



**RETURN BIDS TO:**

**RETOURNER LES SOUMISSIONS À:**

Bid Receiving Public Works and Government  
Services Canada/Réception des soumissions  
Travaux publics et Services gouvernementaux  
Canada

1713 Bedford Row  
Halifax, N.S./Halifax, (N.É.)  
B3J 1T3  
Nova Scotia  
Bid Fax: (902) 496-5016

**REQUEST FOR PROPOSAL  
DEMANDE DE PROPOSITION**

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

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

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

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

**Comments - Commentaires**

<b>Title - Sujet</b> Sinker Electrical Discharge Machine	
<b>Solicitation No. - N° de l'invitation</b> W355B-184026/B	<b>Date</b> 2017-08-22
<b>Client Reference No. - N° de référence du client</b> W355B-18-4026	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$HAL-409-10175	
<b>File No. - N° de dossier</b> HAL-7-79008 (409)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2017-09-06</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Atlantic Daylight Saving Time ADT
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Taylor, Kathie	<b>Buyer Id - Id de l'acheteur</b> hal409
<b>Telephone No. - N° de téléphone</b> (902) 496-5510 ( )	<b>FAX No. - N° de FAX</b> (902) 496-5016
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> DEPARTMENT OF NATIONAL DEFENCE SEE HEREIN HALIFAX NOVA SCOTIA B3K5X5 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**

Atlantic Region Acquisitions/Région de l'Atlantique  
Acquisitions  
1713 Bedford Row  
Halifax, N.S./Halifax, (N.É.)  
B3J 3C9  
Nova Scot

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



Item Article	Description	Dest. Code Dest.	Inv. Code Fact.	Qty Qté	U. of I. U. de D.	Unit Price/Prix unitaire FOB/FAM		Delivery Req. Livraison Req.	Del. Offered Liv. offerte
						Destination	Plant/Usine		
2	Sinker Electrical Discharge	W355D	W355D	1	SUM	\$	XXXXXXXXXX	See Herein	
2	Sinker Electrical Discharge	W355D	W355D	1	SUM	\$	XXXXXXXXXX	See Herein	

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**This bid solicitation cancels and supersedes previous bid solicitation number W355B-184026/A dated May 23, 2017 with a closing of June 29, 2017 at 14:00. A debriefing or feedback session will be provided upon request to bidders/offerors/suppliers who bid on the previous solicitation.**

## **PART 1 - GENERAL INFORMATION**

### **1.1 SECURITY REQUIREMENTS**

#### **1. Before award of contract, the following conditions must be met:**

- (a) the Bidder must hold a valid organization security clearance as indicated in Part 6 - Resulting Contract Clauses;
- (b) the Bidder's proposed individuals requiring access to classified or protected information, assets or sensitive work site(s) must meet the security requirements as indicated in Part 6 - Resulting Contract Clauses;
- (c) the Bidder must provide the name of all individuals who will require access to classified or protected information, assets or sensitive work sites;

2. For additional information on security requirements, Bidders should refer to the Industrial Security Program (ISP) of Public Works and Government Services Canada (<http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>) website.

### **1.2 Requirement**

DND, FMF Cape Scott, Halifax, NS, has a requirement for the supply, installation, start up and training of one (1) new Sinker EDM to be used to manufacture parts for the repair of surface and underwater vessels, as fully detailed in 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 Trade Agreements**

This requirement is subject to The Agreement on Internal Trade (AIT), the North America Free Trade Agreement (NAFTA) and WTO-AGP.

## **PART 2 - BIDDER INSTRUCTIONS**

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

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

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

The 2003 (2017-04-27) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

## 2.2 Submission of Bids

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

## 2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than 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.

## 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 Nova Scotia.

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

## PART 3 - BID PREPARATION INSTRUCTIONS

### 3.1 Bid Preparation Instructions

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

Section I: Technical Bid (two hard copies)  
Section II: Financial Bid (one hard copy)  
Section III: Certifications (one hard copy)

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

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

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

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

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and

- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

### **Section I: Technical Bid**

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

### **Section II: Financial Bid**

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

### **Section III: Certifications**

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

## **3.2 SACC Manual Clauses**

B100T Condition of Material (2014-06-26)

## **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**

##### **4.1.1.1 Mandatory Technical Criteria**

Fully detailed in Annex A.

