

सीएसआईआर - केन्द्रीय काँच एवं सिरामिक अनुसंधान संस्थान

196, राजा एस सी मल्लिक रोड, कोलकाता - 700 032, भारत

CSIR - CENTRAL GLASS & CERAMIC RESEARCH INSTITUTE



196, Raja S C Mullick Road, Kolkata - 700 032, India

CORRIGENDUM

REFERENCE NO.: - P/NC/63/MD/SO(SB)/OTE/22-23/3893

DATE: 04/11/2022

NAME OF EQUIPMENT: "SUPPLY, INSTALLATION, COMMISSIONING, DEMONSTRATION & TRAINING OF HIGH POWER UV LED TYPE DIGITAL LIGHT PROCESSING (DLP) BASED 3D PRINTER"

NOTE: The Bids must be submitted in the Central Public Procurement Portal (URL: https://etenders.gov.in/eprocure/app) only. Manual/Offline bids shall not be accepted under any circumstances. Bidders should guote in INR only.

CONSEQUENT TO THE PRE-BID MEETING HELD ON 28/10/2022, THE REVISED SPECIFICATION IS GIVEN BELOW:-

Name of the item: High power UV LED type Digital Light Processing (DLP) 3D printer

One 3D printer based on digital light processing (DLP) technology capable of making ceramic/glass parts using UV curable resins loaded with ceramics/glass powder.

Technical specifications:

- 1) Material Compatibility (Open system): The 3D printer should be compatible with third party photocurable polymer resins with and without ceramic/glass powder loading
- 2) Technical notes/documents demonstrating the capability of the machine to fabricate 3D printed ceramic parts must be supplied along with the bid.
- Light source: High-resolution DLP projector with LED light at 385 nm or 405 nm or 450-460 nm wavelength.
- 4) PIXEL SIZE (Resolution) X,Y: 55 µm or lower
- 5) Layer thickness should be user defined
- 6) Build dimensions (XYZ): Minimum 50 mm X 30 mm X 120 mm
- 7) Support at least any one file types: STL, SLC, STM
- 8) Computer interface with suitable software from the respective supplier to control the machine and process parameters. The software should have features such as model slicing, viewing, support creation, orientation selection, placement, etc.
- 9) Compatible external PC with Windows 11, 64bit, processor intel core i7 with 8GB memory or higher configurations, 19" LED Monitor, wireless keyboard and mouse.
- 10) Standard tool kit for regular operation of 3D printer along with initial start-up kits
- 11) The vendors should supply the following along with the main equipment:
 - a) One suitable post-printing UV curing setup/ oven, to accommodate the parts made in the above specified build dimensions, should be supplied with the main printer.
 - b) One suitable debinding furnace to remove the binder/ resin in the cured parts made using ceramic/glass powder loaded UV curable resins. The maximum operating temperature 1000°C with provision to remove evolved gases and control the atmosphere during debinding. The furnace should be programmable to suit different debinding cycles.
 - c) Build materials <u>shelf life must be clearly indicated</u> for all these materials: (i) Standard UV curable resin compatible with the machine (4 Liter) (ii) Resins loaded with Al₂O₃, ZrO₂, Hydroxyapatite, each 1 Liter.
- 12) Electrical Requirements: 220 VAC 50 HZ
- 13) Warranty for one year for main 3D printer, UV curing setup/ oven and debinding furnace.
- 14) Installation, training and demonstration of making 3D parts using supplied 3D printer, UV curing setup/ oven and debinding furnace at CSIR-CGCRI for 3 days for 4 people.
- 15) Site or facility requirement for the 3D printer, UV curing setup/ oven and debinding furnace should be clearly mentioned.

Deadline for Submission of Bid and Opening of Bid is remain unchanged as given in CGCRI Tender No. P/NC/63/MD/SO(SB)/OTE/22-23/3893 dated 14/10/2022 which is as follows:-

Bid Submission End Date & Time	19/11/2022 upto 11.30 AM(IST)	
Bid Opening Date & Time	21/11/2022 upto 3.30 PM(IST)	

The above amendments shall amount to amendments of the relevant terms of our Bid Document for CGCRI Tender No. P/NC/63/MD/SO(SB)/OTE/22-23/3893 dated 14/10/2022.

All other Tender terms and conditions remain unchanged.

Bidders should quote only in INR. Bidding is open to only Class I /Class II Local Bidders.

(A.K.Pandey)
Stores & Purchase Officer
FOR & ON BEHALF OF CSIR

June 04.11.2012
