ca 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

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 _____. *(Insert the name of the province or territory as specified by the Bidder in its bid, if applicable)*

(End of page)

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. [2010A](#) (2015-09-03) General Conditions - Goods, Services (Medium Complexity);
- c. Annex A Requirement;
- d. 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)*)

11. SACC Manual Clauses (Delivery)

SACC Reference	Section	Date
D2000C	Marking	2007-11-30
D2001C	Labelling	2007-11-30
D9002C	Incomplete Assemblies	2007-11-30

11.1 Shipping Instructions - Delivery at Destination

Goods must be consigned to the destination specified in the Contract and Delivered Duty Paid –DDP- (Ottawa ON) Incoterms 2000 for shipments from a commercial contractor.

(End of page)

ANNEX "A" – REQUIREMENT

CNC Wire Cut EDM (Electrical Discharge Machining)

(Submerge type)

Mandatory Technical Specifications

Machine Body

Specifications	Page Reference
Axis travel X = >590 mm Y = > 390mm Z = > 400mm U = >195 mm V = >195 mm	
Max work piece dim's X = >1110 mm Y = >820 mm Z =>400 mm	
Max work piece weight => 1600 kg	
X, Y, U, V and Z manual feed rate =<25.4 mm/min to =>1270 mm/min	
Drive system. Direct drive AC servo motor with Nano interpolation on X, Y, U and V axis	
Stainless steel work table surface	
Super precise linear guide ways with Grade C1 ball screws on X, Y, U, V and Z axis	
Ergonomically designed operator working area	
Glass scale on X,Y axis	

Fluid Supply Unit

Specifications	Page Reference
Tank capacity =>1000 L	
Filter element =<3 µm	
Ion exchange resin auto conductivity control	
Auto temperature inverter controlled fluid chiller unit =< +/- 0.1 deg C	
Polished Stainless steel construction work tank	
Automatic servo control water level in work tank	
Wash down gun	

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Buyer ID - Id de l'acheteur
hn460
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Power Supply Unit

Specifications	Page Reference
Circuit system, Digital power supply Transistor driven	
AC / DC switchable (AC power supply to reduce oxidation and loss of thermal hardness due to electrolysis or corrosion)	

CNC Controller

Specifications	Page Reference
CNC control with 64 bit main processor and 4 / 32 bit aux processors, closed loop software servo drive system	
USB, Ethernet, RS232C and PCMCIA ports for input/output file transfer	
Display monitor =>15 in., color LCD touch screen with cutting & power consumption status	
NC command Resolution =<.000001 mm	
Scaling =<0.001; =>99.9999	
Program storage capacity => 4Megabytes	

CNC Functions

Specifications	Page Reference
Programmable absolute/Incremental coordinate display, inch/mm on X, Y, U, V, Z axis	
Standard G code entry by operator with MDI (manual data input) or by input from NRCan (<i>Natural Resources Canada</i>) standard software system which is currently Master Cam X8	
Quick conversational programming	
Automatic positioning, edge find, hole center, gap center, column center and arc center	
Conditions display. Cutting speed, cut length, cut time and time remaining.	
Dry run function with machine lock	
Remote controls box with five axes multiple speed jog control, flushing control and CNC function control.	
Single step or run, dry run 2D:3D, wire path simulation on display screen.	
Self-diagnostics and machining history display.	
Conversational control to select optimum cutting conditions.	
Anti-crash protection on X,Y,U,V,Z axis	
Auto power off function at end of run.	
Auto second cut system, retrace/auto change machining data.	
Mirror image X, Y axis; axis exchange function	
Program offset data setting function.	
Background editing function.	
Five (5) controllable axis (X,Y,U,V,Z,)	
30 degree taper cutting capability	
Energy Saving mode	

AWT (Auto wire thread function)

Specifications	Page Reference
AWT must have a reliability of =>90% at 150 mm (.25 mm wire).	
Submerged and dry threading at breakpoint.	
Return to start point mode with rapid return to break point.	
Adjustable wire speed and tensioning via 2 servo motors	

Wire Size

Specifications	Page Reference
.2 mm cutting equipment (.008 in.)	
.25 mm cutting equipment (.010 in.)	

Footprint

Specifications	Page Reference
L = <2790 mm W = <2750 mm H = <2400 mm	
Machine weight = < 3150kg	

Electrics

Specifications	Page Reference
575 V, 3 phases, 60 cycles on site, supplier must provide any transformer(s) required.	
Main feed and sub feed to the machine will be carried out by NRCan (<i>Natural Resources Canada</i>) electrical department. The supplier will be responsible for the Final Hook Up.	
Machine and control must be certified by an organization accredited by the Standards Council of Canada (SCC) to meet local electrical code.	

Warranties

Specifications	Page Reference
Two year parts and labor on machine, power supply, control and fluid supply unit.	
Supplier will provide technical support and service during normal working hours E.S.T. for the duration of the warrantee period.	
Warrantee will begin on the day that the machine and control are installed (fully operational) to the satisfaction of NRCan at destination.	

Manuals

Specifications	Page Reference
Two sets of all Safety, Operating and Maintenance manuals are required.	

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Amd. No. - N° de la modif.
File No. - N° du dossier
hm460.23240-160835

Buyer ID - Id de l'acheteur
hn460
CCC No./N° CCC - FMS No./N° VME

Training

Specifications	Page Reference
The supplier will provide Factory Training for two NRCan employees for a period of four days. The supplier must include the cost of such training in the proposal.	
Training must be provided within one year of installation	

Miscellaneous/Accessories

Specifications	Page Reference
Post processor compatible with the standard software system used by NRCan (currently Mastercam X8).	
Submergable Auto Vertical Alignment Jig	
Upper flushing nozzles (5 min)	
Lower Flushing Nozzles (5 min)	
Energizing Plates (4 min)	
Auto Lubrication System	
Upper Ceramic Isolation Plate (2 min)	
Lower Ceramic Isolation Plate (2 min)	
Filters (6 min)	
Ion Exchange Resin (min 10 Kgs)	
1 spool of each wire; .2mm ; .25mm	
Basic Tool Kit	
LED Work Light	

Installation:

The supplier will be responsible for unloading at site, performing a complete installation, levelling, final electrical hook up, inspection and testing. Supplier must also provide electrical certification.

Delivery **MUST** to be completed by 2016-03-31.

Installation **MUST** to be completed by 2016-04-14.

If the delivery and/or installation are not completed by these dates, the contract will be terminated by way of default.

Part Number Offered: _____

Firm Lot Price: \$ _____