

Technical Specification - SPIN RINSE DRYER

Sl.No	Item	Description	Compliance	Remarks
1	Cabinet	Laminar flow, Bench top	Yes/No	
2	Cabinet make	Standard polypropylene	Yes/No	
3	FM 4910 Compliant	Mandatory	Yes/No	
4	Chamber make	Electro polished 316 Stainless Steel	Yes/No	
5	Chamber rotation	On-axis rotation	Yes/No	
6	Door	Automatic door lock	Yes/No	
7	Viewing window	Large viewing window	Yes/No	
8	Door seal	Nitrogen inflatable seal	Yes/No	
9	Bowel size	Suitable (150 mm x 150 mm x 0.7 mm) square glass substrates	Yes/No	
10	Nozzles	9 uniform nozzle sprays	Yes/No	
11	Motor	Brushless motor with high resolution encoder	Yes/No	
12	Motor speed	Quick ramp with stable precision spin speed 0 to 2800 RPM	Yes/No	
13	Motor seal	Gas flow seal - less maintenance, elimination of O-rings	Yes/No	
14	Rotor	Single bolt quick disconnect, One cassette carrier for substrates up to 200mm with low profile cassette	Yes/No	Customer advise cassette type and standardization of rotor accordingly
15	Vibration control	Vibration isolation - Improved vibration isolation	Yes/No	
16	Rinse technology	Enhanced resistivity monitor to determine completion of rinse	Yes/No	
17	DI Water Recirculation	DI water recirculation to prevent bacterial growth	Yes/No	
18	DI Water resistivity	Resistivity Monitor Controller and Probe	Yes/No	
19	Auto Rinse Cycle	DI water auto rinse cleans bowl to prevent particle build up	Yes/No	
20	Nitrogen Regulation	N ₂ regulator prevents over pressure and allows precise amount of N ₂ . Prevents door seal and window damage.	Yes/No	

21	Nitrogen Monitoring	Pressure transducer monitors pressure.	Yes/No	
22	Nitrogen Heating	Temperature programmable and monitoring of N ₂ heater for efficient reduced particle glass substrate drying.	Yes/No	
23	Nitrogen purge saver	Mandatory during SRD in idle state	Yes/No	
24	Heating	Temperature programmable and monitoring of bowl blanket heater	Yes/No	Heater alarm and Over temperature protection are mandatory
25	Control system	B&R PLC, dual core multi touch graphical control system	Yes/No	
26	Software	Windows based Map system	Yes/No	
27	User interface	10.1" touch screen for easy programming of recipes and viewing of additional data	Yes/No	
28	Recipe editor	Graphical recipe editor allowing creation of unlimited easy-to-save recipes onscreen or remotely	Yes/No	
29	Password levels	Create multi-user level passwords that limit access privileges for different types of users	Yes/No	
31	Diagnostics and Data logging	Data collection and graphing of tool functions and components	Yes/No	
32	Certifications	CE, UL & SEMI standards safety guidelines	Yes/No	
33	EMO	Front and rear with protective guard	Yes/No	
34	Valves and Components	Industry standard parts	Yes/No	
35	Drawings, Manuals and user training	Necessary electrical drawings and manuals (Hard & soft copy) to be given after installation and acceptance of equipment. Training of the system should be given to the IIT Madras personnel	Yes/No	
36	Warranty	One year standard warranty	Yes/No	

37	Extended Warranty	Two years after standard warranty (Quote as Optional)	Yes/No	Needs to be quoted separately
38	Shipping terms	DAP at IIT Madras site	Yes/No	Needs to be quoted separately
39	Facility details	Detailed information regarding facilities should be provided	Yes/No	Including DI water, Nitrogen, Exhaust, Drain and Power consumption details
40	Installation, and Commissioning	Installation, complete interfacing of the system with its subsystems, and commissioning is to be carried out by the vendor's factory-trained engineers, followed by a demonstration of the system's performance at IIT Madras	Yes/No	

Important Notes:

1. The manufacturer must have a recognized quality management system certification such as ISO 9001 or equivalent.
2. The manufacturer must have a vast expertise in the area of substrate processing systems and must have a very good sales record of selling systems for semiconductor manufacturers, research institutes and universities.
3. The vendor should supply the hardware and software together.
4. Please provide complete drawing of the system along with utilities connection and range. We may reject the tender if a proper drawing is not provided OR if the outlay/design proposed is not found satisfactory.
5. Please provide photographs, drawings and technical specifications of the equipment.
6. Please provide at least 3 references of laboratories (in India/Abroad) where you have installed similar systems with full specification of the systems. We may reject the tender if we find the reference systems unsatisfactory.
7. Please provide details of after sales service. The supplier should have service centre or facility with complete infrastructure in India to handle major repair of the system. Critical spares should be available off the shelf in Indian offices. In case of a break down, maintenance


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 Project Co-ordinator
 विद्युत इंजीनियरिंग विभाग
 Department of Electrical Engineering
 भारतीय प्रौद्योगिकी संस्थान मद्रास
 INDIAN INSTITUTE OF TECHNOLOGY MADRAS
 चेन्नै / Chennai - 600 036 भारत / India

and replacement of parts should be possible at purchaser's site. We may reject the quote if the after-sales service details or feedback from previous purchasers are found unsatisfactory.

8. Please provide separate technical and financial bids in sealed envelopes.
9. Please mark tender number on top of the cover envelope.
10. Provide list of mandatory and optional spares along with wear & tear consumables list.



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