

Tender No. HLL/CRD/PUR/TENDER/2013-14/10

Sl No	Name of the Equipment	URS (User Requirement Specifications)	Qty Required
03	LN2 refrigerator	<p>Features</p> <ul style="list-style-type: none"> <li>• LN2 capacity, Litres: 30 – 40</li> <li>• Static hold time Days: 135</li> <li>• Evap rate, Litres/ day: 0.28</li> </ul> <p>Dimensions:</p> <ul style="list-style-type: none"> <li>• Necktube, mm: 127±10</li> <li>• Outside diameter, mm- 470±10</li> <li>• Height, mm: 698±10</li> <li>• Empty weight kg: 14-16 kg approx</li> <li>• Full weight, kg: 45-50 kg approx</li> </ul> <p>Canisters</p> <ul style="list-style-type: none"> <li>• Length, mm: 280 approx</li> <li>• Inside diameter, mm: 75</li> <li>• Number: 10</li> </ul> <p>Capacity</p> <ul style="list-style-type: none"> <li>• 0.5 cc Straws on canes: 3900 approx</li> <li>• 5cc straws bulk: 9700 approx</li> </ul> <p>Vial 1.2 ml/2.0ml: 1100</p>	1
09	<b>Table top Twin screw Microextruder with film line</b>	<ul style="list-style-type: none"> <li>➤ It should comply with GMP model</li> <li>➤ It should be Table top model</li> <li>➤ It should be useful for life science / Pharma application.</li> <li>➤ Should have a flexible barrel housing system, co-rotating detachable twin screws.</li> <li>➤ The barrel liners should be easily attached to the connectors of the extruder frame.</li> <li>➤ Parts that come in contact with the product (barrel liners and screws) should be made of stainless steel (DIN 1.4112).</li> <li>➤ Machine can be operated by the touch screen control panel</li> <li>➤ The outlet of the extruder should consist of a divisible, detachable cap with 2.4 mm die.</li> <li>➤ Total volume of extruder barrel: 5 cm<sup>3</sup></li> <li>➤ Digital RPM adjustment with a variable speed</li> </ul>	1

		<p>range from 1-250 rpm should be available.</p> <ul style="list-style-type: none"><li>➤ Maximum torque = 15 - 20 Nm per screw</li><li>➤ The machine should consist of force-sensing cell that measures the axial force.</li><li>➤ The machine should be protected against overload of axial force.</li><li>➤ Maximum force is 9.500 N.</li><li>➤ The connectors should be equipped with, 2 x 3 separately controlled heating zones with an adjustable temperature range.</li><li>➤ Operating temperature ambient to 400°C.</li><li>➤ The connectors should be equipped with air cooling channels.</li><li>➤ Manually operated water cooled top hopper should be available.</li><li>➤ One set of operating tools such as 1 barrel and screw set, 1 outlet die should be provided along with the equipment.</li><li>➤ Required Software for control &amp; operation of the system should be provided with the system. The system should also have the option of operating through a touch screen panel control system. The interface between the system and the PC should be through USB.</li><li>➤ Data-acquisition and computer-control software from which data concerning processing parameters can be acquired and displayed graphically should be provided.</li><li>➤ The equipment should be processed with manual operating, standard processing cycle and cleaning-cycle.</li><li>➤ Processing-parameters such as RPM, temperatures, processing time should be programmed retrieved from standard cycles.</li><li>➤ Film winding unit should be attached with Extruder.</li></ul> <p><b>GMP complaint 50 mm Cast film line with 0.4 mm die should be provided.</b></p>	
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26	<b>Digital Hot Plate</b>	<ul style="list-style-type: none"> <li>• Hotness indicator should be made available to prevent burn hot surface</li> <li>• Exact temperature setting via digital display (LED)</li> <li>• Hot plate platform should be 9 - 10" x 9 - 10" inch (Length x Breadth)</li> <li>• Timer automatically shuts off heating at the end</li> <li>• Ceramic top seamless, reflective white surface aids sample visibility</li> <li>• Temperature range: 50° to 500° C</li> <li>• Control accuracy with sensor <math>\pm 1</math> °C</li> <li>• Handling Capacity &lt; 20 lb</li> <li>• CE and/or ISO standard certificate are necessary.</li> <li>• Pre installations requirements must be specified</li> <li>• Supplier should have supplied systems in India.</li> <li>• Supplier should provide IQ/OQ of the instrument and all other relevant documents.</li> <li>• Original brochures, Original specification sheets from equipment manuals directly obtained from the principal manufacture of the quoted model must be enclosed along with supporting data. Printed manuals in English should be provided.</li> <li>• Compliance statement with proof for specifications of the system should be provided.</li> </ul>	