



# INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH TIRUPATI

## CLARIFICATION ON TENDER NUMBER: IISERT/PUR/0474/19

ITEM DESCRIPTION- SUPPLY, INSTALLATION AND COMMISSIONING OF THERMAL EVAPORATOR WITH TURBO PUMPS INTEGRATE TO BOTTOM OF THE GLOVE BOX

ANNEXURE -I

### TECHNICAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISERT/PUR/0474/19

DATE: 23/01/2020

Sr.No	Query/Clarification Sought	Clarification / Amendment
1.	<b>Chamber</b> Suggested to consider SS316 and requested to include thickness of the chamber and details of linear motion feed through  <b>Viewport</b> Requested to provide Viewport material and thickness	Based on the suggestions we have revised the specifications for required chamber material as either SS304 or SS316 and the required thickness is ~5 mm. Details of Linear Motion Drive Feedthrough (Z-Axis) Allowable leak amount $\leq 1.33 \times 10^{-11}$ (Pa · m <sup>3</sup> / sec) Allowable heating temperature $\leq 200$ (°C) Moving distance            50 (mm) to 100 (mm) Positioning scale            0.01 (mm) Drive shaft diameter $\varphi 8$ (mm) Connection flange size    ICF-70 FH  Material: Quartz glass, sapphire and lead glass. Thickness: 10 mm
2.	<b>Turbo molecular pumps</b> Suggested for high capacity with low RPM	We have revised the specification based on their request as either pumps of 650 L/sec with ~45000 rpm or pumps with 800 L/sec with ~32000 rpm and required ultimate pressure in both the cases is $5 \times 10^{-7}$ mbar



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3.	<b>Viton gate valve/Viton bonnet and Rotary vacuum pump</b> Asked to provide more details	In addition to the previous details, the gate valve should meet the following requirements: Mounting position: Any orientation, Leak rate: < 10 <sup>-9</sup> mbar l s <sup>-1</sup> , Maximum differential pressure on the valve plate: 1 bar / 750 Torr in either direction, Maximum differential pressure on the valve plate at opening: 20 mbar / 15 Torr, Metal sealed valves: OFHC  Required average life until first service is updated to 100000 closures from 40000 closures
4.	<b>Evaporation source holder</b> Provide details	In addition to the previous details, based on their request, we ask the suppliers to provide all the three K-cells in an equilateral triangle fashion assembled perfectly inside the ICF-152FH flange. The suppliers are requested to provide clear line drawing of the K-cell and heating coils while submitting the documents.
5	<b>Important Note:</b> Suppliers are requested to provide product number, make (for both local/imported) and clear line drawings and brochure of all the major items (mentioned as item headings from 1 to 6) in our previous document.	



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ANNEXURE -II

## COMMERCIAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISERT/PUR/0474/19

DATE : 23/01/2020

Sr.No	Query/Clarification Sought	Clarification / Amendment
1	In BOQ excel, please mention the feasibility for entering optional items pricing.	For Optional Item Pricing, Bidder may upload PDF file (Details Break of Price Schedule) which is available on CPPP.