



**SPECIFICATION
FOR
LED BASED UV LIGHT**

No: CFF/SFQC-07

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1.0. OBJECTIVE :

This technical specification covers the supply of chargeable LED based UV light with accessories for MP testing of steel castings and forgings.

2.0. TECHNICAL REQUIREMENTS:

- 2.1 The equipment should be capable to generate LED based Ultra Violet light of wave length 365 ± 10 nm .
- 2.2 The equipment should be capable to generate LED based Ultra Violet light of intensity of $5000 \mu\text{W}/\text{cm}^2$ at a distance of 15" from the kit . Numbers of LEDs are to be mentioned. Required intensity should come with 20 seconds after switching on .
- 2.3 The equipment should not use any filter .
- 2.4 The equipment should be light and easily portable.
- 2.5 It should work with rechargeable battery for portable use. It should also have provision to work with 220 V single phase AC supply. One set of rechargeable battery kit is to be provided with equipment.
- 2.6 The cord length from LED UV unit to power supply should be min 20 meters.
- 2.7 The LED based UV assembly should be capable to sustain high temperature .It should be capable to work for eight hours continuously. The temperature of unit should not exceed by 25°C .

3.0: GENERAL REQUIREMENTS:

- 3.1 Instrument shall be guaranteed for minimum one year after supply for trouble free service.
- 3.2 The equipment shall be tropicalized for operating temperatures from 4°C to 50°C , Humidity 20-95 % (RH) & dusty atmosphere.
- 3.3 Instrument shall be as per applicable national standard.
- 3.4 Supplier shall demonstrate the satisfactory performance of the equipment.
- 3.5 Supplier shall provide three sets of operation and maintenance manual .
- 3.6 Training to be provided to BHEL personnel for operating & maintaining the equipment.

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