**The contractor must, as part of the bid submission, submit documentation clearly indicating the contractor's experience, in provision of electrical, mechanical and millwright services. Submission is to include the journey person(s) trade certificates and their experience as the contractor's personnel. Related training and formal courses taken by personnel must accompany the contractor's documentation.**

#### **4.1.2 Financial Evaluation**

The price of the bid will be evaluated in Canadian dollars, Applicable Taxes excluded, DDP Incoterms 2000, Canadian customs duties and excise taxes included, where applicable.

### **4.2 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 will be recommended for award of a contract. Bidder must bid on all items to be deemed responsive; only one contract will be awarded.

## **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 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.

### 5.1.1 Integrity Provisions – Required Documentation

In accordance with the *Ineligibility and Suspension Policy* (<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.

### 5.1.2 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](#) website ([http://www.esdc.gc.ca/en/jobs/workplace/human\\_rights/employment\\_equity/federal\\_contractor\\_program.page?&\\_ga=1.229006812.1158694905.1413548969](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969)).

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

## PART 6 - RESULTING CONTRACT CLAUSES

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

### 6.1 Security Requirements

6.1.1 The following security requirements apply and form part of the Contract.

1. The Contractor/Offeror must, at all times during the performance of the Contract/Standing Offer, hold a valid **Designated Organization Screening (DOS)**, issued by the Canadian Industrial Security Directorate (CISD), Public Works and Government Services Canada (PWGSC).
2. The Contractor/Offeror personnel requiring access to sensitive work site(s) must **EACH** hold a valid **RELIABILITY STATUS**, granted or approved by CISD/PWGSC.

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File No. - N° du dossier

Buyer ID - Id de l'acheteur  
ha1409  
CCC No./N° CCC - FMS No./N° VME

3. Subcontracts which contain security requirements are **NOT** to be awarded without the prior written permission of CISD/PWGSC.

4. The Contractor/Offeror must comply with the provisions of the:

- (a) Security Requirements Check List and security guide (if applicable), attached at Annex C;
- (b) Industrial Security Manual (Latest Edition).

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

## **6.4 Term of Contract**

### **6.4.1 Delivery Date**

Please provide best delivery: \_\_\_\_\_

## **6.5 Authorities**

### **6.5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Kathie Taylor  
Supply Officer  
Public Works and Government Services Canada  
Acquisitions Branch  
1713 Bedford Row  
Halifax, NS B3J 3C9  
Telephone: 902-496-5510  
Facsimile: 902-496-5016  
E-mail address: [kathie.taylor@pwgsc.gc.ca](mailto:kathie.taylor@pwgsc.gc.ca)

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

### **6.5.2 Project Authority**

The Project Authority for the Contract is: (to be inserted at contract award)

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File No. - N° du dossier

Buyer ID - Id de l'acheteur  
ha1409  
CCC No./N° CCC - FMS No./N° VME

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

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 a *firm lot price for a cost of \$ \_\_\_\_\_ (insert the amount 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 Method of Payment

#### H1000C (2008-05012) Single Payment

## **6.7 Invoicing Instructions**

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Invoices must be distributed as follows:
  - a. The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.

## **6.8 Certifications and Additional Information**

### **6.8.1 Compliance**

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

## **6.9 Applicable Laws**

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

## **6.10 Priority of Documents**

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

- (a) the Articles of the Agreement;
- (b) the general conditions 2010A (2016-04-04);
- (c) Annex A, Statement of Requirement;
- (d) the Contractor's bid dated \_\_\_\_\_

## **6.11 SACC Manual Clauses**

G1005C Insurance Requirements (2008-05-12)

