



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

SOLICITATION AMENDMENT MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

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 Press brake 200 tons	
Solicitation No. - N° de l'invitation W1985-186796/B	Amendment No. - N° modif. 003
Client Reference No. - N° de référence du client W1985-18-6796	Date 2018-06-28
GETS Reference No. - N° de référence de SEAG PW-\$MTA-309-14904	
File No. - N° de dossier MTA-7-40229 (309)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2018-07-11	
Time Zone Fuseau horaire Heure Avancée de l'Est HAE	
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: Paradis, Mary	Buyer Id - Id de l'acheteur mta309
Telephone No. - N° de téléphone (514) 702-8173 ()	FAX No. - N° de FAX (514) 496-3822
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: MINISTÈRE DE LA DEFENSE NATIONALE 202 Dépôt d'Atelier Bâtisse 10 Sud-FET Reception commerciale 6769 rue Notre-Dame , est Montréal Québec H1N 2E9 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	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

THE ABOVE MENTIONED REQUEST FOR PROPOSAL HAS BEEN AMENDED AS FOLLOWS:

DELETE:

**ANNEX "A"
STATEMENT OF REQUIREMENT**

Purchase and delivery of a Press brake of 200 tons (US)

1.0 SCOPE

1.1 OBJECTIVE

The 202 Workshop Depot wishes to acquire a hydraulic 200-ton press brake, to be used for forming and bending metal plates and sheets for the repair and modification of vehicles. This document states the technical specifications to be respected for the purchase of a high-precision hydraulic press brake.

2.0 BACKGROUND

The 202 Workshop Depot (202WD) is a Canadian Armed Forces repair unit that offers maintenance services. The unit's mandate is to ensure the repair and reconditioning of all Canadian Armed Forces (CAF) ground equipment as well as other equipment.

3.0 REQUIREMENT

Technical specifications

The press brake must meet following mandatory technical specifications:

Item no.	Description
	Mandatory technical specifications
3.1	The high-precision press brake must not be a prototype or an existing model requiring major modifications to comply with the requirements. The equipment must meet all the criteria during the proposal, and must use technology previously proven by the manufacturer. The names of two different companies in North America using a press brake of 200 US tons or more must be supplied to prove that equipment equivalent to that specified in the proposal are in use.
3.2	The press brake must have a minimum capacity of 200 US tons.
3.3	The press brake must be compatible with a power supply of 575 V, three phase at 60 Hz (connection to the infrastructure). If the press brake requires a different electrical power supply, a transformer must be supplied to be able to connect the press brake to the infrastructure.

3.4	The press brake must comply with the following standards: - ANSI B11.3-2012 Safety Requirements for Power Press Brakes; - CSA Z142-10 (C2014) - Code for power press operation: Health, safety, and protection requirements. - CSA Z432-04 (R2014) – Protection of Machinery. - The transformer and electrical components must be certified by CSA. - The laser(s) installed on the press brake as well as their use must comply with these standards: ANSI Z136.1 – 2014 American Standard for Safe Use of Lasers and ANSI Z136.9 – 2013 American National Standard for Safe Use of Lasers in Manufacturing Environments.
3.5	The press brake and its components must have the following dimensions: - Width: maximum of 12 feet (<i>required to accommodate the work space that is available</i>) - Depth: maximum of 6 feet - Height: maximum of 11 feet
3.6	The press brake must have a frame, housings (or uprights), a table, and a bolted ram to be able to replace the parts, or adjust the assembly.
3.7	The distance between the housings must be a minimum of 100 in. (2540 mm) to easily accommodate the use of 96 in. (2413 mm) of sheet metal. The bench length must be at least 120 in. (3048 mm). The throat must be a minimum of 19.6 in. (500 mm).
3.8	The table of the press brake must be able to accommodate a die along its total length.
3.9	The press brake must have a minimum three-point vertically guided ram and the two main cylinders must be able to move independently.
3.10	The throat opening must be a minimum of 450 mm (17.7 in.) and a minimum ram stroke length of 300 mm (11.8 in.).
3.11	The press brake must have cylinders whose rod and pistons are forged and tempered.
3.12	The Supplier must ensure that the dimensions offered allow the bending of boxes (pan shaped) 10 in. (254 mm) high (variable thickness), taking into consideration the space already occupied by the anchoring system of the punch and the dies. Point 3.12 takes precedence over Point 3.11; if the dimensions proposed in Point 3.11 are insufficient, the Supplier must adapt the dimensions to respond to Point 3.12.
3.13	The press brake must be equipped with a dynamic, hydraulic bending compensation CNC (Crowning) numerical control system. The press must be able to compensate both in real time and automatically for the deflections of the punch and die.
3.14	The press brake must be equipped with a system guaranteeing the parallelism of the frame. Linear guides with an accuracy of at least 0.0005 in. (0.0127 mm) must compensate for the bending of the frame.

