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24th September, 2021

Corrigendum-I

For (PR No. 100021444) RfX No.6100000844

Dual Chamber Sputter System

Section-A		Online RfX Clause
Description	Previous Clause	Changed Clause
Bid submission End Date/Date & Time of submission	24.09.2021 at 13.00	08.10.2021 at 13.00
Bid Opening Date & Time	24.09.2021 at 15.00	08.10.2021 at 15.00

Section-B **Technical specifications**

Under	Mentioned Specification	Amend to
Point No. D)	Vacuum Pumps	Vacuum Pumps
1)	Two Pfeiffer Hi-Pace 700 l/s turbopump with delayed vent valves (One for each chamber)	Two Brooks CTI-8 straight cryopump with compressor, temperature sensor, all lines and cables.
2)	Two Edwards 6cfm rotary vane mechanical backing pumps	roughing / regenvolving for cryopumped systems
3)	Interconnecting plumbing and hardware	interconnecting plumbing and hardware
4)	All vacuum pumps must be controlled outside of the system software (via breaker) to ensure on/off unison, pump safety, and potential software issues do not prevent vacuum pump operation	Deleted
Point No. K)	Pressure Control	Pressure Control / Vacuum Valves

1)	Each deposition chamber must include OneVAT Series 64 automatic pressure control for turbopump isolation and throttling (8" CF size) (total of two VAT Series 64 valves).	VAT Series 64 closed loop, automatic pressure control / isolation gate valve. This full range throttle valve has 1000 positions between open and closed and interfaces with the Baratron via a PID controller. This controller also includes pressure and position presets and battery pack which closes valve within 3 seconds in the event of a power failure. (8" CF size)
2)	Automatic venting via turbo delayed vent valve on each chamber	Includes interlock for cryopump safety
3)	Manual vent valve on each chamber	Manual vent valve.
4)	Systems must be designed for downstream pressure control (upstream pressure control is not desirable) for maximizing turbo pump life, better gas flow resolution for reactive processing and less gas consumption.	Deleted
Point No. M)	Power Distribution system and pump control	Power Distribution / Pump Control
1)	System must take single phase, 30A, 208 VAC input voltage.	PD-30A rack mounted master power distribution box with:
2)	Include water and vacuum interlocks	Mains Power Breaker 220 VAC, 30 A, 1 phase input water cooling / vacuum interlock input interlocks enabled output connector
3)	Water and vacuum interlocks must be tied into Mains power to prevent operation of power supplies without interlocks being satisfied. This prevents users from operating power supplies without proper safety restrictions in place.	(2) interlocked 220 VAC receptacles (1) non-interlocked 220 VAC receptacle (2) non-interlocked 220 VAC receptacles for TMP and MP Integral TMP/MP on/off breaker (for main chamber vacuum pumps)
4)	Include breakers for vacuum pump control, allows single breaker to turn turbo and mechanical pump on/off. Ease of operation for pump safety.	PD-30S rack mounted slave power distribution box with:

5)	Power distribution system must be designed to power all required components from both chambers	Mains Power Breaker 220 VAC, 30 A, 1 phase input water cooling / vacuum interlock input interlocks enabled output connector (2) interlocked 220 VAC receptacles (1) non-interlocked 220 VAC receptacle (2) non-interlocked 220 VAC receptacles for TMP and MP Integral TMP/MP on/off breaker (for load-lock pumps)
Point No. O)	Guarantees	Essential Requirements
3)	Base Vacuum: Better than or equal to 9×10^{-9} Torr using cryo pumps.	Deposition Chamber Base Vacuum: better than or equal to 9.0×10^{-9} Torr with cryopump package

for *Debanjan*
Additional Registrar