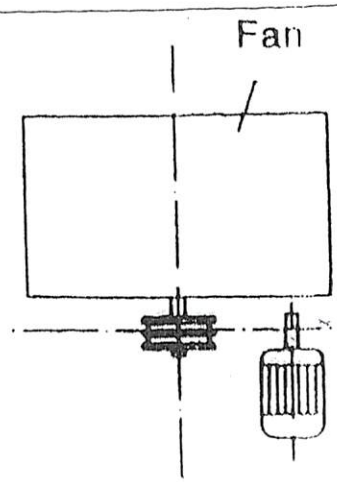
SR #	ITEM SPECIFICATON	QTY
1.	**Centrifugal Fans with Following Specifications:** **Fan:** Flow Rate: 100,000 CMH, Static Pressure: 10 in of WG, Construction Class: III as per ACMA, Gas Tightness Class: B Eurovent 1/10 **Motor:** Power Supply: 380-415V, 3Phase, 50Hz Motor Make: Siemens, ABB or Equivalent Insulation Class: H; IP Class: IP 55,Cooling Method: TEFC **Accessories:** Anti Vibration Mounts; Belt and Shaft Guards; Flanged Inlet and Outlet Flexible Joints; Variable Inlet Vane; Outlet Damper **Fan Configuration RD90 as per Eurovent 1/1** **Fan Configuration LG90 as per Eurovent 1/1** **Spares and other Details / Requirements as per page-3~6**	 **02** **01**

Centrifugal Fans

Centrifugal Fans will meet following technical specifications in addition to the requirements mentioned on page-2/6

Item No	Description	QTY (Nos)
1.	**Centrifugal Fans Complete with Motor, Accessories and Spares with Following Specifications:**	
	Fan Configuration *RD90* as per Eurovent 1/1	02
	Fan Configuration *LG90* as per Eurovent 1/1	01
	Fan:- • Type: Centrifugal • Power Transmission: Belt Driven • Flow Rate: 100,000 CMH • Static Pressure: 10 in of WG • Inlet: Single • Construction Material: Wet Parts, SS; Other Parts: Carbon Steel Epoxy Painted • Fan Class: III as per ACMA • Maximum Temperature: 100° C • Ambient Temperature: -20° C to 50° C • Altitude: 450 meters • Medium: Dust Filtered Air at Ambient Condition	
	Motor: • Power Supply: 380-415V, 3Phase, 50Hz • Motor Make: Siemens, ABB or Equivalent • Insulation Class: H • Protection Class: IP 55 • Cooling Method: TEFC	
	Fan Configuration:- For Fan-A and Fan-B: RD90 arrangement as per Eurovent 1/1 or Clockwise rotation when seen from the side opposite to the inlet (Driver/Motor Side), with outlet at 90° to the vertical axis. Both fan and motor arrangement are shown below:-	



View from Top For Motor of Fan-C

Gas Tightness Requirements:

- The fan will be gas tight and the gas tightness shall conform to the Class B of Eurovent "Guidelines for Gas Tight Fans", 1-10, 2005
- Continuous welding on casing with liquid penetrant testing.
- Shaft seal shall be achieved with at least 2 floating bush rings.

Balancing Requirements:

- The rotating assembly (i.e Impeller, Shaft and Pulley) shall be balanced both statically and dynamically.
- Balancing shall conform to VDI 2060 or any equivalent industrial balancing standard. The standard and grade used for balancing must be mentioned on the quote.

Vibration and Noise Limits:

- Vibration at the bearings should be less than 4.5 mm/sec.
- The vibration characteristics shall conform to the VDI 2056 or equivalent industrial vibration standard.
- Noise level at or below 90 dB(A), at a distance of 1.5 m, measured in accordance with AMCA 300/301 or equivalent industrial standard.

Accessories:

- Provision of Inspection Door with gaskets, ensuring leak tightness
- Anti-vibration Mounts
- Belt and Shaft Guards
- Flanged Inlet and Outlet, alongwith Flexible Joints
- Variable Inlet Vane
- Outlet Damper

Spares:

- Motor: 01 No
- Shaft: 01 No
- Impeller: 01 No
- Belts: 03 Sets
- Bearings: 01 Complete Set
- Seals: 01 Complete Set

Additional Requirements:

- The Fan must be factory assembled and tested.
- The supply must include all the necessary documents regarding Fan operation and installation i.e. Operation and Maintenance Manuals; Installation Manuals, Characteristic Curves etc
- 3rd Party Certificates for fan balancing, vibration measurements and noise levels shall be provided.
- The overall length and width of the fan must be kept as less as possible and the dimensions alongwith drawings must accompany the quote.
- Fan motor wattage must be mentioned in the quote in addition to other technical specifications.

Note

- Spare list is for all 03 No of fans and not to be mistaken for each fan.