3.15	The press brake must be equipped with a quick, tool-free clamping system for the punches. The punches must be able to be inserted both vertically and laterally. A nominal space of 2 in. must be present between the clamping jaws of the punches. The jaws must also move laterally (a minimum lateral movement of 1 in. is required). The clamping system must be, at a minimum, compatible with American punches and <i>Wilson Tools</i> with and without notches. The clamping system must allow the use of gooseneck punches on both sides. The clamping system must not be pneumatic or hydraulic. We are looking for a manual clamping system. The Supplier must be able to provide a European clamping system in the event that 202 Workshop wishes to acquire this type of tool. Please note that we need a system of tightening which takes American and <i>Wilson</i> tools and which can also accommodate 'gooseneck punch'.
3.16	If present, the hydraulic system(s) must be equipped with a filter with a fineness of 3 microns.
3.17	The press brake must be equipped with two support arms at the front of the press. The support arms must be able to move along the linear guides. The support arms must be able to be placed at the end of the press brake so as to not interfere with the operator during operations which do not require support arms. The support arms must be graduated in millimeters.
3.18	The press brake must be equipped with a lighting system at the front and the rear of the press brake.
3.19	<p>The press brake must be equipped with a movable rear stop over six axes (the axes include the movement of the fingers).</p> <p>(Clarification is provided for this statement: It means that since the two fingers mounted on the rear stop must move independently, each finger would move left, right, forward, and backwards individually, so making up the first 4 axes, which is x1, x2, y1, y2 . Considering that the two fingers are mounted on the rear stop which needs to be able to move forward backward, and up and down, the rear stop will have an over X and Z, therefore six axes).</p> <p>The stop must be equipped with two independently movable fingers. The travel on the stop on the X-axis must be a minimum of 1.2 m. The fingers must be able to position themselves automatically via the control console according to the distance required by the bending plan. Manual adjustment with micrometric precision of the stop by the operators must be possible using the control console. A system (mechanical or software) must prevent accidental collisions between the fingers and the die and/or the table. Note: the standard run is 800mm, but with the 3rd support, it is possible to lean on a distance of 1.2m and this is acceptable for this requirement.</p>
3.20	The press brake must be equipped with an integrated control console, equipped with an LCD touch screen.
3.21	The press brake's computer must permit importing .DXF, .STP or .IPT file formats. The computer must allow the operator to correct bending parameters. The computer must be compatible with all press brake correction systems (bending compensation, parallelism, etc.) as well as with all control devices (adjustable stops, hydraulic tightening, etc.). A comptroller which allows to display in 3D or in 2D is acceptable.
3.22	The repositioning accuracy of the stops and the ram must be at least 0.005 in. (repeatability).

Source of Electricity

Manuals and Technical Documents

The supplier agrees provide, within two weeks of being awarded the contract, all of the technical documentation for all infrastructure resources necessary for the operation and installation of the equipment. These technical documents must state the types of supply resources necessary, as well as the values in metric or imperial units. The required specifications are:

- The current and supply voltage;
- The specific floor specifications for the area where the press brake is to be installed;
- A construction plan indicating all required dimensions for the installation of the supporting floor.

The Supplier must provide the Technical Authority with the following manuals:

- Operator Manual;
- Parts Manual;
- Maintenance manuals.

The manual must be in French and/or in English. As a minimum, two paper copies and one electronic copy in PDF format must be supplied for each document.

The supplier must provide an installation plan for the equipment and all of its components, based on the layout plan provided by the 202 Workshop Depot, in DWG version format (compatible with AutoCAD format, 2014 version or more recent). The installation plan must meet the following specifications:

- The diagram for the press brake according to the actual dimensions of all of its components;
- The entire press brake unit must be contained and represented on the plan;
- The plan must include as a minimum the overall dimensions of the press brake and its components.

Minimal Guarantee

Supply a full warranty on the press brake parts and workmanship for three years. The warranty period begins when the press brake has been correctly installed and is fully functional.

Deliverable and Installation

The quote must include the complete installation including: the installation and calibration of the machine, the start-up of the machine, a demonstration of the functionalities of the machine as well as the training.

Provide a specialized technician on site to perform the installation and complete the system start-up after installation.

A 'sketch' is being provided to demonstrate the dimensions of the doors and corridors (see at the end of this annex). This information will be useful to suppliers as it will enable them to estimate the right equipment required to fulfill this contract.

Training and After Sale Service

Operator Training: The submitted quote must include a training of the operators comprised of a minimum of three (3) days of on-site training, broken into security, the introduction of the machine, the usage of the machine, the operation of the digital control console, the operation of the tool restraint system, the operation of the bending system, and the preventive maintenance operations. This minimum ensures that the training adequately cover the material.

Preventive and Corrective Maintenance Training: The submitted quote must include a training provided on the preventive and corrective maintenance of the equipment.

The training must also include at least four (4) hours where the operators can test the control console and bend parts to their satisfaction in order to assess the capacities of the press brake, and to apply the elements presented during training. All documentation used during the training (videos, PowerPoint presentations, etc.) must be given to the Technical Authority in electronic format.

Responsibilities of the Department of National Defence

The installation of any plumbing and electrical connections required for the press brake will be assumed by the 202 Workshop.

4.0 SAFETY

- 4.1 The press brake must be equipped with a laser beam safety device for the bending die (Active Opto-electronic Protective Device (AOPD)). The device must allow the operator to use the press brake when his hands are close to the die. The device must be placed near the punch, so that it can be used with different sheet metal thicknesses without adjustment. If required, various modes can be used for different specific applications. For example, a box mode may allow the laser device to be deactivated when the punch is within 6 mm of the metal sheet.
- 4.2 The press brake must be operated with a foot pedal so that the operator can hold the metal sheets during bending. The pedal must be a maintained-action control type. The press must be stopped automatically if the pedal is released or depressed to the maximum (dead man's switch).

5.0 DELIVERABLE PRODUCTS

Below are deliverable products and their associated timeline

Deliverable Products	Timeline
Start-up Meeting	1 week after the contract is awarded
Delivery of the manual and technical documents	2 weeks prior to the delivery of the equipment
Delivery of the hydraulic Press Brake of 200 tons (US)	At the latest within four months, if possible
Training for the operators as well as the persons in charge of the preventive and corrective maintenance	2 weeks after the delivery of the equipment

