



GOVERNMENT OF INDIA
BHABHA ATOMIC RESEARCH CENTRE

ATOMIC FUELS DIVISION

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Ref: AFD/SFDS/2019/OPA-153507

August 9th, 2019

Sub: Enquiry for fabrication and supply of 1 set of Hydraulic Bolt Tensioner

Dear Sir/Madam,

Sealed quotations are hereby invited on behalf of The President of India for fabrication, supply and installation of **ONE** set of **Hydraulic Bolt Tensioner** as per specifications and terms & conditions enclosed.

You are therefore requested to send your offer (by Registered or Speed Post only) for the same so as to reach the undersigned **ON or BEFORE September 13th, 2019**. Sealed envelope containing the quotation shall be super scribed with the tender no. and due date, and addressed to

ANIK DAS
SCIENTIFIC OFFICER,
ATOMIC FUELS DIVISION,
BHABHA ATOMIC RESEARCH CENTRE,
MUMBAI – 400 085.

Thanking you
Yours faithfully

(ANIK DAS)
Scientific Officer (D)
AFD, BARC

(PRASHANT KUMAR)
Scientific Officer (G)
AFD, BARC

Specifications for “Hydraulic Bolt Tensioner”

1. Scope of Work

Fabrication, Supply, Installation and Commissioning of Hydraulic Bolt Tensioner for existing setup located at BARC, Mumbai.

1.1. Quantity- 1 Set

1.2. Details of the system:

1.2.1. The Hydraulic Bolt Tensioner set shall be suitable for **Bolt size M52 X 355 mm, across flat size 80 mm on 6 inch class 2500 WN RTJ flange. Suppliers are required to visit the site and ensure the suitability of hydraulic bolt tensioner set for existing system.**

1.2.2. Hydraulic Bolt Tensioner shall consist of **Adaptor kit with load cell, Air operated pump and High pressure flexible hoses.**

1.2.3. **Two nos. of adaptor kits with load cell** shall be supplied for simultaneous tensioning of 2 bolts. Adaptor kit shall have the following specifications:

1.2.3.1. Kit shall be designed to operate up to maximum pressure of 1500 bar and shall be manufactured from high strength alloy steel parts.

1.2.3.2. Kit shall have safety systems such as piston stroke indicator, pressure relief valve etc.

1.2.3.3. Weight of each adaptor kit shall be less than 20 kg.

1.2.3.4. Kit shall be fitted with composite material seals for longer life and high reliability.

1.2.4. **One no. of Air operated hydraulic pump** shall be supplied. Pump shall have following specifications:

1.2.4.1. Maximum working pressure \geq 1500 bar

1.2.4.2. Calibrated output pressure gauge of rating \geq 2500 bar

1.2.4.3. Pressure ratio of 1:350 or better

1.2.4.4. Oil tank capacity \geq 5 litres

1.2.4.5. Maximum operating air pressure \geq 5 bar and safety valve set pressure \geq 5.5 bar. Pump shall have FRL unit, input air pressure gauge and control knob for controlled air supply.

1.2.4.6. Pump shall have quick connect outlet for easy connection with high pressure flexible hoses (mentioned in point 1.2.5).

1.2.4.7. Pump shall have stainless steel frame, compact with size less than 500 x 500 x 500 mm and weight less than 25 kg.

1.2.5. **Two nos. of High pressure flexible hoses** shall be supplied. Hoses shall have following specifications:

1.2.5.1. Maximum working pressure \geq 1500 bar

1.2.5.2. Length – 3 metres or more as per requirement of the setup

1.2.5.3. Burst pressure \geq 4500 bar

1.2.5.4. Hoses shall have 4-ply construction and quick connect couplings at both ends suitable for items mentioned at points 1.2.3 and 1.2.4.

1.2.6. Suitable manifolds, couplings, fittings and adaptors for high working pressures required for functioning of hydraulic bolt tensioner shall be supplied.

1.3. Installation & Commissioning: Installation and commissioning shall be carried out by the supplier at AFD, BARC.

1.4. Maintenance:

1.4.1. All the parts of the equipment should have easy accessibility for maintenance work, inspection and repair work.

1.4.2. Any special tools required for maintenance and repairs for the machine should be indicated and the same shall be offered along with the equipment.

