

Specification for Portable UV Dryer (Material Code: 10018)

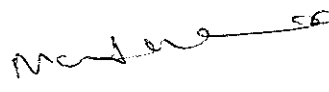
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The portable UV Dryer for curing the polymer of coated PV Modules.

1. The portable Ultra Violet drying system will be movable type
2. Movement length of the dryer: Variable settings- max 200 cm length
3. Dryer chamber size: Length 101-104 cm & width 22-38 cm
4. Total area to be cured: Length- max 200 cm of Width – max 100 cm
5. UV curing Lamps: Intensity of lamps should be uniformly distributed inside the enclosure
6. Lamp Arc length: Lamp arc should cover the total width of the PV module.
7. Total UV lamp power: 8000 - 9000 watts; 220V 1 Φ / 440V 3 Φ AC.
8. Lamp Intensity Variability: 25%, 50 %, 75% & 100% (each lamp Independently, if more than one lamp is there)
9. Variable speed controlling UV dryer: 0 – 5 m/min (with 0.1 step of variation) with indication
10. Dryer should have movement control with remote operation facility with maximum 10m distance
11. Material of construction of UV Dryer: Should be compatible with UV light and have low weight
12. Control Panel should be a movable unit with digital display
13. Blower/ exhaust for heat extraction to maintain ambient temperature inside the dryer (with temperature indication).
14. Safety Features should be incorporated such as
 - a) All the joints should be completely sealed. There should be no leakage of UV radiation outside the Reflector Box in dark room condition.
 - b) Emergency stop should be provided
15. One set of UV lamp(s) totaling to 8kW should be offered, as spares.
16. A warranty of 1 year (min) for the system and 1500 hrs for UV lamp(s).
17. Working demo at CTI laboratory to CTI/ BHEL personnel.

[Note: The PV module will be placed in open atmosphere. Therefore the UV dryer should be an all-weather sustainable unit.]


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