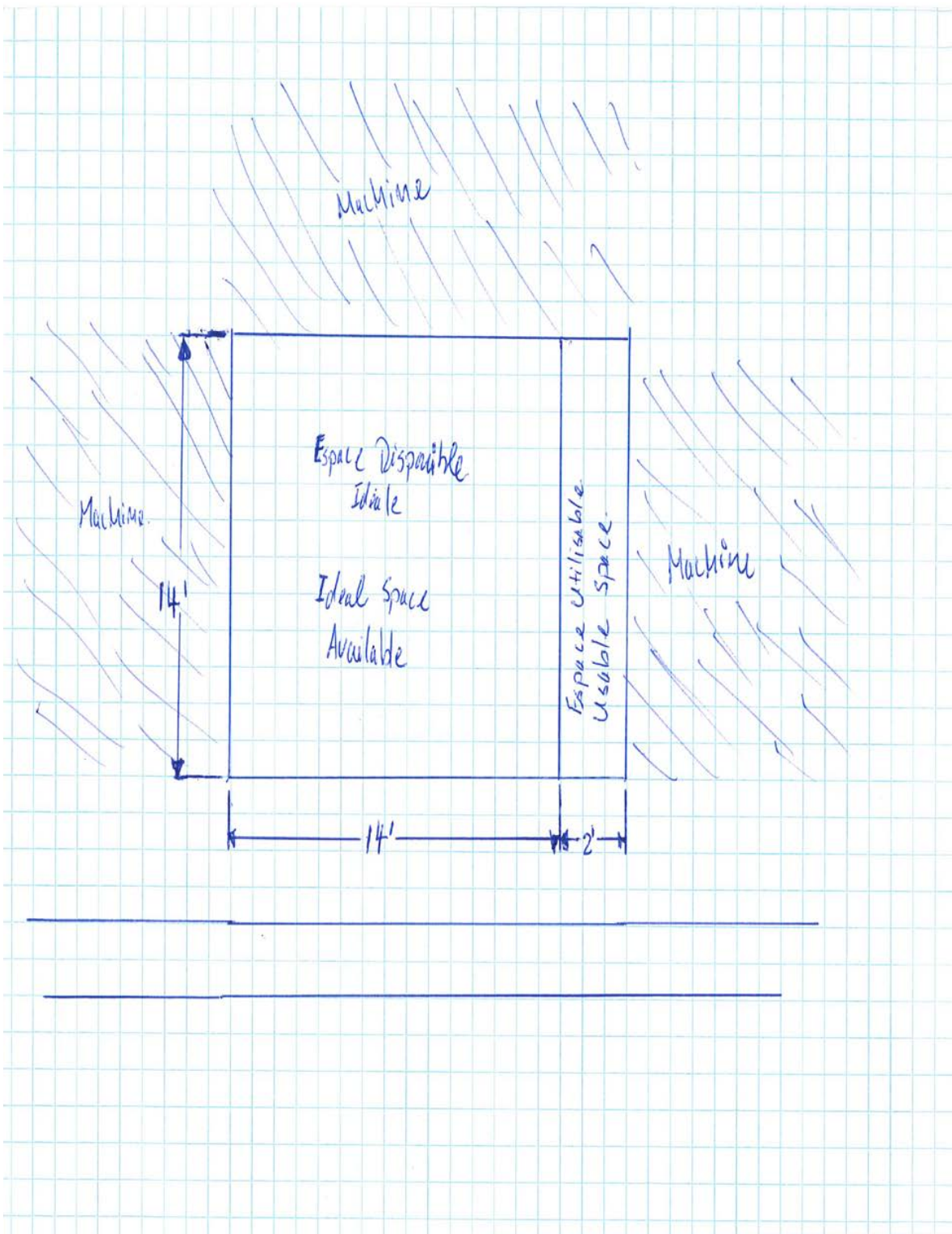
The payment will be processed once a receipt has been provided and after receiving all the deliverables mentioned above.

6.0 CONSTRAINTS

The Supplier must take into account the following:

- 6.1 Before any visit to the garrison, the Supplier must inform the Technical Authority at least 48 hours in advance with the names of those who will be present in order to obtain the necessary authorization.
- 6.2 The Supplier must provide the required equipment to move the equipment on the garrison grounds.
- 6.3 The Supplier must bring all materials and tools necessary for the start-up of the equipment to the installation area.

SKETCH



INSERT:

**ANNEX "A"
STATEMENT OF REQUIREMENT**

Purchase and delivery of a Press brake of 200 tons (US)

1.0 SCOPE

1.1 OBJECTIVE

The 202 Workshop Depot wishes to acquire a hydraulic 200-ton press brake, to be used for forming and bending metal plates and sheets for the repair and modification of vehicles. This document states the technical specifications to be respected for the purchase of a high-precision hydraulic press brake.

2.0 BACKGROUND

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3.0 REQUIREMENT

Technical specifications

The press brake must meet following mandatory technical specifications:

Item no.	Description
	Mandatory technical specifications
3.1	The high-precision press brake must not be a prototype or an existing model requiring major modifications to comply with the requirements. The equipment must meet all the criteria during the proposal, and must use technology previously proven by the manufacturer. The names of two different companies in North America using a press brake of 200 US tons or more must be supplied to prove that equipment equivalent to that specified in the proposal are in use.
3.2	The press brake must have a minimum capacity of 200 US tons.
3.3	The press brake must be compatible with a power supply of 575 V, three phase at 60 Hz (connection to the infrastructure). If the press brake requires a different electrical power supply, a transformer must be supplied to be able to connect the press brake to the infrastructure.
3.4	<p>The press brake must comply with the following standards:</p> <ul style="list-style-type: none">- ANSI B11.3-2012 Safety Requirements for Power Press Brakes;- CSA Z142-10 (C2014) - Code for power press operation: Health, safety, and protection requirements.- CSA Z432-04 (R2014) – Protection of Machinery.- The transformer and electrical components must be certified by CSA.- The laser(s) installed on the press brake as well as their use must comply with these standards: ANSI Z136.1 – 2014 American Standard for Safe Use of Lasers and ANSI Z136.9 – 2013 American National Standard for Safe Use of Lasers in Manufacturing Environments. <p><i>(Note: While it is not necessary to include lasers on the machine, you are to do so. They must then be conform to the standards ANSI Z136.1 and ANSI Z136.9).</i></p>