## **Annex A Requirement**

### **1) Introduction:**

- a) Fleet Maintenance Facility Cape Scott (FMFCS) have a requirement for the supply, installation, start-up and training of one (1) new Sinker EDM to be used to manufacture parts for the repair of surface and underwater vessels.
- b) Canada reserves the right to verify that all of the mandatory specifications are met prior to the award of contract. This verification shall include technical information from a submitted Machine Tool Manufacturers brochure. Technical information that cannot be verified from the submitted brochure must have an accompanying letter(s) signed by a Professional Engineer employed by the Machine Tool Manufacture verifying the technical information.
- c) Specifications found not to be meet this requirement will result in a non-compliant bid, and if found after contract award may result in termination of contract.
- d) Minimum Mandatory Specifications (All dimensions are in Imperial units of measure unless otherwise noted.)

### **2) Machine Tool Specifications:**

- a) Longitudinal travel, (X-axis):
  - i) Minimum (min.) 15.0 inches (in.),
  - ii) Maximum (max.) 16.0 in.
- b) Cross travel, (Y-axis):
  - i) Min. 11.0 in.,
  - ii) Max. 12.0 in.
- c) Vertical travel, (Z-axis):
  - i) Min. 10.5 in.
  - ii) Max. 12 in.
- d) Machine must be equipped with a "C" axis:
  - i) Min. revolutions per minute (rpm) one (1)
  - ii) Max. 100 rpm
  - iii) Min. indexing angle 001 degree (deg.)
- e) Machine dimensions:
  - i) Machine Dimensions is defined as the total footprint of the machine including but not limited to any chillers, power cabinets or fluid tanks that are supplied with the machine. This does not include maintenance area:
    - (1) Min. width 70.0 in.
    - (2) Max. width 96.0 in.
    - (3) Min. depth 76.5 in.
    - (4) Max. depth 97.0 in.
    - (5) Max. height 100.0 in.
  - ii) Work tank dimensions:

(1) Min. width	29.0 in.
(2) Max. width	41.5 in.
(3) Min. depth	24.0 in.
(4) Max. depth	28.0 in.
(5) Max. height	18.0 in.

iii) Work table dimensions:

(1) Min. width	23.0 in.
(2) Max. width	28.0 in.
(3) Min. depth	15.0 in.
(4) Max. depth	20.0 in.

iv) Max. machine weight including all component's and dielectric fluid,10,000 pounds (lbs.)

- f) Must come equipped with system 3R® macro clamping chuck
- g) Machining current min. 40 Amps
- h) Min. electrode weight in spindle 110 lbs.
- i) Must come equipped with remote controller
- j) Controller:
  - i) Min. 15 in. touch screen
  - ii) Must come with windows operating system
  - iii) Must be equipped with an alphanumeric and symbol keyboard
- k) Must come equipped with macro shuttle automatic tool changer, max. five (5) positions
- l) Must be equipped with FM200® fire suppression system or equivalent
- m) Must be equipped with through the electrode flushing
- n) Must be supplied with enough dielectric fluid to fill the machine
- o) Must come with a transformer to connect machine to our 600 volt 3 phase power
- p) Must come equipped with programmable flushing
- q) X and Y axis must have linear scales

**3) Maintenance materials:**

- a) Dielectric fluid filters four (4)
- b) Dielectric fluid for top up Min. Qty. 205 LT

**4) Electrical Certification**

- a) The equipment being supplied must be certified by an acceptable Electrical Certification Organization. The following Certification

- b) Organizations are acceptable. The electrical control must bear a label from one of these organizations in order to be recognized approved.

**c) Identify which Organization shall be used:**

- i) Canadian Standards Association (CSA), \_\_\_\_
- ii) QPS/Entela, \_\_\_\_
- iii) Intertek Testing Services, \_\_\_\_
- iv) Underwriters Laboratories of Canada (ULC), \_\_\_\_
- v) Underwriters Laboratories Inc. (UL), \_\_\_\_
- vi) Met Laboratories Inc. (MET), \_\_\_\_
- vii) TUV Rheinland of North America, \_\_\_\_
- viii) Quality Auditing Institute (QAI), \_\_\_\_
- ix) TUV America Inc. \_\_\_\_

- d) NOTE: Labels from all Organizations above (with the exception of CSA and ULC), must be accompanied by a small "c" at the eight o'clock position or Canadian Standard number to indicate the product has been certified to the Canadian Standard.

