

CSIR – Central Mechanical Engineering Research Institute
Mahatma Gandhi Avenue, Durgapur – 713209

No. PUR/488/AMRG/RM/E/2023-24

Date: 21.08.2024

CORRIGENDUM

With reference to the Tender No. PUR/488/AMRG/RM/E/2023-24 published on CPP Portal vide Tender ID 2024_CMERI_204395_1 dated 09-Aug-2024 for procurement of 'Supply, Installation, Commissioning & Training of the Ytterbium fibre laser (Multimode)' the following Revised Specifications and allied Technical details with necessary addition/alterations has been made under Chapter 4 in the Tender Document after Pre-Bid Conference on 13.08.2024.

Revised Specifications and allied Technical details for Supply, Installation, Commissioning & Training of the Ytterbium fibre laser (Multimode)

1.	Maximum power output (kW)	2
2.	Power stability (%):	5 or better
3.	Wavelength (nm):	1070 ±10
4.	Power consumption (kW)	10 or less
5.	Operation mode:	Both continuous wave and modulated
6.	Single mode or multimode:	Multimode
7.	Polarisation:	Random
8.	Safety classification:	Class IV
9.	Beam Parameter Product (mm x mrad):	12 or less
10.	Cladding head assembly consisting of focussing head, lens assembly, powder delivery nozzle:	Yes, Weight of the cladding head including lens assembly and powder delivery nozzle should be less than 15 kg.
11.	Minimum spot diameter (mm):	1
12.	Pulse modulation frequency or pulse repetition rate (PRR) (Hz):	50 to 1000 (controllable at a step of 50 Hz or lower, i.e. pulse frequency should have provision to be set at uniformly spaced 20 or more number of levels)
13.	Duty cycle (pulse-on time/ total pulse duration, where total pulse duration = 1/PRR) (%):	10 to 100 (controllable at a step of 5 or less, i.e. duty cycle should have provision to be set at uniformly spaced 19 or more number of levels)
14.	Length of the output fibre cable (m):	15 or more
15.	Cooling arrangement:	Water cooled (suitable chiller has to be supplied and installed along with the laser provided)
16.	Low power pilot beam to track laser output position:	Yes
17.	Visual safety warning during operation of the laser source:	Yes
18.	Graphical user interface to command and monitor the commanded and delivered laser power and alarms and errors in the system:	Yes, Suitable peripheral like a computer with required configuration has to be provided. The laser system should be able to communicate (i.e. receive input from

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		and provide information to) with computer via Ethernet port.
19.	Power back up time (min)	20 or more
20.	Accessories:	Cables / connectors or any other item(s)/ accessories deemed necessary for assembling the laser system; 4 numbers of safety goggles for protection of eye from class IV laser radiation covering the wavelength of the laser.
21.	Input power supply:	50 Hz, Single phase, 200 - 240 V AC / 50 Hz, Three phase, 400-440 V AC
22.	Operating temperature (degree Cel.):	10 to 40
23.	Relative humidity during operation (%):	20 to 90
24.	Warranty:	1 year onsite comprehensive warranty of the entire system
25.	Installation:	In-person at CSIR-CMERI
26.	Training:	In-person, onsite comprehensive training on the operation and maintenance of the entire system to 4 persons

Additional mandatory documents:

1. Document (in letter head / letter pad of the supplier / OEM) mentioning the name, address and website of the original equipment manufacturer (OEM) of the laser source
2. Proof of registration of the original equipment manufacturer (OEM) of the laser source recognized by any national / state government
3. An undertaking from the OEM of the laser source to provide service and spare parts (on payment basis) in case of break down for a period of 10 years or more, starting from the date of expiry of the warranty period
4. Beam intensity distribution across the laser spot with due calibration certificate
5. Technical datasheet, Operation and Maintenance manual of the entire system including all of its components (both in soft (in docx /PDF) and hard copy format).

All prospective bidder may please refer the Revised Specifications and allied Technical details while submit their offers.

The Tender Document as referred in this corrigendum stands amended to the extent mentioned hereinabove.

Anand Bhatnagar
21.08.24

Stores & Purchase Officer