3.5	The press brake and its components must have the following dimensions: - Width: maximum of 148 inches (<i>required to accommodate the work space that is available</i>) - Depth: maximum of 77 inches - Height: maximum of 11 feet
3.6	The press brake must have a frame, housings (or uprights), a table, and a bolted ram to be able to replace the parts, or adjust the assembly.
3.7	The distance between the housings must be a minimum of 100 in. (2540 mm) to easily accommodate the use of 96 in. (2413 mm) of sheet metal. The bench length must be at least 120 in. (3048 mm). The throat must be a minimum of 19.6 in. (500 mm).
3.8	The table of the press brake must be able to accommodate a die along its total length.
3.9	The press brake must have a minimum three (3) -points vertically guided ram and the two main cylinders must be able to move independently. <i>(Note: We are asking a minimum of 3 points vertically guided ram with (4) rollers per side. This would be plenty to ensure a stable vertical movement of the ram)</i>
3.10	The throat opening must be a minimum of 450 mm (17.7 in.) and a minimum ram stroke length of 300 mm (11.8 in.).
3.11	The press brake must have cylinders whose rod and pistons are forged and tempered. <i>(Note: The cylinders can be in cast, but the rod and pistons must be forged and tempered).</i>
3.12	The Supplier must ensure that the dimensions offered allow the bending of boxes (pan shaped) 10 in. (254 mm) high (variable thickness), taking into consideration the space already occupied by the anchoring system of the punch and the dies. Point 3.12 takes precedence over Point 3.11; if the dimensions proposed in Point 3.11 are insufficient, the Supplier must adapt the dimensions to respond to Point 3.12. <i>(Note: We cannot provide a picture of the 10 in box since we never made one. The important point is that we want to ensure clearance to make a 10 in box with the machine).</i>
3.13	The press brake must be equipped with a dynamic, hydraulic bending compensation CNC (Crowning) numerical control system. The press must be able to compensate both in real time and automatically for the deflections of the punch and die.
3.14	The press brake must be equipped with a system guaranteeing the parallelism of the frame. Linear guides with an accuracy of at least 0.0005 in. (0.0127 mm) must compensate for the bending of the frame.

3.15	<p>The press brake must be equipped with a quick, tool-free clamping system for the punches. The punches must be able to be inserted both vertically and laterally. A nominal space of 2 in. must be present between the clamping jaws of the punches. The jaws must also move laterally (a minimum lateral movement of 1 in. is required). The clamping system must be, at a minimum, compatible with American punches and <i>Wilson Tools</i> with and without notches. The clamping system must allow the use of gooseneck punches on both sides. The clamping system must not be pneumatic or hydraulic. We are looking for a manual clamping system. The Supplier must be able to provide a European clamping system in the event that 202 Workshop wishes to acquire this type of tool. Please note that we need a system of tightening which takes American and <i>Wilson</i> tools and which can also accommodate 'gooseneck punch'.</p> <p><i>(Note: The tooling we are using is from Wilson tools. The clamping system must be, at a minimum, compatible with American punches and Wilson Tools with and without notches. For more details, please refer to the Wilson tools catalogue).</i></p>
3.16	<p>If present, the hydraulic system(s) must be equipped with a filter with a fineness of 3 microns.</p>
3.17	<p>The press brake must be equipped with two support arms at the front of the press. The support arms must be able to move along the linear guides. The support arms must be able to be placed at the end of the press brake so as to not interfere with the operator during operations which do not require support arms. The support arms must be graduated in millimeters.</p> <p><i>(Note: We are requesting a full length linear rail to be able to easily slide the two arms).</i></p>
3.18	<p>The press brake must be equipped with a lighting system at the front and the rear of the press brake.</p>
3.19	<p>The press brake must be equipped with a movable rear stop over six axes (the axes include the movement of the fingers).</p> <p>(Clarification is provided for this statement: It means that since the two fingers mounted on the rear stop must move independently, each finger would move left, right, forward, and backwards individually, so making up the first 4 axes, which is x1, x2, y1, y2 . Considering that the two fingers are mounted on the rear stop which needs to be able to move forward backward, and up and down, the rear stop will have an over X and Z, therefore six axes).</p> <p>The stop must be equipped with two independently movable fingers. The travel on the stop on the X-axis must be a minimum of 1.2 m. The fingers must be able to position themselves automatically via the control console according to the distance required by the bending plan. Manual adjustment with micrometric precision of the stop by the operators must be possible using the control console. A system (mechanical or software) must prevent accidental collisions between the fingers and the die and/or the table. Note: the standard run is 800mm, but with the 3rd support, it is possible to lean on a distance of 1.2m and this is acceptable for this requirement.</p> <p><i>Note: the approximate back gauge requirements are:</i></p> <p><i>ΔX: 1200 mm (minimum)</i></p> <p><i>ΔY: 2540 mm (minimum)</i></p> <p><i>ΔZ: 500 mm</i></p>

3.20	The press brake must be equipped with an integrated control console, equipped with an LCD touch screen.
3.21	The press brake's computer must permit importing .DXF, .STP or .IPT file formats. The computer must allow the operator to correct bending parameters. The computer must be compatible with all press brake correction systems (bending compensation, parallelism, etc.) as well as with all control devices (adjustable stops, hydraulic tightening, etc.). A comptroller which allows to display in 3D or in 2D is acceptable.
3.22	The repositioning accuracy of the stops and the ram must be at least 0.005 in. (repeatability).

Source of Electricity

Manuals and Technical Documents

The supplier agrees provide, within two weeks of being awarded the contract, all of the technical documentation for all infrastructure resources necessary for the operation and installation of the equipment. These technical documents must state the types of supply resources necessary, as well as the values in metric or imperial units. The required specifications are:

- The current and supply voltage;
- The specific floor specifications for the area where the press brake is to be installed;
- A construction plan indicating all required dimensions for the installation of the supporting floor.

