

# **Artificial E-7 M-60 Sand Plants**

# **TECHNICAL SPECIFICATION**

# **Artificial Sand - A Viable Alternative**

An Alternate to River Sand in Concrete and Construction Industry

# **BASIS OF SELECTION**

S/R	Details	Remark	
1	Material	Basalt-	
2	Feed Size	0-10 mm Crusher Dust (Max. 12mm)	
3	Bulk Density	1.6 T/m3	
4	Moisture content	Less Then 2% (~1.6% recommended max.)	
5	Application	To produce classified premium quality engineered sand as per customer specific Requirements for concrete or plaster applications	
6	Handling Capacity	60 TPH	
7	Product	Premium engineered Sand	

# MAIN MACHINE EQUIPMANT DETAILS

#### • CHAIN ELEVATOR

S/R	Details	Remark
1	Capacity	60 to 70 Tons Per Hours
2	Belt Width	650 MM
3	Belt Length	9000 MM
4	Angle of Inclination	15 to 18 Dig
5	Drive	Gear Motor 7.5 KW

#### • CHAIN ELEVATOR

S/R	Details	Remark
1	Capacity	80 Tons Per Hours
2	Bucket	400 MM 105 Nos
3	Chain Link	120 MM 200 link



4	Two In Put Hoper Height	1500 MM and 2500 MM
5	Gear Motor with Ratchet Wheel	10 KW

#### • TOP ELEVATOR CONVEYER

S/R	Details	Remark
1	Capacity	60 to 70 Tons Per Hours
2	Belt Width	650 MM
3	Belt Length	3500 MM
4	Angle Of Inclination	2 to 3 Dig
5	Drive	Gear Motor 3.5 KW

# • VSI

S/R	Details	Remark
1	Capacity	60 Tons Per Hours
2	Standard Brand	Laxmi En Fab Ahmedabad
3	Nos Of Ports	5 Nos
4	Drive	V Belt Drive
5	Electric Motor	125 HP x 2 Nos Double
		Drive 250 HP

#### VSI HOIST

S/R	Details	Remark
1	Capacity	2 Tons
2	Wire Rope	10 MM 60 Feet
3	Electric Motor	2.2 KW

#### • AIR SEPARATOR SCREEN

	S/R	Details	Remark
	1	Vibrate Motor	3.6 KW 2 Nos
I	2	Level Controlling Unit	2 Nos

#### • ID BLOWER

S/R	Details	Remark
1	Capacity	540 M3 per Minutes
2	Electric Motor	30 KW 1440 RPM



	3	Drive	V Belt Drive
	4	Belt Pulley	9 Inch 4 Grove C Type 2
ı			Nos

#### • DIFFUSION FEEDER VIBRATOR

S/R	Details	Remark
1	Lifting Huck	4 Nos
2	Vibrator Rubber Pad	4 Nos
3	Vibrating Motor	3.6 KW 2 Nos
4	Dispersing System	0.35 KW 2 Nos

#### • RE-CIRCULATION BELT CONVEYOR

S/R	Details	Remark
1	Capacity	60 to 70 Tons Per Hours
2	Belt Width	500 MM
3	Belt Length	5000 MM
4	Angle Of Inclination	6 to 8 Dig
5	Drive	Gear Motor 3 KW

#### • DRUM MIXER UNIT

S/R	Details	Remark
1	Drum Mixer Size	800 Dia x 2000 MM Length
2	Gear Motor	4 KW
3	Bottom out Put Height	Bottom out Put
4	Drive	Chain Drive
5	Water Pump	0.4 KW

# • DRUM OUT PUT CONVEYER

S/R	Details	Remark
1	Capacity	60 to 70 Tons Per Hours
2	Belt Width	500 MM
3	Belt Length	5000 MM
4	Angle Of Inclination	15 TO 20 Dig
5	Drive	Gear Motor 5.5 KW

