



भारतीय प्रौद्योगिकी संस्थान इन्दौर  
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IIT Indore

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February 02, 2018

**Pre-bid queries and Responses for "Glove Box"**

The meeting for Pre-bid discussion and presentation was held at IIT-Indore on **02/02/2018 at 11.00 a.m.** The report of the meeting is as below. All prospective/willing bidders are requested to **take note of this report as part of the Tender document.**

Item : Glove Box	
<b>A.</b>	<b>Queries received from : M/s Elico Marketing Pvt. Ltd. Ghaziabad</b>
	<b>Queries</b>
	<b>Response / Remarks from IIT I</b>
<b>1</b>	<b>Technical Bid Part –II : 2 Polymer glove ports:</b> Provides standard 2 Anodized Aluminum Alloy Glove port O-ring Seal
	<b>Acceptable, if corrosion resistant comparable to polymer ports or better.</b>
<b>2</b>	<b>Technical Bid Part –II : Front panel should be of Polycarbonate material.</b> Provides Toughened GLASS Window at front which is more resistant to scratch and chemicals.
	<b>Acceptable.</b>
<b>3</b>	<b>Technical Bid Part –II : Glove box should be integrated with heat exchanger.</b> <b>Technical Bid Part –II Circulation rate more than 85m<sup>3</sup>/h:</b> Our standard supply is Highly efficient and compact Fuji blower, ~45m <sup>3</sup> /hr which is sufficient for efficient performance of the glove box without the need for water cooling & Heat Exchanger. Only need ~5-10min/hr running time to achieve <1ppm purity. There are several installations of our glove box in IITs and Govt. institutions working without heat exchanger.
	<b>A heat exchanger is required.</b>

4	<p><b>Technical Bid Part –II: Optional Re circulation chiller, Temperature range +5to +30°C (Setting range) Accuracy+/-1K, Cooling capacity: 1000W @ 30°C</b></p> <p><b>Technical Bid Part –II : Flow rate (cooling fluid) up to12l/min:</b></p> <p>Our standard supply is Highly efficient Fuji blower, ~45m<sup>3</sup>/hr which is sufficient for efficient performance of the glove box without the need for water cooling &amp; Heat Exchanger.Large blowers (flow rate 88 m<sup>3</sup>/h) generates more heat and needs heat exchanger or water cooling.</p> <p>Our patented sealing technology ensures very low leak rate and does not need continuous circulation. Only need ~5-10min/hr running time.</p> <p>Several installations of our glove box are working satisfactorily in IITs and Govt. institutions without circulator and chiller.</p>	Optional but highly desirable since western India becomes quite warm during the summers when ambient temperature goes above 40 °C.
5	<p><b>Technical Bid Part –II: Cylindrical Ante chamber, 390mmdiameter:</b></p> <p>Provides Cylindrical Ante chamber, 370 mm diameter as standard supply</p>	Acceptable
6	<p><b>Technical Bid Part –II: Automatic Blower speed reduction/ increase back to100%, based on O2 and H2O level:</b></p> <p>Provides PLC control Blower switch on and off depending on set values of O2 and H2O level inside Glove BOX.</p>	Automation required
7	<p><b>Technical Bid Part –II: Automated Switch off of Vacuum pump should be possible and Activation at a user Set Time.</b></p> <p>Vacuum pump is offered with single touch ON/OFF control through Siemens PLC and Vacuum pump ON/OFF Switch for permanent switch off</p>	Automation required
<p><b>Queries received from : M/s Jacomex India Private Limited, New Delhi</b></p>		
1	<p><b>Dimension:</b></p> <p>The depth you are asking is 775-800 mm while depth of our glove box is 725mm. The depth is 725mm in our glove box because with longer depth access to the wall of glove box is difficult. And also handling of samples/materials placed on top rack becomes difficult. Hence purposefully we kept the depth as 725mm for ease of access. Due to this there is no effect on performance of glove box. Hence we request you to consider our offer with 725mm depth.</p>	Acceptable.

2	<p><b>You have mentioned: Should have non oil based pressure relief valve:</b></p> <p>This is actually not a disadvantage but it is advantage. More and more manufacturers are shifting to this simple pressure relief valve. Due to this relief valve, the pressure regulation becomes independent of vacuum pump operation and usage of foot pedal is no longer needed. This increases lifetime of vacuum pump and operation of glove box become simple. We have supplied more than 100 glove boxes in India and everywhere it is working fine. There is no backflow at all as told by our competitor. We will provide satisfied user list of our glove box. Hence we request you to consider system with our technology.</p>	<p><b>No change. Can bid with deviation with proper justification.</b></p>
3	<p><b>Light:</b> You have asked for fluorescent light. We will provide LED light which is brighter, long life and energy saving.</p>	<p><b>Acceptable</b></p>
4.	<p><b>Analyzers:</b></p> <p>You have asked for Solid State Analyzers. We provide EC cell for O2 measurement and Cermic sensor for H2O measurement. In solvent atmosphere Zirconia based Solid State analyzers are not good and EC cell analyzers are most reliable technology available today. We will provide you supporting research and analysis based document from world's biggest analyzer making company GE. From this document and research analysis by GE everything will be clear. Every reputed glove box manufacturer or such analysis based equipments are using this new technology analyzers. Hence we request you to consider our offer for this point also.</p>	<p><b>No change. Can bid with deviation with proper justification.</b></p>

एस.पी.होता/S. P. HOITA  
उप कुलसचिव/Deputy Registrar (MM)  
आई.आई.टी., इन्दौर/IIT Indore

All prospective/willing bidders are requested to take note of this report as part of the Tender document. All other parts of the tender including the terms and conditions of the tender will remain Unchanged.

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