The Supplier must provide the Technical Authority with the following manuals:

- Operator Manual;
- Parts Manual;
- Maintenance manuals.

The manual must be in French and/or in English. As a minimum, two paper copies and one electronic copy in PDF format must be supplied for each document.

The supplier must provide an installation plan for the equipment and all of its components, based on the layout plan provided by the 202 Workshop Depot, in DWG version format (compatible with AutoCAD format, 2014 version or more recent). The installation plan must meet the following specifications:

- The diagram for the press brake according to the actual dimensions of all of its components;
- The entire press brake unit must be contained and represented on the plan;
- The plan must include as a minimum the overall dimensions of the press brake and its components.

Minimal Guarantee

Supply a full warranty on the press brake parts and workmanship for three years. The warranty period begins when the press brake has been correctly installed and is fully functional.

Deliverable and Installation

The quote must include the complete installation including: the installation and calibration of the machine, the start-up of the machine, a demonstration of the functionalities of the machine as well as the training.

Provide a specialized technician on site to perform the installation and complete the system start-up after installation.

A 'sketch' is being provided to demonstrate the dimensions of the doors and corridors (see at the end of this annex). This information will be useful to suppliers as it will enable them to estimate the right equipment required to fulfill this contract.

Training and After Sale Service

Operator Training: The submitted quote must include a training of the operators comprised of a minimum of three (3) days of on-site training, broken into security, the introduction of the machine, the usage of the machine, the operation of the digital control console, the operation of the tool restraint system, the operation of the bending system, and the preventive maintenance operations. This minimum ensures that the training adequately cover the material.

Preventive and Corrective Maintenance Training: The submitted quote must include a training provided on the preventive and corrective maintenance of the equipment.

The training must also include at least four (4) hours where the operators can test the control console and bend parts to their satisfaction in order to assess the capacities of the press brake, and to apply the elements presented during training. All documentation used during the training (videos, PowerPoint presentations, etc.) must be given to the Technical Authority in electronic format.

Responsibilities of the Department of National Defence

The installation of any plumbing and electrical connections required for the press brake will be assumed by the 202 Workshop.

4.0 SAFETY

- 4.1 The press brake must be equipped with a laser beam safety device for the bending die (Active Opto-electronic Protective Device (AOPD)). The device must allow the operator to use the press brake when his hands are close to the die. The device must be placed near the punch, so that it can be used with different sheet metal thicknesses without adjustment. If required, various modes can be used for different specific applications. For example, a box mode may allow the laser device to be deactivated when the punch is within 6 mm of the metal sheet.
- 4.2 The press brake must be operated with a foot pedal so that the operator can hold the metal sheets during bending. The pedal must be a maintained-action control type. The press must be stopped automatically if the pedal is released or depressed to the maximum (dead man's switch).

5.0 DELIVERABLE PRODUCTS

Below are deliverable products and their associated timeline

Deliverable Products	Timeline
Start-up Meeting	1 week after the contract is awarded
Delivery of the manual and technical documents	2 weeks prior to the delivery of the equipment
Delivery of the hydraulic Press Brake of 200 tons (US)	At the latest within four months, if possible
Training for the operators as well as the persons in charge of the preventive and corrective maintenance	2 weeks after the delivery of the equipment

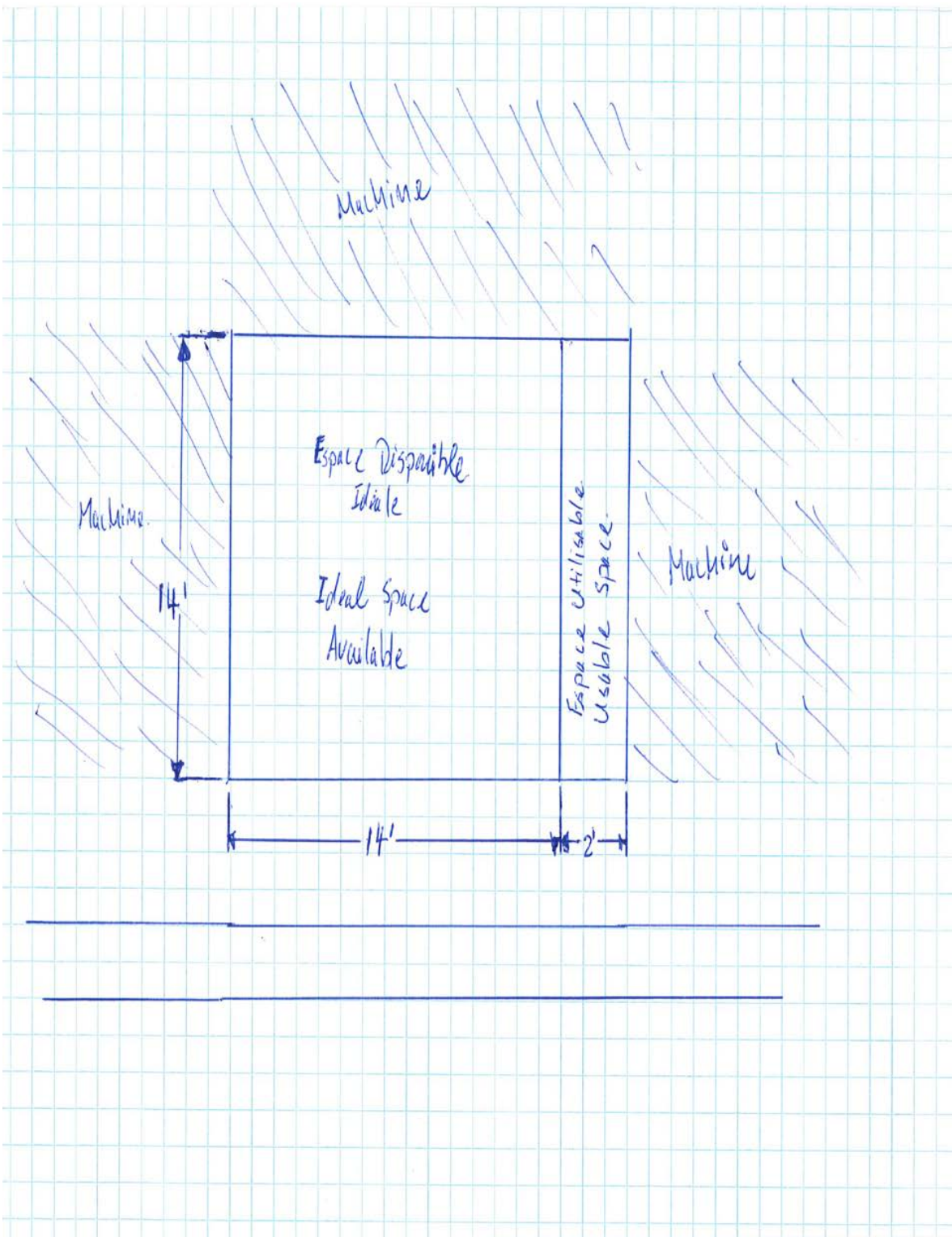
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6.0 CONSTRAINTS

