



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

MATERIALS MANAGEMENT DIVISION

PR NO. 1000046945

RFx No. 6100002157

Technical specifications for Effusion Cell

Sr. No.	Description	Value / Range	Technical Compliance (YES / NO)	Additional Information (if any)
1	High Temperature Effusion Cell - 1 No.			
	High Temperature Effusion Cell mounting flange DN63CF (O.D. 4.5") free -standing W heating filament – cell price without crucible- Type C WRe 5%/26% thermocouple. Maximum temperature: 1700° C (1750°C) (depends on crucible and evaporation material) bakeable up to 300°C Max. electrical data: 1300W / 15A (1700°C) Dimensions under UHV: O.D. 55mm, length 266mm			
2	W crucible 35cc – 1 No.			
3	Integrated manual rotary shutter – 1 No.			
	Integrated manual rotary shutter For High temperature Effusion Cell Shutter rod Molybdenum Shutter plate Ta			
4	RPM_MD Rotary Pneumatic Shutter Module – 1 No.			
	RPM_MD Rotary Pneumatic Shutter Module for MD 16 rotary feedthrough without switching valve			
5	Bakeable cable set for effusion cell – 1 No.			
	Bakeable cable set for effusion cell up to 25A 6m TC type C extension line (bakeable 200°C) 6m power cable (bakeable 180°C) Connection to power supply: cable lug 8mm Connection to cell: 2-pin female connector (bakeable 200°C)			
6	DC-Power Supply 1450W and PID Controller – 1 No.			
	DC-Power Supply 1450W and PID Controller 0-80V 0-19A / 1450 W 19" 1HE, control 0-5V, manual current limit Input wide range 90-265V AC Built in serial interfaces RS232 & RS485 display for voltage and current Controller: PID controller with serial interface (RS232 or RS422) Eurotherm Frontplate for rack mounting of controller 19"/3HE-14TE with the controller			
7	Warranty: 1 year			