

# Technical Specification Sheet

## 1. Laser Welding Machine

1. Specifications:
  - a. Cylindrical/Prismatic/Pouch cell welding capabilities.
  - b. Battery Pack welding capabilities
  - c. Bus Bar welding on each cell and group of cells
  - d. Dissimilar metal welding like copper, Nickel, Mild Steel, Aluminium
  - e. Welding Head
  - f. Position measurement
  - g. Focus measurement
  - h. Laser process control
  - i. Crosshair
  - j. Digital vision screen
  - k. Inline vision system
  - l. Weld monitoring
  - m. Laser 3000W - 1080nm
  - n. Chiller
  - o. Fume Suction
  - p. Back reflection isolator >80%
  - q. Adjustable job size Maximum up to 1000 × 500 × 500 mm
  - r. Reproducibility of the axis system within +/- 5 µm
  - s. Common Fixtures upto 5 based upon mutual discussion of job size
  - t. Welds with a low thermal influence Zone
  - u. CE Laser Class I
  
2. Quality and Inspection Criteria
  - a. Spectral width measurement during inspection
  - b. M<sup>2</sup> measurement during inspection
  - c. laser Interferometer report
  - d. Welding Test reports
  - e. Vibration test
  - f. ISO 15609-4 compliant
  - g. Endurance sinusoid with frequency sweep at different frequencies
  - h. Pre-Inspection for agreed weldment of cells and Packs and other mentioned functionality in the specification will be done during the technical evaluation process.
  - i. Life expectancy- 15 yrs
  - j. 1 Years Warranty and one year extended warranty to be quoted.
  - k. Machine Uptime >98%
  - l. AMC after warranty period to be quoted during bidding process separately. (It is mandatory for the vendor to quote for AMC).
  
3. No. of units to be purchased: 1 (One)