- e) Electrical equipment that is not certified by one of the above agencies can only be accepted if the equipment is "field" inspected and labelled by the Canadian Standards Association (CSA), QPS/Entela, Intertek Testing Services, MET Laboratories, TUV America Inc, Underwriters Laboratories of Canada under the Special Inspection Program. This inspection must take place before equipment delivery to FMF Cape Scott and a copy of verification documentation report must accompany the machine with delivery. Identify which Organization shall be used:

- i) Canadian Standards Association (CSA), \_\_\_\_
- ii) QPS/Entela, \_\_\_\_
- iii) Intertek Testing Services, \_\_\_\_
- iv) Met Laboratories Inc. (MET), \_\_\_\_
- v) TUV America Inc., \_\_\_\_
- vi) Underwriters Laboratories of Canada (ULC) \_\_\_\_

**5) MATERIAL AND WORKMANSHIP:**

- a) SAFETY DEVICES- The machine and its controls shall be equipped with the latest and most efficient devices for the protection of the operator and equipment. Covers, guards and/or other safety devices shall not interfere with the operation of the machine. Safety mechanisms such as limit switches, positive stops, overload protection devices and warning lights shall protect the equipment against overload, over-travel or malfunction of the machine or its components.
- b) LUBRICATION- All enclosed, rotating and sliding components shall be adequately lubricated. Each lubrication reservoir, if so equipped, shall be fitted with a sight glass or other means to determine fluid levels.
- c) INTERCHANGEABILITY- To provide for replacement of worn parts, all parts bearing the same part number shall be functionally interchangeable and shall be dimensionally identical within specified tolerance limits in use by the manufacturer.
- d) CONSTRUCTION- The machine shall be so constructed that when it is installed and connected to power it shall be ready for operation. The machine shall be constructed of new parts which are without defects and free of repairs.

- e) **CASTING AND FORGING-** All castings and forgings shall be free of defects, scale and mismatching. Welding, peening, plugging or filling with metallic paste shall not be used for reclaiming any defective part for use in the machine.
- f) **WELDING, BRAZING OR SOLDERING-** Welding, brazing, or soldering shall be utilized where specified in the machine design. None of these processes shall be used as a repair measure for defective parts.
- g) **FASTENING DEVICES-** All screws, bolts, pins and similar parts shall be installed in such a manner as to prevent any change in tightness. Those subject to removal shall not be swaged, peened, staked or otherwise permanently deformed.
- h) **SURFACES-** All surfaces of casting and forgings, molded parts, stampings and weldments shall be cleaned and free from sand, dirt, sprues, flash, scale, flux and other harmful or extraneous material. External surface edges shall be either rounded or beveled unless sharpness is required to perform a necessary function. Unless as otherwise specified herein, the condition and finish of all surfaces shall be commensurate with the manufacturer's standard commercial practice.
- i) **PAINTING-** All exterior and interior surfaces of the machine and its components which are not otherwise finished and for which a painted surface is suitable shall be prepared and painted with synthetic enamel by the manufacturer using their standard commercial practice. The interior of gear cases, cast-in reservoirs and similar areas shall have an oil resistant surface. All other accessible interior areas shall be coated with a sealed, rust resistant paint.
- j) **LUBRICATION CHART/PLATE-** A lubrication chart or plate shall be securely attached to the machine. The following information shall be contained on this chart or plate:
  - i) Points of lubrication,
  - ii) Service interval,
  - iii) Type of lubricant,
  - iv) Viscosity,
  - v) Lubricant types shall be identified in the machine maintenance manual and be specified by one or more of the following:
    - (1) Detailed performance specification,
    - (2) Brand name with a minimum of three (3) manufacturers recommended for each application from any oil company having outlets in Canada.
- k) **PLATES-** All words indicating speed, machine settings and instruction plates shall be written in the English Language, engraved, embossed or stamped in bold face, with a contrasting finish, easily read by the operator.

