

RAIL COACH FACTORY, KAPURTHALA
SPECIFICATIONS FOR OXYGEN GENERATOR
Specification No. Mech/M&P/3600/GM/01/Rev.01

1. DESCRIPTION AND SCOPE OF SUPPLY:

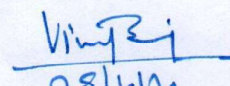
The specification covers supply, installation commissioning and proving out of Oxygen Generator (medical grade) 90-92% purity 5 Cubic meter/hr at 3-4 Bar. The supply shall include all concomitant accessories/equipment which the manufacturer considers essential to make the machine fully operational when installed at Rail Coach Factory Kapurthala Punjab.

2. Leading Parameters:

i.	Technology	PSA Technology air cooled
ii.	Purity-	90~92 % V/V
iii.	Grade	Standard Industrial / Medical (Sterilized Gas from bacteria & Pathogens).
iv.	Hydrocarbon Content-	Less than 1 PPB as per WHO standards
v.	Capacity-	5 Nm3/hr at 3-4 Bar
vi.	Power consumed-	1.2 KWH per Nm3 of Oxygen Produced under normal conditions.
vii.	Air Compressor Capacity-	10 bar (CFM range: 45-60) Make: Atlas copco / Caterpillar/kesar/CP
viii.	Operating Pressure-	7 Bar
ix.	Startup-	15-20 Minutes depends on site conditions.
x.	Power-	415V 3 Phase 50 Hz
xi.	Max Individual Item Weight-	1 Tons
xii.	Total Weight- ~	4-5 Tons
xiii.	MOC	Mild Steel, Stainless Steel, Brass
xiv.	NOISE LEVEL –	less than 70db at 1 meter distance
xv.	With auto on/off feature, Operations can be done by any Smartphone, Purity interlock, high pressure & temperature safety interlocks etc.	

(Wherever range given above, better range is acceptable)

(DYCPE-I)


 28/4/24
 मुख्य संयंत्र इंजीनियर
 Chief Plant Engineer
 रेल डिब्बा कारखाना, कपूरथला
 Rail Coach Factory, Kapurthala

Page 1 of 2

3.0 Main components/assemblies.

- 1) Air Compressor
- 2) Air Filtration
- 3) Air Drying
- 4) Air Buffer Tank for pneumatic operated automatic valves
- 5) Trace Oil Particle Filter
- 6) Air Buffer for Automatic valve
- 7A) Absorbing Tower A
- 7B) Absorbing Tower B
- 8) Flue Gas Vent Silencer
- 9) Oxygen Surge/Buffer tank
- 10) Oxygen Storage Tank

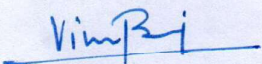
Note:-

- i. The machine should be capable of operating in severe workshop conditions of dust temperature between 0 degree C to 50 degree C and for relative humidity of up to 95% (non-condensing).
- ii. The equipment shall incorporate safety devices for protection of the operator under normal operating conditions.

4.0 Terms & conditions

- i. The supplier or his agent shall carry out a joint check at the consignee's end along with the consignee before unpacking of machine. After joint inspection, the successful tenderer shall arrange installation, commissioning and prove out of machine within 02 days from the date of receipt of equipment at RCF, Kapurthala.
- ii. Representative of the manufacturer/Supplier, during commissioning of machine, shall train operators/maintenance staff nominated by the consignee.
- iii. The successful tenderer shall provide a catalogue showing features of the machine and its parts.
- iv. The warranty of the machine will be as per IRS conditions of contract.
- v. Other terms & condition of the contract will be as per Indian Railway Standard conditions of contract.
- vi. The Purchaser may accept internationally accepted alternative specifications which ensure equal or higher quality than the specifications mentioned in the Technical Specification.
- vii) **Delivery period shall be within 25 days of placement of purchase order.**
- viii) The supplier shall provide complete layout of plant alongwith offer.
- ix) List of general spares and consumables with frequency of replacement for maintenance shall be provided with offer.
- x) Maintenance and user manual shall be provided with the supply of product.

(DYCPE-I)


28/4/2020 CPE
मुख्य सचिव इंजीनियर
Chief Plant Engineer
रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory, Kapurthala
Page 12 of 2