The Supplier must take into account the following:

- 6.1 Before any visit to the garrison, the Supplier must inform the Technical Authority at least 48 hours in advance with the names of those who will be present in order to obtain the necessary authorization.
- 6.2 The Supplier must provide the required equipment to move the equipment on the garrison grounds.
- 6.3 The Supplier must bring all materials and tools necessary for the start-up of the equipment to the installation area.

SKETCH



DELETE:

ANNEX "C"
MANDATORY AND TECHNICAL EVALUATION CRITERIA

TO BE COMPLETED BY SUPPLIERS - AT CLOSING DATE AND HOUR OF SOLICITATION:

The information that figures in the table below must be duly completed and submitted **at the closing date and hour of the solicitation**.

The proposals must cover all the subjects indicated in these tables in order to be considered.

In order to explain and demonstrate how the supplier meets the requirements of the bid, the suppliers must attach to their bid, a copy of the complete specifications and descriptive literature (Technical documents such as data sheets, user manual or other) of the products being offered.

Canada will only evaluate the documents that are sent along with the bids submitted by the supplier.

Canada will not evaluate information such as references to a web site address where supplementary information can be found. Neither will it evaluate instruction manuals or technical brochures that are not sent with the bid.

Only those proposals that meet all the mandatory technical criteria in the table below will be subject to further evaluation which is the financial evaluation.

The proposals that fail to meet all these conditions will be rejected.

The Department of National Defence, 202 Workshop, in Montreal, PQ needs to acquire a Press brake of 200 US tons.

MANDATORY TECHNICAL SPECIFICATIONS

THE FOLLOWING MANDATORY TECHNICAL CRITERIA MUST BE MET AT A MINIMUM.

Item no.	Description	Specify the area in the bid document or in the technical documents that describes the mandatory specifications needed
Mandatory Technical specifications		
1	The high-precision press brake must not be a prototype or an existing model requiring major modifications to comply with the requirements. The equipment must meet all the criteria during the proposal, and must use technology previously proven by the manufacturer. The names of two different companies in North America using a press brake of 200 US tons or more must be supplied to prove that equipment equivalent to that specified in the proposal are in use.	

2	The press brake must have a minimum capacity of 200 US tons.	
3	The press brake must be compatible with a power supply of 575 V, three phase at 60 Hz (connection to the infrastructure). If the press brake requires a different electrical power supply, a transformer must be supplied to be able to connect the press brake to the infrastructure.	
4	The press brake must comply with the following standards: - ANSI B11.3-2012 Safety Requirements for Power Press Brakes; - CSA Z142-10 (C2014) - Code for power press operation: Health, safety, and protection requirements. - CSA Z432-04 (R2014) – Protection of Machinery. - The transformer and electrical components must be certified by CSA. - The laser(s) installed on the press brake as well as their use must comply with these standards: ANSI Z136.1 – 2014 American Standard for Safe Use of Lasers and ANSI Z136.9 – 2013 American National Standard for Safe Use of Lasers in Manufacturing Environments.	
5	The press brake and its components must have the following dimensions: - Width: maximum of 12 feet (<i>required to accommodate the work space that is available</i>) - Depth: maximum of 6 feet - Height: maximum of 11 feet	
6	The press brake must have a frame, housings (or uprights), a table, and a bolted ram to be able to replace the parts, or adjust the assembly.	
7	The distance between the housings must be a minimum of 100 in. (2540 mm) to easily accommodate the use of 96 in. (2413 mm) of sheet metal. The bench length must be at least 120 in. (3048 mm). The throat must be a minimum of 19.6 in. (500 mm).	
8	The table of the press brake must be able to accommodate a die along its total length.	
9	The press brake must have a minimum three-point vertically guided ram and the two main cylinders must be able to move independently.	
10	The throat opening must be a minimum of 450 mm (17.7 in.) and a minimum ram stroke length of 300 mm (11.8 in.).	
11	The press brake must have cylinders whose rod and pistons are forged and tempered.	

