



# INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

## MATERIALS MANAGEMENT DIVISION

Powai, Mumbai 400076

**For RFx No.6100000399 (PR No.10000014831)**

### **Technical Specifications of Laser Welding Machine**

#### A. Machine's Specification:

1. Fiber Laser Welding Machine 1000W, with IPG German Laser Source
2. XY axis Table - 600 mm x 400 mm moment, with manual Z axis adjustment
3. Online UPS 30 KV
4. Wavelength 1070+/-5 nm
5. Welding head : Gun type fixed on Z column, should also be possible to use as handheld gun as and when needed
6. Adjustable Power rate: 5 to 100%
7. Pulse repetition rate 50Hz-5000Hz
8. Beam quality 1.1
9. Electric Power supply: 220V50Hz/ 420V50Hz
10. Consumable Part: Protection lens, focusing lens nozzle
11. Fiber length: 10 meter
12. Cooling type: In-build Water Chiller along with machine

#### B. Chiller

1. Laser cooling: Chilled water temperature 18-25 degree centigrade
2. Cooling capacity: 6kW min
3. On loop chiller with water tank included
4. Water inlet: 20 degree centigrade-5bar
5. Supply: 25 Lit /min

#### C. Other conditions:

1. Warranty 3 Years for laser min 1 year for machine