

ISO 9001:2015	Document No. RDSO/M&C/NDT/107/2007, (Rev-2), July 2020	Version No. 1.0	Effective Date:
Specification for Ultraviolet Lamp			



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RDSO/M&C/NDT/107/2007, (Rev-2), July 2020

SPECIFICATION FOR ULTRAVIOLET LAMP

Amendment History:

S. No.	Amendment date	Version	Reasons for Amendment
1.	1991	NA	First issue specification No . M&C/NDT/6/91 APPD.
2.	March 2007	NA	First revision of specification No . RDSO/M&C/NDT/107/2007, Rev-I, March 2007.(Specification renumbered)
3.	September 2012	NA	Reaffirmed
4.07.2020	1.0	The Specification should be generic & preferably reference to National Standard. (Reference: PED/QA (Mech)'s note no. QAM/Spl. DG/Misc., dtd. 15.06.2020).

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1. SCOPE:

This specification covers the requirements of ultraviolet lamp used during fluorescent dye penetrant or magnetic particle examination.

2. GENERAL:

The ultraviolet lamp shall be light weight, powerful, durable and of tough construction. It shall consist of

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a hand held lamp with bulb and separate control unit with suitable inter-connecting cables.

3. UV CHARACTERISTICS

The lamp shall be provided with a high quality interference glass filters (woods glass or kopp filter) allowing only radiation in the range of wave length 330-390 nm.

4. U V INTENSITY:

The intensity of UV emission shall be 4000 $\mu\text{W}/\text{cm}^2$ at a distance of 38 cm. from the filter surface.

5. LAMP:

A 100 W Mercury vapour spot lamp shall be used for the light source and working life of this bulb shall not be less than 2000 hrs.

6. WHITE LIGHT EMISSION:

The unit shall not emit white light of more than 2 ft. candle intensity.

7. POWER SOURCE:

The unit shall be suitable for operation at 220 V, 50 Hz single phase power supply.

8. WEIGHT:

The unit shall be of light weight construction and shall not weigh over 1.5 Kgs. The housing can be of light weight, heat resistant, high strength material such as Aluminium.

9. SPARES AND ACCESSORIES:

Spare and accessories for 2 years trouble free operation shall be provided along-with the unit.

NOTE : "Firm should comply Make in India policy and Public Procurement (Preference to Make in India) order - 2017 under this specification" and subsequent amendment done time to time.

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