CSIR-CENTRAL MECHANICAL ENGINEERING RESEARCH INSTITUTE MG AVENUE, DURGAPUR – 713 209 [WEST BENGAL

AMENDMENT TO CSIR-CMERI BIDDING DOCUMENTS AFTER PRE-BID CONFERENCE

| File Ref | Brief Description of the Item |
|--------------------------|---------------------------------|
| PUR/202/ADMAC/02/2016-17 | SUPPLY, INSTALLATION, TESTING & |
| | COMMISSIONING OF HYDRAULIC |
| | UNIVERSAL CYLINDRICAL GRINDING |
| | MACHINE - SEMI AUTOMATIC |

The following amendments have been made to the Technical Specifications

| Section | Specification detailed in CSIR-CMERI bidding | Amended Specification |
|---------|--|---|
| No. | document (Ref: PUR/202/ADMAC/02/2016-17) | (After Pre-Bid Conference) |
| 2.007 | Wheel Slide through Turcite-B/ equivalent/better lined V & Flat guide ways or Precision Ball screw and Nut arrangement or Hardened and precision ground feed screw. | Wheel Slide through Turcite-B/ equivalent/better lined V & Flat guide ways on Precision Ball screw and Nut arrangement or Hardened and precision ground feed screw. |
| 2.008 | Provision for backlash error adjustment. | Deleted |
| 3.011 | Grinding wheel size (OD x ID x Width): 500mm x203.2mm x80mm or 400mm x127mm x 40mm or equivalent | Grinding wheel size (OD): 400-500mm |
| 3.014 | Spindle motor power: Minimum 4kW | Spindle motor power: Minimum 3.7 kW (5 HP) |
| 3.020 | Table speed: speed infinitely variable 0.1-3 m/min or better range | Table speed: 0.1-3 m/min or better range |
| 3.022 | Minimum automatic travel: 2 mm | Automatic travel: ≥2 mm |
| 3.029 | Adapter Sleeve MT5/MT4/MT3 with nut for extraction | Adapter Sleeve MT5/MT4/MT3 with suitable extraction system |
| 3.032 | Hydraulic Actuation for Work head | Deleted |
| 3.033 | Spindle speed: variable 28-300 r.p.m or wider range | Spindle speed: variable 60-300 RPM or wider range |
| 3.059 | Dressing device with necessary tool holder and dressing tool (Multi grain diamond) for cylindrical, face dressing, dressing of internal grinding wheel, and taper / angular dressing and radius dressing. | Dressing device with necessary tool holder and dressing tool (Multi grain diamond/ industrial grade/ single point 5 carat diamond) for cylindrical, face dressing, dressing of internal grinding wheel, and taper / angular dressing and radius dressing. |
| 4.002 | Appropriate external grinding wheels for grinding of steel, stainless steel, aluminum alloy 2 nos. Each | Appropriate external grinding wheels for grinding of steel, stainless steel, aluminum alloy: 2 nos. Each (total six). |
| 4.003 | Appropriate internal grinding wheels for grinding of steel, stainless steel, aluminum alloy 2 nos. Each | Appropriate internal grinding wheels for grinding of steel, stainless steel, aluminum alloy: 2 nos. Each (total six) |

| 4.006 | Vibration damping bases. | Vibration damping bases/ pads. |
|--------|--|--|
| 4.007 | 3-jaw self centering chuck (dia.300) with external and internal clamping. | 3-jaw self centering chuck (Ø200 mm) with external and internal clamping. |
| 4.008 | Four jaw independent chuck dia. 300 mm. | Four jaw independent chuck Ø 200 mm |
| 5.001 | OEM will manufacture at least 01 no. standard test piece on the machine (which will be supplied to CMERI) and forward the inspection report, test piece to CSIR-CMERI along with M/C test Chart report. The cost involve in this will have to be borne by the OEM. | OEM will manufacture at least 01 no. standard test piece as per IS 2368 or ISO 2433 or equivalent standard within the capacity (maximum) of the machine, which will be supplied to CSIR-CMERI with the inspection report along with Machine test Chart report. |
| 6.001 | Installation, commissioning & proving of the machine to its desired capacity and complete satisfaction of the CSIR-CMERI will be done by the OEM's engineer. Commissioning work including acceptance test/component trial will be carried out by the OEM within one month from the date of completion of erection of machine at CSIR-CMERI. | Installation, commissioning & proving of the machine to its desired capacity and complete satisfaction of the CSIR-CMERI will be done by the OEM's engineer/ OEM certified factory trained engineer. Commissioning work including acceptance test/component trial will be carried out by the OEM within one month from the date of completion of erection of machine at CSIR-CMERI. |
| 6.002 | During commissioning at least 01 no. of standard test piece will be produced on the machine and test piece will be inspected for dimensional tolerance, accuracies, surface finish, straightness, perpendicularity, parallelism etc. and machine will be calibrated by using laser interferometer. All the toolings, work holding devices, laser interferometer & Standard Test pieces will be supplied by the CSIR-CMERI for machining different samples. | During commissioning at least 01 no. of standard test piece as per IS 2368 or ISO 2433 or equivalent standard within the capacity (maximum) will be produced on the machine and test piece will be inspected for dimensional tolerance, accuracies, surface finish, straightness, perpendicularity, parallelism etc. by CSIR-CMERI. Grinding wheel & Work Material will be supplied by CSIR-CMERI for grinding of different samples. |
| 7.001 | The OEM shall have to provide training exclusively for 6 to 7 working days in the field of programming, operation, maintenance, mechanical/hydraulic/electrical etc. to CSIR-CMERI personnel by OEM experts at CSIR-CMERI site during commissioning of the machine. | The OEM shall have to provide training exclusively for 6 to 7 working days in the field of programming, operation, maintenance (mechanical, hydraulic, electrical & electronics) etc. to CSIR-CMERI personnel by OEM's engineer/ OEM certified factory trained engineer at CSIR-CMERI site after commissioning of the machine. |
| 11.002 | The machine model being offered must be a standard latest model and in manufacturing line for not more than two years. The OEM must have at least 5 installation of the offered machine in India (Documentary evidence must be submitted). | The machine model being offered must be a standard latest model. The Date of dispatch should be within One Year from date of manufacturing. The OEM must have at least 5 installations of the offered system/configuration globally. (Documentary evidence must be submitted). |
| 12.001 | The basic machine cost should also include any optional items needed to comply the | There may be some items which may be optional for some OEM/ bidders but are essential to demonstrate |