**6) Delivery, Installation and Commissioning:**

- a) Fleet Maintenance Facility Cape Scott (FMFCS) requires a "Turnkey" installation. All work is to be done during normal work week (Monday through Friday) and business hours (8:00 hrs. to 16:00 hrs.). The following is a description of this service with FMFCS and the Contractor responsibilities:
- b) Fleet Maintenance Facility Cape Scott (FMFCS) responsibilities:
  - i) FMFCS will have the installation area cleared of all non-essential material,

- ii) FMFCS will provide riggers, crane operator and outside crane (19,800 lb. capacity) using the equipment manufactures accepted lifting procedure. If the load weight exceeds the outside crane capacity, FMFCS will supply a mobile crane with the required lifting capacity, FMFCS will lift the machine from the delivery vehicle and move it to a temporary location outside the building and then into the building,
  - iii) FMFCS shall use an inside gantry crane (20,000 lb. capacity) and follow the manufactures accepted lifting procedure for movement of the equipment into a temporary location in Building D200, CFB Halifax,
  - iv) FMFCS will provide lift and moving from that temporary location to the machine's final location in the Building D200, Machining Services Shop, this will also include lifting and moving of the machine and moving back into the machine's final position after the contractor completes the necessary floor work (core drilling, placing machine anchors, running conduit and services);
- c) Contractor's responsibilities:
- i) **NOTE: All persons in the Industrial Electrician and Industrial Mechanic (Millwright) trades employed by the contractor to work on this installation of the equipment must have journey person status; the exception is that all Industrial Electrician and Industrial Mechanical trade apprentices shall only be utilized when working directly with a journey person in their respective trades. The contractor must, as part of the bid submission, submit documentation clearly indicating the contractor's experience, in provision of electrical, mechanical and millwright services. Submission is to include the journey person(s) trade certificates and their experience as the contractor's personnel. Related training and formal courses taken by personnel must accompany the contractor's documentation.**
  - ii) Delivery to Building D200 Fleet Maintenance Facility Cape Scott (FMFCS), CFB Halifax, Nova Scotia B3K 5X5,
  - iii) A Hazard assessment and contractor health and safety plan must be submitted to Fleet Maintenance Facility Cape Scott (FMFCS) Project manager prior to work beginning,
  - iv) Give all notices, obtain all permits and approvals, and pay all necessary fees in order to carry out the specified work,
  - v) The contractor shall be responsible for disposing of all waste materials and debris, generated by the contractor, this responsibility includes all shipping pallets, crate covers and crate contents (bracing, shipping insulation etc.),
  - vi) The installation shall include unpacking, delivery inspection, cleaning, levelling, all electrical connections etc. (this may require core drilling for electrical, compressed air etc. (all other services required by the machine) and securing the machine to shop floor with chemical anchors (contractor's responsibility to supply and install as per manufacturer's instructions c/w levelling pads and hold down clamps and studs/nuts). Supply and install electrical wiring to FMFCS specified 600 Volt, 3 Phase electrical control panel. The contractor shall supply, install and connect all necessary transformers, wiring, conduits, electrical control panel circuit breakers, accessory piping: compressed air, water lines etc. as required by the machine,

- vii) Installation shall be as per Canadian Electrical Code (CEC),
- viii) After the contractors and FMFCS final acceptance of the installation, start up and maintenance and operator training shall commence,
- ix) Maintenance training must be provided for a minimum of one (1) day at our facility in FMFCS, Halifax, Nova Scotia. The dates of this service will be scheduled by DND in accordance with delivery,
- x) Operator training must be provided for a minimum of three (3) day(s) at our facility in FMFCS, Halifax, Nova Scotia. The dates of this service will be scheduled by DND in accordance with acceptance of the installation. This training is to be provided by the equipment manufactures trained technician, Field Service Representative (FSR).
- xi) Supply FMFCS with two (2) copies of operation, material and maintenance manuals. Contents of these binders shall contain at a minimum:
  - (1) Equipment and material specifications.
  - (2) Warranties and guarantees.
  - (3) Calibration and commissioning documentation.
  - (4) Copies of any permits and inspection certificates.
  - (5) Shall provide as-built, marked-up drawings on clean set of prints provided to the owner at total completion of the work.
  - (6) Supply copies of all drawings, calculations and certifications to FMFCS Industrial Engineering Manager or his/her designated representative.