1.4.3. Operation & Maintenance/Service manual shall be supplied.

1.4.4. The supplier shall provide training in operation and maintenance to our staff at our premises.

1.5. Acceptance: Supplier shall provide a demonstration of the hydraulic bolt tensioner at user's place after installation and commissioning of system. Bolt tensioner shall be accepted only after the satisfactory operation during demonstration.

1.6. The completion time shall be **3 (Three) Months** or earlier after placing the purchase order. The supplier shall give a minimum **warranty of 12 months** trouble free operation after commissioning at user site.

2. Quotation format

2.1. Quotations are invited **only from established vendors** who have earlier experience of fabrication & supply of '**Hydraulic Bolt Tensioner**'. Quotation shall include the list of the organizations in Department of Atomic Energy OR Mumbai OR India to whom the vendor has supplied '**Hydraulic Bolt Tensioner**' along with contact name, telephone nos. & email ID of person. In absence of such list, it will be assumed

that vendor has no prior experience of dealing in this type of system and his quotation will be rejected.

2.2. Visit of contractor or his representative to AFD / BARC, prior to submitting the quotation is compulsory. The contractor / contractor's representative should compulsorily visit BARC, to examine the existing system with prior intimation of at least 2 days to Anik Das, AFD, BARC, Mumbai – 400 085, Telephone - 022-25594844, email: anikdas@barc.gov.in. The visit will be approved only after verification of credentials of the visitor. The visit may be carried out on 30/08/2019, 03/09/2019 and 04/09/2019, 11.00 A.M. to 4.00 P.M. No visitor will be entertained before and after stipulated period. Quotation of contractor without site visit will be rejected.

2.3. Quotation shall be printed on letter head and mention Sales Tax Registration Number registered with local ST authority / CST authority, PAN Number of the firm, Service Tax Registration Number, the name of the signatory and bear company seal.

2.4. Only lump sum price must be quoted. Offer should be valid for a minimum period of 90 days.

2.5. The offer shall contain commercial details of the vendor as well as complete technical details of the system being offered.

3. Terms and condition of work

3.1. Installation of items may require multiple visits to BARC site. Supplier and their personnel must have valid Police Verification Certificate (PVC) to enter inside BARC premises.

3.2 After completion of work the contractor / supplier shall make arrangements for disposal of all scrap / garbage, redundant material and debris generated during the course of the work. Payment due shall not be made until the contractor / service provider clears the premises of the purchaser of all left over material.

3.3 Any delay in completion of order, which is attributed to supplier, will be liable for penalty @ 0.5% per week (max. 5%) to be imposed on supplier.

3.4 Income Tax @ 2%, surcharge and education cess on tax as applicable shall be deducted from your bill.

3.5 Payment shall be made after satisfactory completion of work and on receipt of the following documents:

3.5.1. Delivery challan in duplicate.

3.5.2. Bill in triplicate.

3.5.3. Advanced stamped receipt in favour of Accounts Officer, BARC, Trombay, Mumbai.

3.5.4. Electronic Clearing Service (ECS)

3.5.5. GST undertaking

3.5.6. Guarantee / warranty certificate

4. Confidentiality clause:-

No party shall disclose any information to any third party concerning the matters under this contract generally. In particular, any conformation identified as “Proprietary” in nature by the disclosing party shall be kept strictly confidentiality by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party. This clause shall apply to the sub-contractors, consultants, advisers or the employees engaged by a party with equal force.

1. “Restricted information” categories under Section 18 of the Atomic Energy Act 1962 and “Official Secrets” under Section 5 of the Official Secrets Act 1923.

2. Any contravention of the above-mentioned provisions by any contractor, sub-contractor, consultant adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation

3. Prohibition against use of BARC’s name without permission for publicity purposes.

4. The contractor of sub-contractor, consultant, adviser or the employees engaged by the contractor shall not use BARC’s name for any publicity purpose through any public media like Press, T.V. or Internet without the prior written approval of BARC.