# • BAG HOUSE

S/R	Details	Remark
1	Air Volume	900 M3/ Min



2	In Let Dust Load	300 G /M3
3	Out Let Dust Emission	50 Mg/M3
4	Туре	Puls Jet Systems
5	Filter Air Bag	200 Dia 4200 Lengh
6	Compressor	1350 NL/Min-11 KW

# • EXHAUSTER

S/R	Details	Remark
1	Туре	Centrifuge Type
2	Electric Motor	90 KW 1440 RPM
3	Exhauster RPM	1440 RPM
4	Drive	V Belt Drive
5	V Belt	C Type 4 Nos

#### • EXHAUST DUMPER

S/R	Details	Remark
1	Air Controlling	Achuletor
2	Blade	3 Nos
3	Electric Motor	0 5 KW

# • STORAGE SILO

S/R	Details	Remark
1	Capacity	50 Tons
2	Level Sensor	Law and high
3	Electric Magnetic Hemmer	4 Nos
4	Bottom Out Put Screw	14 Inch 1000 MM Length
5	Gear Motor	3.7 KW
6	Flab Valve	14 Inch Manual

# • ROTATING CONVEYER ( EXTRA PRICE )

S/R	Details	Remark
1	Capacity	60 to 70 Tons Per Hours
2	Belt Width	500 MM
3	Belt Length	15000 MM
4	Angle Of Inclination	15 TO 20 Dig
5	Drive	Gear Motor 7.5 KW

#### • ELETRICALS

S/R	Details	Remark
1	Motors	



2	Control Desk	
3	Mcc With Plc Panel	
4	Local Push Button Station	
5	Zero Speed Switch	
6	Earthing Strip	
7	Cabling	
8	Motors	

#### • SKID STRUCTURE

S/R	Details	Remark
1	Bag filter and Compressor	
2	Superior VSI & Air Classifier	
3	Trestles and Galleries for Belt Conveyor	
4	Supports for Ducting and Stack	
5	All Chutes, Support, Platform, Walkway,	
	Stair/ladder for Equipment	

#### • **COMMON ITEMS**

S/R	Details	Remark
1	Foundation Bolts & Nuts for All Equipment in Scope	
2	Name Plate and Machine Number Plate	
3	Painting Including Primary and Final Coating	
4	Operation and Maintenance Manual for All Equipment in Scope	

# • **EXCLUSIONS**

S/R	Details	Remark
1	Any DG Set/power Source, Input Cable, Plant Lighting and Related Electricals/any	
	Other Electrical Not Specified in Scope.	
2	Any Civil/site Work (Ground Leveling, Civil Footings Etc.)	
3	First Fill of Lubricants	
4	Maintenance Hoists/ETO Crane.	
5	Any Civil, Structural, Electrical Work	
6	Any Arrangement for Loading/unloading of Material.	
7	Any Work Related to Dismantling, Modification, Shifting, Assembly, Erection and Disposal of Existing Equipment, Structures and Accessories	



8	All Erection and Commissioning Activities	
	of Plant. (Only Supervision Is Considered	
	in Our Scope)	

#### • OTHER

S/R	Details	Remark
1	Any Statutory Approval & the Fees There-	
	to	
2	Third Party Inspection Charges	
3	Transportation, Insurance, Unloading &	
	Storage of Material at Site.	

# • ELETRICALS

S/R	Details	Remark
1	Pre-vibrate	0.5 HP
2	In Put Conveyer	5 HP
3	Elevator	5 HP
4	Top Feeder Conveyor	5 HP
5	ID Blower	40 HP
6	VSI Motor	125 X 2 Nos
7	Vibrating Motor	5 HP 2 Nos
8	Vibrating Motor	5 HP 2 Nos
9	Vibrating Motor	0.5 HP 2 Nos
10	Screw Gear Motor	5 HP
11	Air Screen Rotary Valve	2 HP
12	Exhauster	120 HP
13	Dumper	0.5 HP
14	Mixer Unit	5 HP
15	Out Put Conveyer	5 HP
16	Rotating Conveyer	5 HP
17	Water Pump	3 HP
18	Air Compressor	12.5 HP
19	Silo Out Put Screw Conever	3 HP