| | above specifications, the charges for the pre- | the machine as per specification. The cost of those |
|--------|---|--|
| | dispatch inspection, installation & | items needs to be included in the basic machine cost. |
| | commissioning, training on site etc. | This basic machine cost along with the charges for |
| | | installation & commissioning, training on site etc shall |
| | | be considered in price bid evaluation. |
| | | |
| 12.002 | The prices of the optional items (as per | The prices of the optional items (as per section no. |
| | section no. 4.000, Essential accessories) to be | 10.000 Optional Accessories) to be mentioned |
| | mentioned separately. | separately but it will not be considered for price bid |
| | | comparison. |
| 12.008 | The accuracies & repeatability's must be in IS | Deleted |
| | 2368 or ISO 2433 standard or any other | |
| | suitable international standard. | |
| | | |

REVISED ESSENTIAL CRITERIA, AFTER INCORPORATION OF AMENDMENTS

| SI | Essential criteria: |
|-----|--|
| no. | |
| 01 | Length for external Grinding: Minimum 750 mm |
| 02 | External grinding diameter: ≥240 mm |
| | ≤ 8 mm |
| 03 | Internal grinding diameter: ≥120 mm |
| | ≤ 20 mm |
| 04 | Length for internal grinding: Minimum 150 mm |
| 05 | Maximum weight of job between centers : ≥100 kg |
| 06 | Maximum weight of job on chucking operation: ≥45 kg |
| 07 | Grinding wheel size (OD): 400-500 mm |
| 08 | Grinding wheel spindle motor power: Minimum 3.7 kW (5 HP) |
| 09 | Table stroke: minimum 850 mm |
| 10 | Internal grinding Spindle speed: Minimum 18000 rpm |
| 11 | Internal grinding motor Power: Minimum 1kW |
| 12 | The accuracies & repeat-abilities must be as per IS 2368 or ISO 2433 standard or any other |
| | equivalent standard. |
| 13 | The machine model being offered must be a standard latest model. |
| | The Date of dispatch should be within One Year from date of manufacturing. |
| | The OEM must have at least 5 installations of the offered system/configuration globally. |
| | (Documentary evidence must be submitted). |
| 14 | Comments like "yes", "agreed", "will be given at the time of supply", "confirmed" and "will be |
| | completed" are not acceptable where numerical values are required to be quoted. |

THE DEADLINE FOR SUBMISSION OF BIDS / DATE OF OPENING OF TECHNO-COMMERCIAL BIDS OF THE AFORESAID TENDER IS ALSO EXTENDED AS SHOWN BELOW :

| REVISED DEADLINE FOR SUBMISSION OF BIDS | 09 MARCH 2017 UPTO 2.30 PM IST |
|--|--------------------------------|
| REVISED DATE FOR OPENING OF TECHNOLOGICAL BIDS | 09 MARCH 2017 AT 3.00 PM IST |

THE BIDDING DOCUMENT OF THE ABOVE CSIR-CMERI TENDER IS AMENDED TO THE EXTENT INDICATED ABOVE. ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

THE ABOVE AMENDMENTS ALSO AMOUNT TO AMENDMENTS OF THE RELEVANT PROVISIONS OF THE BIDDING DOCUMENTS

STORES AND PURCHASE OFFICER