

ANNEXURE-9

SODIUM SULPHATE RECOVERY MOLTEN GLAUBER SALT CIRCULATION PUMP WITH MOTOR, BASE, ACCESSORIES & SPARES

Type of pump	:	Horizontal Centrifugal
Duty	:	To pump aqueous solution of Na ₂ SO ₄
Aqueous Solution (as dissolved Solid)	:	30.4% Na ₂ SO ₄ , 1.5% NaOH and 4.6% glauber salt crystals in suspension
Capacity	:	280 m ³ /hr.
Total Discharge Head (TDH)	:	14 m.
Temperature	:	32-50°C
Density of liquor	:	1.35
pH of Liquor	:	Alkaline
Viscosity (Cp)	:	10
Gland Sealing	:	Double Mechanical seal
Impeller	:	Semi-Open
Suction	:	Flooded.
NPSH available	:	9m
Particle size	:	500-3000µ

MATERIAL OF CONSTRUCTION

Impeller	:	1.4474/AISI329
Wear ring/plate	:	1.4474/AISI329
Casing	:	1.4474/AISI329
Sleeve	:	CF8
Shaft	:	CF8
Non wetted part	:	CI
Base	:	MS Fabricated only.
Coupling make	:	Tyre Coupling of Unique / Fenner / Love joy.
Motor	:	Crompton greaves / Siemens/ ABB
Motor selection Margin	:	Minimum 30% above brake horse power required
Power rating	:	415V (+/- 10%), Class-F,IP-55 insulation, 3 Ph, 50 Hz, A.C.Supply,IE-3

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The offer must be submitted in the given format

Pump model & type offered	-	
Speed of the pump	-	
Suction & discharge (mm)	-	
Type of drive	-	
Type & make of coupling	-	
Capacity offered (m ³ /hr)	-	
Head (m)	-	
NPSH required	-	
BKW required	-	
Motor offered make & rating	-	
Impeller type & diameter offered	-	
Full size of impeller offered	-	
Drive end bearing* No.	-	
Non drive end bearing* No.	-	
Shaft diameter at impeller end	-	
Distance between NDE bearing and impeller	-	
Distance between bearings (NDE & DE)	-	
Weight of bare pump (Kgs.)	-	
Weight of structural base (Kgs.)	-	
Weight of motor (Kgs.)	-	
Type of lubrication offered	-	
Material of construction of		
a) Casing	-	
b) Impeller	-	
c) shaft	-	
d) shaft sleeve	-	
Gland sealing arrangement	-	
Efficiency of pump		
No of stages		

*SKF Bearing only

Pump flange shall be drilled as per ANSI 16.5