## 7) Documentation Required:

- a) Installation drawing package for the Sinkers EDM described in this Purchase Description, included in package must be:
  - i) All floor mounting pad recommendations,
  - ii) Anchoring hole description and locations,
  - iii) All machine services requirements:
    - (1) Electrical,
    - (2) Compressed air,
    - (3) Water,
    - (4) Etc.
  - iv) This drawing package must be signed by the Machine Manufacturer's Mechanical Engineering. This information is to be shipped to FMFCS Industrial Engineering Manager or his/her designated representative within 30 days after the acceptance of the contract to purchase. Photocopies will not be acceptable,
- b) Manufacturer's original hard copy equipment manuals, Qty. two (2), containing:
  - i) Installation manual,
  - ii) Maintenance manual,
  - iii) Operating manual,
  - iv) Parts list,
  - v) Electrical circuit diagrams,
  - vi) Machine accuracies and test documentation,
  - vii) This information is to be shipped to FMFCS Industrial Engineering Manager or his/her designated representative within 30 days after the acceptance of the contract to purchase. Photocopies will not be acceptable,
  - viii) **Note:** In addition to 7)b), if it is the manufactures normal procedure is to supply digital

documentation as well, the following information must accompany the equipment:

- (1) Digital documentation manual set on CD-ROM complete/with (c/w):
  - (a) Installation manual,
  - (b) Maintenance manual,
  - (c) Operating manual,
  - (d) Digital Read Out manual,
  - (e) Parts list,
  - (f) Electrical circuit diagrams,
  - (g) A letter of permission to reprint manuals or partial sections from the supplied CD-ROMs must be sent to the FMFCS Industrial Engineering Officer or his/her designated representative. This letter shall be in the form of an email.

## **8) WARRANTY**

- a) The equipment shall be guaranteed to be free from manufacturing and operational defects for a period of twelve months from the date it was set-to-work by the contractor's representative and accepted as operationally satisfactory by the FMFCS Industrial Engineering Manager or his/her designated representative. The contractor shall be responsible for the provision of labour, parts, and field service at their own expense during the term of the warranty period and shall make good all defects within ten (10) days of being informed by Industrial Engineering Officer or his designated representative that it is required. All other warranties over and above those specified service herein shall be considered valid.

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File No. - N° du dossier

Buyer ID - Id de l'acheteur  
ha1409  
CCC No./N° CCC - FMS No./N° VME

### Annex B Basis of Payment

The price of the bid will be evaluated in Canadian dollars, the Goods and Services Tax or the Harmonized Sales Tax excluded, DDP Incoterms 2000, Canadian Customs Duties and Excise Taxes included.

	U of I	Qty	Unit Price	Extended
Sinker electrical discharge machine	ea	1	\$ _____	\$ _____
Dielectric filters	ea	4	\$ _____	\$ _____
Dielectric fluid (205 LT minimum)	lot	1	\$ _____	\$ _____
<b>TOTAL</b>				\$ _____

**Annex C  
Cross Reference Data**

Bidders are requested to provide cross-reference below to identify the page(s) where each mandatory minimum specification can be demonstrated in their technical documentation provided with bid. For the few criteria which are not identified in specification sheets/literature/brochures, your firm's indication of "Compliant" will be considered as certification that the requirement is met. Canada reserves the right to verify any and all information relating to mandatory requirements.

