

Cement Grinding Unit Machinery Details & Photographs

Sr.No	Equipments	Unit	
1	Ball Mill (With Motor)	1	
	<u>General data</u>		
	Make/Type	-	Movers Co. white metal & gear system
	Design capacity	t/h	10 t/h
	Specific power consumption at shaft	kWh/t	
	Product size (blain)	cm ² /g	3700cm ₂ /g ± 222cm ₂ /g
	Residue on 90 μ	%	2-3%
	Mill speed	rpm	25rpm
	<u>Mill dimensions</u>		
	Length	m	9.57m
	Diameter inside shell	m	2.0m
	L/D ratio	-	
	Thickness of shell	mm	25mm
	Material quality	BIS	Hyper steel
	<u>Mill Bearings</u>		
	Make/type - Trunnion/Slide Shoe	T/S	white metal
	<u>Motor</u>		
	Make/Type	-	NGEF
	Power	kW	300Kw (400hp)
	Speed	rpm	986 rpm
	Torque	Nm	
	<u>Main gear box</u>		
	Make/Type	-	ALICON Co.
	Number of reduction stages	-	
	Total reduction ratio	-	
	Rated power	kW	300kw
	Output speed	rpm	1000rpm
	<u>Auxiliary Drive</u>		
	Motor power	kW	
	Motor speed	rpm	
	Reduction ratio of gear box	-	
	Rated power of gear box	kW	

	Mill Liners		
	Compartment		
	Make	-	Movers Co.
	Type	-	
	Material	-	Manganese
	Specific wear rate	g/t	
	Lifetime	h	
2	Mill Feeding Belt Conveyor	1	(With Motor)
	Conveyor Design		
	Capacity	t/h	20t/h
	Width	mm	600mm
	Distance between centres		
	- Horizontal	mm	300mm
	- Vertical	mm	9000mm
	- Centre to Centre	mm	18000mm
	Material Handled		clinker & fly ash
	Bulk Density of Material		
	- For Conveyor Sizing	Kg/m ³	
	- For power Sizing	Kg/m ³	
	Belt Speed	m/s	0.2 m/s (18 rpm)
	Troughing Angle	Degree	20 degree
	Belt Fill	%	25%
	Drive Details		
	Drive Arrangement		
	Shaft Power		
	Recommended Motor Power	kW	5KW
	Recommended Motor Speed	rpm	1400rpm
	Gear Box		
	- Make		REDICON
	- Type		U - type (400)
	- Reduction Ratio		60:01:00
	- Service Factor		
	Input Coupling		
	Type		RC coupling
	Model		
	Make		
	Output Coupling		
	Type		
	Model		
	Make		

	Belting		
	Make		Movers Co
	Width	mm	600mm
	No. of Plies		
	Belt Grade		
	Top Thickness	mm	10mm
	Bottom Thickness	mm	10mm
	Code/Standard		
3	Dust Collector		
	Make		Movers Co.
	Model/ Size		60 bag capacity
	Type		round
	Operating Conditions		
	Volume	m3/h	
	inlet gas temperature	deg.C	70 degree C
	Inlet dust load	gm/m3	
	Static pressure drop at filter inlet	mmWG	auto cut
	Design Data		
	Vent Volume	m3/h	
	Temperature	deg.C	
	Inlet dust load	g/m3	
	Static pressure across filter	mmWG	70000-90000 mmwG
	Air to Cloth ratio:		
	-gross	m3/min./m2	
	-net	m3/min./m2	
	Design suction pressure of housing	mmWG	
	Maximum gas temperature allowed	deg.C	
	Maximum outlet dust load	mg/Nm3dry	
	BAGFILTER FAN		
	Make		
	Model		1m fan diameter
	Capacity		
	Static pressure		
	Fan efficiency, static/ total		
	Fan speed		1050 rpm
	Arrangement		

4	Screw Conveyor(With Motor)		
	Design Data		
	Make		movers co.
	Capacity		
	- Rated	t/h	20t/h
	- Design	t/h	20 t/h
	Centre Distance	mm	3352.8mm
	Width	mm	300mm
	Inclination	Degree	180 degree
	Motor		
	Make	rpm	1440 rpm
	Power	kw	5KW
	Type	-	
	Coupling	-	
5	Packing Machines		(With 2 compressors & 2 blowers)
	Nos		2
	Capacity		Suitable for 2 silo with 125 ton capacity each
	Type/Model		
	No of Spouts		3
6	Jaw Crusher (With Motor)	1 Qty.	
7	Total Plant load	MW	0.38 MW max consumption
8	Transformer	1000kwa	
9	LAB EQUIPMENTS		Complete physical & chemical labs equipment & chemicals , according to IS 2013:8112
10	Table feeder (With Motor)	1	
11	Air Lift(with blower)	25hp	air lift blower having 25 hp and 1250 rpm & motor having 1440 rpm & 30 hp & air lift capacity is 10 t/h
12	Silos	2 Qty.	125 ton each
13	I.D fan(with Motor)	1 Qty.	
14	Electrical parts & equipments		Electric fittings/switches/panels/cables





