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

File Ref	Brief Description of the Item
PUR/205/ADMAC/06/2016-17	SUPPLY, INSTALLATION, TESTING &
	COMMISSIONING OF CNC CONTROLLED
	SURFACE GRINDING MACHINE ALONG
	WITH ACCESSORIES

The following amendments have been made to the Technical Specifications

Section	Specification detailed in CSIR-CMERI	Amended Specification
No.	bidding document ( Ref: PUR/205/ADMAC/06/2016-17)	(After Pre-Bid Conference)
4.002	Working surface of table (Grinding Area) (min.): 1000 x 500 mm	Working surface of table (Grinding Area): minimum 1000 x 500 mm
4.054	Spindle cone : Compatible with the above wheel dia. Section 4.25.02	Spindle cone : Compatible with the above wheel dia. Section 4.053
4.072	MANUAL PULSE GENRATOR (cordless hand wheel preferable): For manual movement and adjustment of slides handwheel must be provided with selectable amount of movement i.e. 0.001mm, 0.01mm, 0.1mm and 1mm per pulse.	MANUAL PULSE GENRATOR (for remote operation): For manual movement and adjustment of slides handwheel must be provided with selectable amount of movement i.e. 0.001mm, 0.01mm, 0.1mm and 1mm per pulse.
4.078	The accuracies & repeat-abilities must be in DIN 8632-1 standard, VDI/DGQ3441 or any other equivalent standard.	Geometrical accuracies of the machine as per IS 2743 or DIN 8632-1 standard or any other equivalent standard. Positional accuracy and repeatability of the machine as per VDI/DGQ 3441 or any other equivalent standard.
4.079	Positional accuracy (X,Y,Z axis) : 0.005 mm or better	Deleted
6.006	Three point dressing device : 1 No. (with diamond dresser 10 Nos.)	Three point dressing device : 1 No. (with 5 carat diamond dresser 10 Nos.)
6.013	Appropriate grinding wheels for grinding of steel, stainless steel, aluminum alloy 2 nos.	Appropriate grinding wheels for grinding of steel, stainless steel, aluminum alloy: 2 nos. each (total 6 wheels).
7.001	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 2743 or DIN 8632-1 or equivalent standard within the capacity (maximum) of the machine ,which will be supplied to CSIR-CMERI with the inspection report along with M/C test Chart report.
8.001	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.	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

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	Commissioning work including acceptance test/component trial will be carried out by	acceptance test/component trial will be carried out by the OEM within one month from the date of completion of
	the OEM within one month from the date	erection of machine at CSIR-CMERI.
	of completion of erection of machine at	
	CSIR-CMERI.	
8.002	During commissioning at least 01 no. of standard test piece will be produced on the machine and test piece will be inspected for dimensional telerance accuracies surface	During commissioning at least 01 no. of standard test piece as per IS 2743 or DIN 8632-1 or equivalent standard within the capacity (maximum) of the machine 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	dimensional tolerance, accuracies, surface finish, straightness, perpendicularity, parallelism etc. and machine will be calibrated by using laser interferometer by CSIR- CMERI. Grinding wheel & Work Material will be supplied by CSIR-CMERI for grinding of different samples.
	machining different samples.	
9.001	The OEM shall have to provide training exclusively for 6 to 7 working days in the field of programming, operation, maintenance,	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
	mechanical/hydraulic/electrical etc. to CSIR-CMERI personnel by OEM experts at	certified factory trained engineer at CSIR-CMERI site after commissioning of the machine.
	CSIR-CMERI site during commissioning of	
	the machine.	
13.003	The machine model being offered must be	The machine model being offered must be a standard latest
	a standard latest model and in	model.
	manufacturing line for not more than two years. The OEM must have at least 5	The Date of dispatch should be within One Year from date of manufacturing.
	installation of the offered machine in India	The OEM must have at least 5 installations of the offered
	(Documentary evidence must be submitted).	system/configuration globally. (Documentary evidence must be submitted).
14.001	The basic machine cost should also include	There may be some items which may be optional for some
	any optional items needed to comply the	
	above specifications, the charges for the pre-dispatch inspection, installation &	as per specification. The cost of those items needs to be included in the basic machine cost. This basic machine cost
	commissioning, training on site etc.	along with the charges for installation & commissioning, training on site etc shall be considered in price bid evaluation.
14.002	The prices of the optional items (as per section no. 6.000 Essential Accessories) to be mentioned separately.	The prices of the optional items (as per section no. 12.000 Optional Accessories) to be mentioned separately but it will not be considered for price bid comparison.
14.008	The accuracies & repeatability's must be in DIN 8632-1, VDI/DGQ 3441 standard (Germany) or any other suitable	Deleted
	international standard.	
14.009	Vendor should provide along with the offer	Vendor should provide along with the offer the Machine
	the Machine Test Chart of similar installed	Test Chart of similar installed machine for inspection of
	machine for inspection of Geometrical	Geometrical Accuracy, Positioning Accuracy, Repeatability
	Accuracy, Positioning Accuracy,	etc in accordance with IS 2743 or DIN 8632-1, VDI/DGQ
	Repeatability etc in accordance with DIN	3441 standard (Germany) .
	8632-1, VDI/DGQ 3441 standard (Germany)	

## **REVISED ESSENTIAL CRITERIA, AFTER INCORPORATION OF AMENDMENTS**

Sl.No.	ESSENTIAL CRITERIA		
01	Minimum Ground surface of job: length 1000 mm x width 500 mm x height 550 mm.		
02	Working surface of table (Grinding Area) : minimum 1000 x 500 mm		
03	Longitudinal (X axis) travel : Minimum 1100 mm		
04	Wheel head Vertical (Y axis) Travel: Minimum 600 mm		
05	Wheel head Cross (Z axis) travel : Minimum 550 mm.		
06	AC servo drive with high precision ball screw for vertical, cross and Horizontal slide movement.		
07	Rigid Cast iron base with one V and one flat precision ground guide way with Turcite-B coating/ equivalent /better for all the axis.		
08	Table speed (infinitely variable) : 1 mm/min - 25,000 mm/min or better		
09	Vertical feed rate range (infinitely variable) : 0-600 mm/ min or better		
10	Cross feed range (infinitely variable) : 0.5 mm/stroke - 25 mm/stroke or better		
11	X,Y,Z Axis Movement Feed Back through Rotary Encoder of resolution 0.5 to 1.0 μm.		
12	Spindle speed ( infinitely variable) : 1000 - 3000 rpm or better		
13	Spindle head drive Motor capacity: minimum 11 kW		
14	Geometrical accuracies of the machine as per IS 2743 or DIN 8632-1 standard or any other equivalent standard.		
	Positional accuracy and repeatability of the machine as per VDI/DGQ 3441 or any other equivalent standard.		
15	MANUAL PULSE GENRATOR (for remote operation): For manual movement and adjustment of slides handwheel must be provided with selectable amount of movement i.e. 0.001mm, 0.01mm, 0.1mm and 1mm per pulse.		
16	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).		
17	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 TECHNO COMMERCIAL 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