



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
MATERIALS MANAGEMENT DIVISION
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PR No. 1000042357

Rfx. No.6100001955

Technical specifications for the Add on components "ALD tool perovskite PV device stack fabrication tool" for existing glove box.

Sr. No	Item Description	Detailed Technical Specification	Technical Compliance (Yes / No)	Additional Information (if any)
1.	Add on components	<ul style="list-style-type: none">• ALD tool for Perovskite PV device stack fabrication tool :Temperature-controlled all aluminum chamber, up to 300 degree Celsius, with up to M-10 square sample holder- Heated chamber isolation valve for high exposure, high conformality processes-Dedicated process kit with optimized precursor flow path and all metal sealing upstream of sample-Precursor input:<ol style="list-style-type: none">1. Process Gas2. High Vapor pressure liquid oxidant (H₂O or H₂O₂)3. Solid or liquid metal sources-All sources include heated, integrated dose columns for precise and quantifiable precursor delivery4. Thermal ALD valves5. High temperature dose volume fill valves-Metal sealed, 200 sccm MFC for N₂ or Ar purge flow control-Fully automated temperature control system for bottles, dose volumes, precursor delivery manifold and chamber-Chamber heater control based on dual temperature probes for accuracy and as probe failure failsafe-16-bit 7" color touchscreen control and PLC operation- Proprietary software embedded in PLC with integrated process recipes- 12-month warranty (labor and non-consumable parts)- 36-month complete process development support and lifetime process development assistance		

		<p>* Conformal heating jacket with secondary elbow heater:</p> <ul style="list-style-type: none">- For operation to 150C <p>* Large chamber for ALD:</p> <ul style="list-style-type: none">-Design for large chamber, platen, door and supports for M-10 square substrates (182 x 182 mm).-Manufacture new parts from 304 SS and 6061 aluminums <p>Internal rails for transfer interface</p>		
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