

Sl No.	Nomenclature & Drawing No.	Manufacturing Technology & Testing / Inspection Facilities Required to produce The Item	Must be possessed by the vendor in his premises(List of Plant and Machinery and testing/inspection facility to be submitted)	May be possessed by the Vendor in his premises or may be out sourced (Name and address of sub-contractor, list of Plant and Machinery and testing/inspection facility to be submitted)	Firm Compliance (Y/N)	Remarks
1	VENTILATION SYSTEM 172.87SP-3	Technology 1	DC Motor and electromagnet assy	Facility for: 1. Temperature controlled soldering. 2. Precision assy of stator and rotor of DC motor	Sources for(Tie-up/Outsource/MoU): 1. Bearing, 2. Wedges and insulations 3. Carbon brush, 4. Spring, 5. Varnish, 6. Wires as per specification 7. Connectors(LCSO approved) Facility for: 1. Winding machine(dia: 100mm) 2. Winding of Stator (Concentric Coils) and Armature (Distributed Coils) with insulation and slot wedge. 3. Winding of concentric coils for electromagnet 4. Varnishing and heating in oven	
		Technology 2	High speed blower assy	Facility for: 1. Precision assy table/surface table for rotor blades	Sources for(Tie-up/Outsource/MoU): 1. Springs 2. Gaskets and rubber items 3. Pressure gauge Facility for: 1. Laser cutting (sheet metal) or mechanical/servo press (100T) 2. Brazing	
		Technology 3	Metallic cover and branch pipes manufacturing	Facility for: 1. Gas shield welding/arc welding	Facility for: 1. Sand blasting 2. Sheet metal fabrication	
		Technology 4	Metal Machining and Metal forming technologies	Basic Metal Machining Facility of 1. Turning(dia: 300mm or more)	Metal forming facility of 1. Steel and Aluminium Casting 2. Heat treatment(Annealing, hardening) facility, 3. Electroplating facility (Zinc plating, Chromium plating,	

			<p>The vendor should have periodically calibrated instruments measuring:</p> <ol style="list-style-type: none"> <li>1. Stabilised DC power sources. 0-32V DC, 100A</li> <li>2. Measuring Instruments(Accuracy Class: 1.0 or better)             <ol style="list-style-type: none"> <li>a. Megger(insulation testing facility) 500V</li> <li>b. High Voltage Breakdown Test kit 0-1kV,</li> <li>c. Spring balance/force measurement equipment(using weights) (50kgf) for electromagnet effort measurement</li> </ol> </li> </ol> <p>Test facility for:</p> <ol style="list-style-type: none"> <li>1. Dynamic balancing of rotor(10000 RPM)</li> <li>2. Welding leak testing using air/kerosene(for cover)(pressure 0.05mpa)</li> <li>3. Pressure gauge testing (10bar)</li> </ol>	<p>Electrical and Mechanical Testing</p>	<p>Test/Inspection</p>	<p>( cadmium chromating, hot tinning, anodizing, phosphating, oxidizing, zinc chromating, chemical passivation)</p>		<p>Facility for or Tie-up/MoU for testing of:</p> <ol style="list-style-type: none"> <li>1. Material chemical composition(Impurities content)</li> <li>2. Rubber Components             <ul style="list-style-type: none"> <li>• Hardness</li> <li>• Rupture Strength and elongation after rupture.</li> <li>• Density</li> </ul> </li> <li>3. Testing of Mechanical Properties             <ul style="list-style-type: none"> <li>e.g.                 <ul style="list-style-type: none"> <li>• Tensile strength.</li> <li>• Hardness</li> <li>• elongation.</li> <li>• yield strength.</li> <li>• impact strength.</li> <li>• cupping test.</li> <li>• bend test,</li> <li>• compression and load test (for springs)</li> </ul> </li> </ul> </li> <li>4. Testing of electrical properties             <ul style="list-style-type: none"> <li>e.g.                 <ul style="list-style-type: none"> <li>• dielectric strength.</li> <li>• dissipation factor,</li> <li>• volume resistivity,</li> <li>• surface resistivity</li> </ul> </li> </ul> </li> <li>5. Environmental test:             <ol style="list-style-type: none"> <li>a. Vibration resistance tests</li> <li>b. Impact loading test</li> <li>c. High temperature tests</li> <li>d. Relative humidity tests</li> <li>e. Low temperature tests</li> <li>f. Dust test, mould growth test, tropical exposure test, rapid temperature cycling test as per specifications.</li> </ol> </li> </ol>			
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