12	The Supplier must ensure that the dimensions offered allow the bending of boxes (pan shaped) 10 in. (254 mm) high(variable thickness), taking into consideration the space already occupied by the anchoring system of the punch and the dies. Point 12 takes precedence over Point 11; if the dimensions proposed in Point 11 are insufficient, the Supplier must adapt the dimensions to respond to Point 12.	
13	The press brake must be equipped with a dynamic, hydraulic bending compensation CNC (Crowning) numerical control system. The press must be able to compensate both in real time and automatically for the deflections of the punch and die.	
14	The press brake must be equipped with a system guaranteeing the parallelism of the frame. Linear guides with an accuracy of at least 0.0005 in. (0.0127 mm) must compensate for the bending of the frame.	
15	The press brake must be equipped with a quick, tool-free clamping system for the punches. The punches must be able to be inserted both vertically and laterally. A nominal space of 2 in. must be present between the clamping jaws of the punches. The jaws must also move laterally (a minimum lateral movement of 1 in. is required). The clamping system must be, at a minimum, compatible with American punches and <i>Wilson Tools</i> with and without notches. The clamping system must allow the use of gooseneck punches on both sides. The clamping system must not be pneumatic or hydraulic. We are looking for a manual clamping system. The Supplier must be able to provide a European clamping system in the event that 202 Workshop wishes to acquire this type of tool. Please note that we need a system of tightening which takes American and <i>Wilson tools</i> and which can also accommodate 'gooseneck punch'.	
16	If present, the hydraulic system(s) must be equipped with a filter with a fineness of 3 microns.	
17	The press brake must be equipped with two support arms at the front of the press. The support arms must be able to move along the linear guides. The support arms must be able to be placed at the end of the press brake so as to not interfere with the operator during operations which do not require support arms. The support arms must be graduated in millimeters.	
18	The press brake must be equipped with a lighting system at the front and the rear of the press brake.	
19	The press brake must be equipped with a movable rear stop over six axes (the axes include the movement of the fingers). (Clarification is provided for this statement: It means that since the two fingers mounted on the rear stop must move independently, each finger would move left, right, forward, and	

	<p>backwards individually, so making up the first 4 axes, which is x1, x2, y1, y2 . Considering that the two fingers are mounted on the rear stop which needs to be able to move forward backward, and up and down, the rear stop will have an over X and Z, therefore six axes).</p> <p>The stop must be equipped with two independently movable fingers. The travel on the stop on the X-axis must be a minimum of 1.2 m. The fingers must be able to position themselves automatically via the control console according to the distance required by the bending plan. Manual adjustment with micrometric precision of the stop by the operators must be possible using the control console. A system (mechanical or software) must prevent accidental collisions between the fingers and the die and/or the table. Note: the standard run is 800mm, but with the 3rd support, it is possible to lean on a distance of 1.2m and this is acceptable for this requirement.</p>	
20	The press brake must be equipped with an integrated control console, equipped with an LCD touch screen.	
21	The press brake's computer must permit importing .DXF, .STP or .IPT file formats. The computer must allow the operator to correct bending parameters. The computer must be compatible with all press brake correction systems (bending compensation, parallelism, etc.) as well as with all control devices (adjustable stops, hydraulic tightening, etc). A comptroller which allows to display in 3D or in 2D is acceptable.	
22	The repositioning accuracy of the stops and the ram must be at least 0.005 in. (repeatability).	

INSERT:

ANNEX "C"
MANDATORY AND TECHNICAL EVALUATION CRITERIA

TO BE COMPLETED BY SUPPLIERS - AT CLOSING DATE AND HOUR OF SOLICITATION:

The information that figures in the table below must be duly completed and submitted **at the closing date and hour of the solicitation**.

The proposals must cover all the subjects indicated in these tables in order to be considered.

In order to explain and demonstrate how the supplier meets the requirements of the bid, the suppliers must attach to their bid, a copy of the complete specifications and descriptive literature (Technical documents such as data sheets, user manual or other) of the products being offered.

Canada will only evaluate the documents that are sent along with the bids submitted by the supplier.

Canada will not evaluate information such as references to a web site address where supplementary information can be found. Neither will it evaluate instruction manuals or technical brochures that are not sent with the bid.

Only those proposals that meet all the mandatory technical criteria in the table below will be subject to further evaluation which is the financial evaluation.

The proposals that fail to meet all these conditions will be rejected.

The Department of National Defence, 202 Workshop, in Montreal, PQ needs to acquire a Press brake of 200 US tons.

MANDATORY TECHNICAL SPECIFICATIONS

THE FOLLOWING MANDATORY TECHNICAL CRITERIA MUST BE MET AT A MINIMUM.

Item no.	Description	Specify the area in the bid document or in the technical documents that describes the mandatory specifications needed
Mandatory Technical specifications		
1	The high-precision press brake must not be a prototype or an existing model requiring major modifications to comply with the requirements. The equipment must meet all the criteria during the proposal, and must use technology previously proven by the manufacturer. The names of two different companies in North America using a press brake of 200 US tons or more must be supplied to prove that equipment equivalent to that specified in the proposal are in use.	

2	The press brake must have a minimum capacity of 200 US tons.	
3	The press brake must be compatible with a power supply of 575 V, three phase at 60 Hz (connection to the infrastructure). If the press brake requires a different electrical power supply, a transformer must be supplied to be able to connect the press brake to the infrastructure.	
4	<p>The press brake must comply with the following standards:</p> <ul style="list-style-type: none"> - ANSI B11.3-2012 Safety Requirements for Power Press Brakes; - CSA Z142-10 (C2014) - Code for power press operation: Health, safety, and protection requirements. - CSA Z432-04 (R2014) – Protection of Machinery. - The transformer and electrical components must be certified by CSA. - The laser(s) installed on the press brake as well as their use must comply with these standards: ANSI Z136.1 – 2014 American Standard for Safe Use of Lasers and ANSI Z136.9 – 2013 American National Standard for Safe Use of Lasers in Manufacturing Environments. <p><i>(Note: While it is not necessary to include lasers on the machine, you are to do so. They must then be conform to the standards ANSI Z136.1 and ANSI Z136.9).</i></p>	
5	<p>The press brake and its components must have the following dimensions:</p> <ul style="list-style-type: none"> - Width: maximum of 148 inches <i>(required to accommodate the work space that is available)</i> - Depth: maximum of 77 inches - Height: maximum of 11 feet 	
6	The press brake must have a frame, housings (or uprights), a table, and a bolted ram to be able to replace the parts, or adjust the assembly.	
7	<p>The distance between the housings must be a minimum of 100 in. (2540 mm) to easily accommodate the use of 96 in. (2413 mm) of sheet metal.</p> <p>The bench length must be at least 120 in. (3048 mm).</p> <p>The throat must be a minimum of 19.6 in. (500 mm).</p>	
8	The table of the press brake must be able to accommodate a die along its total length.	
9	<p>The press brake must have a minimum three-point vertically guided ram and the two main cylinders must be able to move independently.</p> <p><i>(Note: We are asking a minimum of 3 points vertically guided ram with (4) rollers per side. This would be plenty to ensure a stable vertical movement of the ram)</i></p>	
10	The throat opening must be a minimum of 450 mm (17.7 in.) and a minimum ram stroke length of 300 mm (11.8 in.).	
11	The press brake must have cylinders whose rod and pistons are	

