

I : Ventilation Machinery

II FANS AND BLOWERS

II (1) Mine Ventilation Fans

1. Manufacturer/Supplier : M/s Voltas Limited,
Mining & Construction Equipment Division,
19, J. N. Heredia Marg, Ballard Estate,
Mumbai - 400 038.

Axial flow adjustable aerofoil type

		(i)	(ii)	(iii)
Model		Volfan 480	Volfan 560	Volfan 655
Cap	cu m/hr	9000 to 14400	14400 to 21600	10800 to 18000
Fan dia	mm	480	560	655
PR	cm wg	4.5 to 1	3 to 0.5	2.2 to 0.4
Max motor power				
Single stage	HP	3	7.5	15
		(iv)	(v)	(vi)
Model		Volfan 900	Volfan 1200	Volfan 1600
Cap	cu m/hr	10800 to 54000	18000 to 136800	36000 to 208800
Fan dia	mm	900	1200	1600
Max motor power				
Single stage	HP	15	50	60
PR	cm wg	5 to 0.5	9 to 1	7.2 to 1.5
		(vii)	(viii)	(ix)
Model		Volfan 2000	Volfan 3000	Volfan 2400 H
Cap	cu m/hr	126000 to 306000	216000 to 900000	183600 to 892800
Fan dia	mm	2000	3000	2435
Max motor power				
Single stage	HP	150	450	1100
PR	cm wg	11 to 4	12 to 5	28 to 2.5

II (2) Auxiliary Fans

1. Manufacturer/Supplier : M/s General Electric Co. of India Ltd.,
"Magnet House", 6, Chittaranjan Avenue,
Calcutta - 700 072.

		(i)	(ii)	(iii)
Type		Single Stage Non-Guide-Vane Axial flow	Two stage Non-Guide-Vane Axial flow	Down stream Guide-Vane Single stage
Size	mm	483 & 610	483 & 610	610

2. Manufacturer/Supplier : M/s Gujarat Exhausters Pvt. Ltd.,
22, 5th Floor, Ellora Commercial Centre,
Ahmedabad - 380 001.

I : Ventilation Machinery

Model		(i)	(ii)	(iii)
Cap	cu m/hr	G	W	P
Fan dia	mm	5100 to 7300	5100 to 15300	5100 to 391000
PR	cm wg	450 to 1500	450 to 750	600 to 1000
Type		9	9	9
		Axial flow	Axial flow	Axial flow
Model		(iv)	(v)	(vi)
Cap	cu m/hr	A	F	Van Axial & Tube Axial
Fan dia	mm	8500 to 39100	2125 to 27200	3400 to 200000
PR	cm wg	600 to 900	300 to 900	-
Type		9	-	UP to 9
		Axial flow	Axial flow	Axial flow
3. Manufacturer/Supplier		M/s Voltas Limited., Mining & Construction Equipment Division, 19, J.N. Heredia Marg, Ballard Estate, Mumbai - 400 038		

Model		(i)	(ii)	(iii)
Type		Volfan 560	Volfan 600	Vf b 760 c
Cap	cu m/hr	Axial flow	Axial flow	Axial flow
Fan dia	mm	648000 to 1332000	864000 to 1656000	13800 to 33000
PR	cm wg	480	600	760
Max motor power		4.5 to 1	25 to 4	41 to 11
Single stage	HP	3	20	60

I I (3) Industrial Exhaust and Forcing Fans

Manufacturer/Supplier : M/s Gujarat Exhausters Pvt. Ltd.,
22, 5th Floor, Ellora Commercial Centre,
Ahmedabad - 380 001.

Type		(i)	(ii)	(iii)
Cap	cu m/hr	Industrial Exhauster	Power Roof Ventilators	Industrial Limit load
PR	cm wg	460 to 144000	upto 44000	upto 686000
		upto 50	upto 2.5	15

I I (4) Blowers

Manufacturer/Supplier : M/s Gujarat Exhausters Pvt. Ltd.,
22, 5th Floor, Ellora Commercial Centre,
Ahmedabad - 380 001.

