



Bharat Heavy Electricals Limited
Boiler Auxiliaries Plant
Ranipet - 632406, Tamilnadu (INDIA)

SPEC NO.: BHEL/ MTD&TE/ HYD PUNCHING
MACHINE/ 2020-21/ REV.0

NIT No.:

Date:

Specification cum Compliance Certificate for Portable Double Acting Hydraulic Punching Machine

Notes:-

1. The 'MAKE/ ORDER CODE Offered', 'OFFERED QTY' Columns and where applicable the 'Deviations' & 'Remarks' Column of this format shall be filled in by the Vendor and submitted along with the offer. Inadequate / incomplete, ambiguous or unsustainable information against any of the clauses of the specifications / requirements shall be treated as non-compliance.

2. The offer and all documents enclosed along with offer should be in English language only.

Name & Address of the Supplier :

Tele. No. :

Fax No. :

E-mail :

Scope: Design, Manufacture, Supply, Installation & Commissioning of Portable Double Acting Hydraulic Punching Machine with Hydraulic Pump, Spring Balancer and Hoist Stand with Movable Trolley complying with the following specification.

SL. NO.	DESCRIPTION: BHEL REQUIREMENT	BIDDER'S RESPONSE
1.0	PRE-QUALIFICATION CRITERIA :	
1.1	Only those bidders who have supplied atleast 1 No. of Portable Double Acting Hydraulic Punching Machine of Similar OR Higher Capacity OR Offered Model in last 5 Years (as on the initial date of opening of tender) are eligible to quote. (Reference PO copy as a proof must be submitted alongwith technical bid)	
1.2	Bidder should submit at least one Performance Certificate from any of their customer (especially from Heavy Engineering / Fabrication, Public/ Private sector companies) for satisfactory performance of Portable Double Acting Hydraulic Punching Machine of similar OR Higher Capacity OR Offered Model for a minimum period of one year from the date of commissioning (as on the initial date of opening of tender). For obtaining performance certificate, a suggestive format is enclosed as Annexure-A	
1.3	Only the original equipment manufacturer OR their authorized Agents / Distributors / Dealers are eligible to quote. Along with the offer, valid authorization certificate from the original equipment manufacturer should be submitted if the offer is submitted by an Agent / Distributor / Dealer.	
2.0	INFORMATION TO BE PROVIDED BY THE VENDOR	
2.1	Vendor shall provide their full contact details with Phone No. & Email ID including the address of his Agents / Service Centres (if any) in India.	
2.2	Number of Portable Double Acting Hydraulic Punching Machine in quoted model supplied & commissioned till date (as on the initial date of opening of tender).	
2.3	Details of Portable Double Acting Hydraulic Punching Machine supplied to any other BHEL units.	
2.4	Along with technical offer, Bidder has to furnish us few Customer Reference List including PO details, Qty, Make/ Model, Year of supply & commissioning and contact details to whom such machines/ equipment has been supplied.	
2.5	The technical offer shall be supported by Product Catalogue / Technical Data Sheet for the quoted item.	
3.0	TECHNICAL DETAILS:	
3.1	Type: Portable Double Acting Hydraulic Punching M/c along with Hydraulic Pump	1 No. Bidder to confirm.
3.2	Spring Balancer of suitable capacity :	1 No. Bidder to confirm & specify the capacity.
3.3	Hoist Stand with movable trolley : (Required to hold the Spring balancer with Hydraulic Puncher and Hydraulic Pump on the hoist stand for movement of complete assembly when the job is stationary)	1 No. Bidder to confirm.
3.4	Overall thickness of the material to be punch in multilayered plate form:	10 MM Bidder to confirm.
3.5	Details of material in multilayered plate form:	Upper Layer : Haste Alloy C276 / Thickness 2 MM Middle Layer : Mild Steel / Thickness 6 MM Bottom Layer : Haste Alloy C276 / Thickness 2 MM Bidder to confirm.
3.6	Max. Punching Thickness in quoted model:	-- Bidder to specify.
3.7	Required Size of Hole Diameter:	12 MM to 20 MM Bidder to confirm and specify the range.
3.8	Maximum Punching Diameter in quoted model:	-- Bidder to specify.
3.9	Maximum Throat Depth :	110 MM Bidder to confirm & specify.

