



**INDIAN INSTITUTE OF TECHNOLOGY BOMBAY**  
**MATERIALS MANAGEMENT DIVISION**  
**Powai, Mumbai 400076**

Ref. PR No-1000042965

RFx. No. 6100001915

Item Description: - **Add on components to existing cluster tool**

<b>Sr. No</b>	<b>Detailed Technical Specification</b>	<b>Technical Compliance (Yes / No)</b>	<b>Additional Information (if any)</b>
1	<ol style="list-style-type: none"> <li>1. Rectangular chamber with sliding door and a Maintenance door: Qty 01 No</li> <li>2. Rectangular Chamber made of SS consist of inner enclosure too which is temperature controlled. Temperature range at least -30°C (-40°C) ...80°C (Active cooling) : Qty 01 No</li> <li>3. "12 cm x 12cm" sample holder with up and down movement (up &amp; down 50 mm) and rotation (0-30 rpm) with required uniform deposition area of 10 cm x 10 cm (thickness uniformity: ±5 nm) : Qty 01 No</li> <li>4. Effusion cell with automated shutter with low temperature deposition capabilities (50°C - 600°C) : Qty 04 Nos</li> <li>5. Graphite Crucibles : Qty 06 Nos</li> <li>6. Water Chiller : Qty 01 No</li> <li>7. Thickness monitor with display (existing PC) (Thickness Resolution: 0.01A/s) : Qty 04 Nos</li> <li>8. Transfer arm to move sample to load lock : Qty 01 No</li> <li>9. Gauge with display : Qty 01 No</li> <li>10. Frame for mounting chamber : Qty 01 No</li> <li>11. Gas valves for purging : Qty 01 No</li> <li>12. Hi pace 300 with controller : Qty 01 No</li> <li>13. Roughing &amp; backing valve : Qty 01 No</li> <li>14. Electrical and water connections : Qty 01 No</li> <li>15. Controller for effusion cell : Qty 04 Nos</li> <li>16. Automated Effusion cell shutter : Qty 04 Nos</li> <li>17. Controller for sample holder rotation : Qty 01 No</li> <li>18. Controller for all shutter : Qty 01 No</li> <li>19. Hardware (spare) : Qty 01 No</li> <li>20. Automation of heating of material and feedthrough in thickness monitor (Rate controller) for 4 nos effusion cell : Qty 01 No</li> <li>21. Substrate heater upto 300°C : Qty 01 No</li> <li>22. SS sheet to separate all the sources (Shield) : Qty 01 No</li> <li>23. Loadlock provision to connect the chamber to a cluster tool with similar size substrate handling capabilities : Qty 01 No</li> </ol>		
2	One year of warranty required		