	<p>forged and tempered.</p> <p><i>(Note: The cylinders can be in cast, but the rod and pistons must be forged and tempered).</i></p>	
12	<p>The Supplier must ensure that the dimensions offered allow the bending of boxes (pan shaped) 10 in. (254 mm) high(variable thickness), taking into consideration the space already occupied by the anchoring system of the punch and the dies. Point 12 takes precedence over Point 11; if the dimensions proposed in Point 11 are insufficient, the Supplier must adapt the dimensions to respond to Point 12.</p> <p><i>(Note: We cannot provide a picture of the 10 in box since we never made one. The important point is that we want to ensure clearance to make a 10 in box with the machine).</i></p>	
13	<p>The press brake must be equipped with a dynamic, hydraulic bending compensation CNC (Crowning) numerical control system. The press must be able to compensate both in real time and automatically for the deflections of the punch and die.</p>	
14	<p>The press brake must be equipped with a system guaranteeing the parallelism of the frame. Linear guides with an accuracy of at least 0.0005 in. (0.0127 mm) must compensate for the bending of the frame.</p>	
15	<p>The press brake must be equipped with a quick, tool-free clamping system for the punches. The punches must be able to be inserted both vertically and laterally. A nominal space of 2 in. must be present between the clamping jaws of the punches. The jaws must also move laterally (a minimum lateral movement of 1 in. is required). The clamping system must be, at a minimum, compatible with American punches and <i>Wilson Tools</i> with and without notches. The clamping system must allow the use of gooseneck punches on both sides. The clamping system must not be pneumatic or hydraulic. We are looking for a manual clamping system. The Supplier must be able to provide a European clamping system in the event that 202 Workshop wishes to acquire this type of tool. Please note that we need a system of tightening which takes American and <i>Wilson tools</i> and which can also accommodate 'gooseneck punch'.</p> <p><i>(Note: The tooling we are using is from Wilson tools. The clamping system must be, at a minimum, compatible with American punches and Wilson Tools with and without notches. For more details, please refer to the Wilson tools catalogue).</i></p>	
16	<p>If present, the hydraulic system(s) must be equipped with a filter with a fineness of 3 microns.</p>	

17	<p>The press brake must be equipped with two support arms at the front of the press. The support arms must be able to move along the linear guides. The support arms must be able to be placed at the end of the press brake so as to not interfere with the operator during operations which do not require support arms. The support arms must be graduated in millimeters.</p> <p><i>(Note: We are requesting a full length linear rail to be able to easily slide the two arms).</i></p>	
18	<p>The press brake must be equipped with a lighting system at the front and the rear of the press brake.</p>	
19	<p>The press brake must be equipped with a movable rear stop over six axes (the axes include the movement of the fingers).</p> <p>(Clarification is provided for this statement: It means that since the two fingers mounted on the rear stop must move independently, each finger would move left, right, forward, and backwards individually, so making up the first 4 axes, which is x1, x2, y1, y2 . Considering that the two fingers are mounted on the rear stop which needs to be able to move forward backward, and up and down, the rear stop will have an over X and Z, therefore six axes).</p> <p>The stop must be equipped with two independently movable fingers. The travel on the stop on the X-axis must be a minimum of 1.2 m. The fingers must be able to position themselves automatically via the control console according to the distance required by the bending plan. Manual adjustment with micrometric precision of the stop by the operators must be possible using the control console. A system (mechanical or software) must prevent accidental collisions between the fingers and the die and/or the table. Note: the standard run is 800mm, but with the 3rd support, it is possible to lean on a distance of 1.2m and this is acceptable for this requirement.</p> <p><i>Note: the approximate back gauge requirements are:</i></p> <p><i>ΔX: 1200 mm (minimum)</i></p> <p><i>ΔY: 2540 mm (minimum)</i></p> <p><i>ΔZ: 500 mm</i></p>	
20	<p>The press brake must be equipped with an integrated control console, equipped with an LCD touch screen.</p>	
21	<p>The press brake's computer must permit importing .DXF, .STP or .IPT file formats. The computer must allow the operator to correct bending parameters. The computer must be compatible with all press brake correction systems (bending compensation, parallelism, etc.) as well as with all control devices (adjustable stops, hydraulic tightening, etc). A comptroller which allows to display in 3D or in 2D is acceptable.</p>	

Solicitation No. - N° de l'invitation
W1985-186796/B
Client Ref. No. - N° de réf. du client
W1985-186796

Amd. No. - N° de la modif.
03
File No. - N° du dossier
MTA 7-40229

Buyer ID - Id de l'acheteur
MTA309
CCC No./N° CCC - FMS No./N° VME

22	The repositioning accuracy of the stops and the ram must be at least 0.005 in. (repeatability).	
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- All other terms and conditions remain the same.