

**INDIAN FARMERS FERTILISER CO-OPERATIVE LTD.
PARADEEP UNIT**

CENTRIFUGAL PUMP

	PLANT :			ITEM NO. : 20.01.111-3		
	TOTAL NO. : 04	WORKING : 03	STAND BY : 01			
	DRIVER : MOTOR					
	SERVICE : Vacuum Cooler Circulation Pump					
	INSTALLATION : OUT DOOR					
	H3PO4 SLURRY 28-30% P2O5 WITH GYPSUM SLURRY 30-40% W/W + USUAL IMPURITIES					
1	DUTY (EACH PUMP)	UNIT	NORMAL	RATED	PUMPING TEMPERATURE	90 °C
2	NET CAPACITY	m3/hr	9000	9000	MINIMUM FLOW REQUIRED :	m3/hr
3	SUCTION PRESSURE	kg/cm2g	0.49	0.49	SPECIFIC GRAVITY AT 50 °C	1.602
4	DISCHARGE PRESSURE	kg/cm2g	1.01		VISOSITY AT 50 °C	200 cP
5	DIFFERENTIAL PRESSURE	kg/cm2g	0.52		VAPOUR PRESSURE AT 50 °C	303 kg/cm2g
6	TOTAL HEAD	m	3.25		MAXIMUM PUMP HEAD	3.25 m
7	HYDRAULIC HP	kW	*		SHUT-OFF HEAD	m
8	EFFICIENCY	%	*		DRIVER POWER	HP
9	ABSORBED POWER	kW	*		DRIVER SPEED	R P M (syn)
10	PUMP SPEED	R P M	*		SOLIDS CONTENT	P P M
11	NPSH AVAILABLE	m	7		NPSH REQUIRED	* m
12					NO. OF STAGES	
13	DRIVER : V BELT DRIVEN					
14	VERTICAL PUMP SETTING HEIGHT (SUCTION NOZZLE TO SUPPORT PLATE) : N.A.					
15	PUMP ROTATION VIEWED FROM COUPLING END : CLOCKWISE / ANTI CLOCKWISE					
16	PUMP MAKE :	*	MODEL :	*		
17	DRIVEN BY : MOTOR	MAKE : SIMENS / NGEF	SPEED ;	* MODEL :	*	
18	GEAR BOX BY : N.A.	MAKE :	SPEED RATIO :	MODEL :		
19	COUPLING BY : *	MAKE : *	SIZE :	*		
20	V-VELT BY : N.A.	SPEED RATIO : N.A.	V BELT SIZE : N.A.	NO. OF BELTS N.A.		
21	SUCTION FLANGE :	SIZE : 1000 NB / *	RATING : 150 #	RTJ / FF / RF * API 605*		
22	DISCHARGE FLANGE :	SIZE : 1000 NB / *	RATING : 150 #	RTJ / FF / RF * API 605*		
23	IMPELLER DIAMETER :	* 994 mm / *	MAX. POSSIBLE :	*		

24	MECHANICAL SEAL :	TYPE ;	*	SIZE :	*
25		SEAL MATERIAL :		AISI 316	
26					
27	MATERIAL SPECIFICATIONS :	UTILITIES AVAILABLE :			
28	CASTING : 904 L SS or Equal	POWER :	415 V +/- 10 %	PH : 03	HZ : 50
29	IMPELLER : 904 L SS or Equal	STEAM :	N.A.	kg/cm2g	°C : N.A.
30	SHAFT : 904 L SS or Equal	COOLING WATER :	NOT REQUIRED		
31	SHAFT SLEEVE : 904 L SS	NORMAL	kg/cm2g	DESIGN :	kg/cm2g
32	IMPELLER WEAR RING : 904 L	TEMPERATURE RISE :	°C		
33	CASING WEAR RING :				
34	LANTERN RING :	FLUSHING FLUID :	-		
35	GLAND :				
36	BED PLATE :	BEARING TYPE :	RADIAL / THRUST		
37	DRIP TRAY :	LUBRICATION :	OIL / GREASE / CONSTANT OILER		
38	COUPLING GUARD :	*	SHAFT : VERTICAL / HORIZONTAL		
39		CASING SPLIT :	*	AXIAL / RADIAL	
40		DRIVER MOUNTED :	BELOW / ABOBE PUMP		
41		AREA CLASSIFICATION :	FLAME PROOF/ EXP PROOF CLASS 1 GR.D		
42					
	CHECKED BY :	DATE :		REV. :	
	PREPARED BY :	DATE :			