

INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

MATERIALS MANAGEMENT DIVISION

Powai, Mumbai - 400076

PR No. 1000034086

Rfx No. 6100001480

Technical Specifications for Spin Coater

Chamber specifications:

- 1. 9-10 inch internal diameter bowl-shaped process chamber
- 2. Capable of handling up to ~ 6 inch wafer or ~ 5 inch square substrate capability
- 3. Brushless motor featuring bi-directional rotation/agitation, high acceleration
- 4. Solid Natural Polypropylene housing with interlocking
- 5. Chemically-resistant lid with 0.5-1 inch center opening
- 6. Corrosion-proof configuration (no exposed metal therefore, no degradation using strong acids or bases)
- 7. Natural Polypropylene vacuum chuck for 50 mm through 150 mm substrates and fragment chuck adapter fits over above chuck for holding 10 50 mm pieces
- 8. Natural Polypropylene Drain Port and Nitrogen purge
- 9. Exhausted Drain Reservoir with 250 ml removable Polypropylene drain container
- 10. Safety door interlock (disallows rotation when door is open)
- 11. Safety door latch (requires deliberate action to open process chamber)
- 12. Safety door lock (prevents chamber opening while program is running)

Process and Program:

- 1. Digital Process Controller
- 2. Speed: 1 RPM to 12,000 RPM, NIST-traceable no repetitive calibration required
- 3. Control Time: 1 second to ~ 100 min in 0.1 second increments
- 4. Programs: $\sim 10-20$ preset program with ~ 50 step programs or manual mode.
- 5. Acceleration: approximately 10,000 RPM/sec or better with standard chuck (can be programmable in 1 RPM increments)
- 6. Bluetooth enabled for remote operation

Others:

- 1. Glovebox-ready configuration (should run inside N₂/Ar filled glove box)
- 2. Lifetime Process Support
- 3. Power: Standard Indian Wall Power compatible
- 4. 3-year system warranty