3.10	Mode of Operation:	Automatic & Inching Type	Bidder to confirm.
3.11	Rated Capacity (Punching Power) in Tons:	Vendor to decide based on the required punching diameter and material to be punch.	Bidder to specify.
3.12	Max. Allowable Pressure :	--	Bidder to specify.
3.13	Punching Time :	Punching Time (sec.)	Bidder to specify.
		Returning Time (sec.)	Bidder to specify.
3.14	Ram Stroke :	--	Bidder to specify.
3.15	Accessories:	All required necessary accessories to operate the machine are to be supplied by the vendor. Some of them are listed below: - Punch & Die set of 12 MM hole size - 2 Sets - Sub Handle - Hose Cord Assembly - Pressure Hoses - Throat Adjuster - Tool Box, etc.	Bidder to confirm & specify the list of accessories provided alongwith the equipment.
3.16	Total weight of Hydraulic Puncher :		Bidder to specify.
3.17	Total connected load :		Bidder to specify.
4.0	HYDRAULIC PUMP		
4.1	Make / Model No. :		Bidder to specify.
4.2	Power Source :		Bidder to specify.
4.3	Motor Power :		Bidder to specify.
4.4	Max. Output Pressure :		Bidder to specify.
4.5	Pump Output (Ltr/Min) :		Bidder to specify.
4.6	Oil Capacity (in Ltrs) :		Bidder to specify.
4.7	First fill of Hydraulic Oil to be supplied by the vendor.		Bidder to confirm & specify the oil grade.
4.8	Total weight of Hydraulic Pump :		Bidder to specify.
5.0	ELECTRICAL SYSTEM		
5.1	415V $\pm$ 10%, 50HZ, 3 Phase AC (3 wire system with out neutral) power supply source will be provided by BHEL at a single point near the machine. All types of cables, connections, circuit breakers, etc. required for connecting BHEL's power supply point from isolator provided near the machine to panel and to different parts of the machine/control cabinets, shall be the responsibility of the vendor. Requirement of grounding /earthing with required material details is to be informed by vendor well in advance so that same could be incorporated during construction of foundation.		Bidder to confirm.
5.2	All cables & pressure hoses required for the machine should be included in the offer.		Bidder to confirm.
5.3	Vendor should ensure the proper earthing for the machine and its peripherals.		Bidder to confirm.
6.0	SAFETY ARRANGEMENT		
6.1	Machine should have adequate and reliable safety interlocks/devices to avoid damage to the machine, workpiece and the operator due to the malfunctioning or mistake. Alarm/ warning indications and Emergency Switch should be available. List of safety alarms / indications provided on machine should be submitted by the supplier.		Bidder to confirm.
6.2	All the pipes, cables, etc. on the machine should be well supported and protected. These should not create any hindrance to machine operator's movement for effective use of machine.		Bidder to confirm.
7.0	PRE-DISPATCH INSPECTION		
7.1	The equipment shall be offered for inspection & functional prove out test. This shall be witness by BHEL/ Third Party Agency at suppliers works for performance evaluation prior to despatch. Final acceptance will be given by BHEL after successful prove out test at BHEL works.		
8.0	INSTALLATION & COMMISSIONING		
8.1	Installation & Commissioning of all supplied machines to be included in bidder's scope of supply. Installation, Commissioning and Performance prove out of the offered equipment at BHEL works, by the supplier's representative. Transport, Boarding & Lodging charges for supplier's representative shall also be taken care by the vendor.		Bidder to confirm.
8.2	The supplier's Service Engineer shall give training in the Operation and Maintenance of the machine to BHEL Staff, during commissioning of the supplied machine.		Bidder to confirm.
8.3	Tools, Tackles, Instruments and other necessary equipments required to carry out installation & commissioning activities should be brought by the supplier.		Bidder to confirm.
8.4	Commissioning spares, required for commissioning of the machine within stipulated time, shall be brought by the supplier on returnable basis.		Bidder to confirm.
8.5	Schedule, Duration, Terms & Conditions for Erection and Commissioning shall be submitted with the offer.		Bidder to confirm.

8.6	Erection & Commissioning charges shall be quoted separately by the vendor along with offer.	Bidder to confirm.
9.0	SPARES	
9.1	Bidder to submit recommended O&M spares list (optional) with description and quantity of each item which are required for 2 years of trouble free operation of the supplied item <i>without price details</i> along with the technical offer. The same list shall be provided <i>with price details</i> along with the commercial offer. <i>The bidder will keep their spares price valid upto 2 years from the date of purchase order.</i>	Bidder to specify.
9.2	The bidder shall ensure continuous support for all types of spares and services required for total machine for atleast Five (05) years from the date of commissioning at BHEL works. If machine <u>OR</u> control is likely to become obsolete in this period, the vendor should inform BHEL sufficiently in advance and provide drawings of parts/details of spares & suppliers to enable BHEL to procure these in advance, if required.	Bidder to confirm.
10.0	O&M Manuals: 3 Sets (Hard Copy) and Soft Copy of Operation & Maintenance manual including all technical details and necessary relevant drawings shall be supplied along with the machine.	Bidder to confirm.
11.0	BHEL reserves the right to accept <u>OR</u> reject the BIDDER / VENDOR (OEM) offer based on the assessment of their technical capability. BHEL reserves the right to verify the information provided by the vendor for the referred machine at their referred customer's works. It shall be the responsibility of the vendor to facilitate the visit of BHEL's team at their referred customer works. The Travel, Board & Lodging expenses for BHEL Personnel shall be borne by BHEL. In case the information provided by vendor is found to be false/ incorrect, the offer shall be rejected.	Bidder to accept & confirm.

SUGGESTIVE FORMAT OF PERFORMANCE CERTIFICATE

The Performance certificate should be certified by the customer on Customer's Letter Head. and submitted along with the TECHNICAL OFFER positively.

(On Customer's letter head)

PERFORMANCE CERTIFICATE

1. Name of the machine supplier (OEM):
2. PO No. & Date :
3. Make & Model of the M/c :
4. Month & Year of Commissioning :
5. Quantity :
6. Machine Details
 - a) Type :
 - b) Capacity :
7. Application :
8. Performance of the Machine : Very Good/ Satisfactory / Not Satisfactory
(Strike off whichever is not applicable)
9. After sales service : Satisfactory / Not Satisfactory
(Strike off whichever is not applicable)
10. Any Other remarks :

Date:

Signature & Seal of the Authority
Issuing the Performance Certificate

Contact details of Issuing Authority

Name & Designation :

Contact No. :

Email ID :