Minimum Mandatory Specifications	Cross Reference Page Number
<p><b><u>Machine Tool Specifications:</u></b> (All dimensions are in Imperial units of measure unless otherwise noted.)</p> <p>a) Longitudinal travel, (X-axis):</p> <ul style="list-style-type: none"> <li>i) Minimum (min.)                      15.0 inches (in.),</li> <li>ii) Maximum (max.)                    16.0 in.</li> </ul> <p>b) Cross travel, (Y-axis):</p> <ul style="list-style-type: none"> <li>i) Min.                                      11.0 in.,</li> <li>ii) Max.                                    12.0 in.</li> </ul> <p>c) Vertical travel, (Z-axis):</p> <ul style="list-style-type: none"> <li>i) Min.                                      10.5 in.</li> <li>ii) Max.                                    12 in.</li> </ul> <p>d) Machine must be equipped with a "C" axis:</p> <ul style="list-style-type: none"> <li>i) Min. revolutions per minute (rpm)    one (1)</li> <li>ii) Max.                                      100 rpm</li> <li>iii) Min. indexing angle                    001 degree (deg.)</li> </ul> <p>e) Machine dimensions:</p> <ul style="list-style-type: none"> <li>i) Machine Dimensions is defined as the total footprint of the machine including but not limited to any chillers, power cabinets or fluid tanks that are supplied with the machine. This does not include</li> </ul>	

<p>maintenance area:</p> <table><tr><td>(1) Min. width</td><td>70.0 in.</td></tr><tr><td>(2) Max. width</td><td>96.0 in.</td></tr><tr><td>(3) Min. depth</td><td>76.5 in.</td></tr><tr><td>(4) Max. depth</td><td>97.0 in.</td></tr><tr><td>(5) Max. height</td><td>100.0 in.</td></tr></table> <p>ii) Work tank dimensions:</p> <table><tr><td>(1) Min. width</td><td>29.0 in.</td></tr><tr><td>(2) Max. width</td><td>41.5 in.</td></tr><tr><td>(3) Min. depth</td><td>24.0 in.</td></tr><tr><td>(4) Max. depth</td><td>28.0 in.</td></tr><tr><td>(5) Max. height</td><td>18.0 in.</td></tr></table> <p>iii) Work table dimensions:</p> <table><tr><td>(1) Min. width</td><td>23.0 in.</td></tr><tr><td>(2) Max. width</td><td>28.0 in.</td></tr><tr><td>(3) Min. depth</td><td>15.0 in.</td></tr><tr><td>(4) Max. depth</td><td>20.0 in.</td></tr></table> <p>iv) Max. machine weight including all component's and dielectric fluid,10,000 pounds (lbs.)</p> <p>f) Must come equipped with system 3R® macro clamping chuck</p> <p>g) Machining current                      min. 40 Amps</p> <p>h) Min. electrode weight in spindle    110 lbs.</p> <p>i) Must come equipped with remote controller</p> <p>j) Controller:</p> <table><tr><td>i) Min. 15 in. touch screen</td></tr><tr><td>ii) Must come with windows operating system</td></tr><tr><td>iii) Must be equipped with an alphanumeric and symbol keyboard</td></tr></table> <p>k) Must come equipped with macro shuttle automatic tool changer, max. five (5) positions</p>	(1) Min. width	70.0 in.	(2) Max. width	96.0 in.	(3) Min. depth	76.5 in.	(4) Max. depth	97.0 in.	(5) Max. height	100.0 in.	(1) Min. width	29.0 in.	(2) Max. width	41.5 in.	(3) Min. depth	24.0 in.	(4) Max. depth	28.0 in.	(5) Max. height	18.0 in.	(1) Min. width	23.0 in.	(2) Max. width	28.0 in.	(3) Min. depth	15.0 in.	(4) Max. depth	20.0 in.	i) Min. 15 in. touch screen	ii) Must come with windows operating system	iii) Must be equipped with an alphanumeric and symbol keyboard	
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<p>l) Must be equipped with FM200® fire suppression system or equivalent</p> <p>m) Must be equipped with through the electrode flushing</p> <p>n) Must be supplied with enough dielectric fluid to fill the machine</p> <p>o) Must come with a transformer to connect machine to our 600 volt 3 phase power</p> <p>p) Must come equipped with programmable flushing</p> <p>q) X and Y axis must have linear scales</p>	
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**Annex D**  
**Security Requirement Checklist**

(attached pdf)