Type		(i)	(ii)	(iii)	(iv)	(v)
Inlet dia	mm	06	07	09	012	016
Motor power	HP	166	10	250	300	300
	rpm	0.5	1	2	5	5
		1500	680, 1200	680, 1200	650, 1200	580,800
		& 1800	1400,1600 & 1800	1400,1600 & 800	1400,1600 &1800	&1200
Type		(vi)			(vii)	
Cap	cu m/hr	Medium and High Pressure			Medium and High Pressure	
PR	cm wg	9350			2720	
		140			116	

I : Ventilation Machinery

I II MINE VENTILATION EQUIPMENT

I II (1) Gas Testing Flame Safety Lamps

1. Manufacturer/Supplier : M/s J.K. Dey & Sons
13, Old China Bazar Street,
Calcutta - 700 001.
- | | | |
|-------|--------------------------|------------------------------|
| Model | (i) | (ii) |
| Type | Velox-GI60 | Velox-GI50 |
| | Self Contained Relighter | Without Relighting Mechanism |

I II (2) Safety Torches

1. Manufacturer/Supplier : M/s J.K. Dey & Sons
13, Old China Bazar Street,
Calcutta - 700 001.
- | | | | |
|-------|-----------------|-----------------------|-----------------------|
| Model | (i) | (ii) | (iii) |
| Type | Velox | Velox | Velox |
| Cap | Exp3 | Kp3g | Kp3 |
| | 3 Cell | 3 Cell | 3 Cell |
| | Explosion Proof | Flame explosion Proof | Flame explosion Proof |

I II(3) Air Pollution Control Equipment

- Manufacturer/Supplier : M/s Ushamil Private Limited,
37-38 Community Centre, East of Kailash
New Delhi - 110 065.
- | | | | |
|--------------------|---|--|--|
| Tube dia | (i) | (ii) | (iii) |
| | Wet dust collectors
Series W/Wm | Ultra clean
Cartridge Collectors | Packed bed
Scrubbers |
| | 6 mm (Inside) | Filter Ratio :
upto 4:1 Air Media | Used for Gaseous
Scrubbing of Chlorine,
Sox, Nox, Ammonia etc. |
| Dust Loading Level | (iv) | (v) | (vi) |
| | "Pvf" fabric dust
collectors | Particle classifier
Series EX | Oil mit collector
HC Series |
| | Air flow range :
1 to 500 cu m
at 5 : 1 Ratio | Size : 300 Microns | Pressure Gauge : 0.25 to
7.5 cm wg |
| | Carbon steel
construction | | |
| | (vii) | (viii) | |
| | WH high energy
Scrubber | Balanced air dust and fume control and
Pneumatic conveying system | |
| | Gas Velocity : From 700
to 1200 m/min | to remove cement dust inside
and outside | |
| | Water Injected at 10-15
psig | MS Super Scrubber
& MS super Scrubber Pakage System | |

I : Ventilation Machinery

I II (4) Portable Methanometers

Manufacturer/Supplier	:	M/s K.S. Associates Pvt. Ltd., 16, Kohinoor Building, 105, Park Street, Calcutta - 700 016.
Model/Type	:	KSA-II
Principle of operation	:	Wheatstibe Bridge Circuit
Range	:	0 to 5% of Methane Gas
Danger marking	:	Red Marking at 1.25% on Meter
Battery check	:	Green Marking on Meter dial, Shaded between 3.0 and 2.2%
No. of Operations	:	350/400 Operations of 20 secs Duration each
Meter	:	5 ma., Shockproof, with safex Glass
Life of Catalyst	:	Min 4000 Operations of 20 secs Duration each
Probe	:	1.2 Meters - Telescopic type
Sampling mode	:	Hand operated - Aspiration bulb
Wt	:	With Batteries, Casing - 0.93 kg approved by D G M S.

I II (5) Ventilation Ductings/Brattice Cloth

Manufacturer/Supplier	:	M/s Ventilation Engineering Company, 1, Acharya Jagdish Chandra Bose Road, 1st Floor (North East Block), Calcutta - 700 020.			
		(i)	(ii)	(iii)	(iv)
		Rhino Brattice Cloth	Rhino-Flexiduct Ducting	Rhino Flexitunnel duct	Rhino Semi Rigid Ducitng Made of PVC Supported Fabric & Spiral Steel Wire
Type	:	SF	-	SF	-
Thickness	mm :	0.25	0.4	-	-
Size Dia	mm :	300 to 1000	300 to 800	300 to 1400	300 to 900
Allowable PR	mm wg :	1140 to 350	500 to 100	800 to 150	500
		Approved by DGMS		Approved by DGMS	

I II (6) Ventilation Instruments

Manufacturer/Supplier	:	M/s Micon Engineers, 25, Netaji Subhash Road, Ground Floor, Calcutta - 700 001.
		(a) Pit Water Gauge (Davis Derby type)
		(b) Dry and Wet Thermometer
		(c) Aneroid Barometer
		(d) Manometer (Portable and precision type)
		(e) Air sampling bottle
		(f) Whirling Hygrometer
		(g) Kata Thermometer
		(h) Anemometer