

NOTE- PERFORMANCE AS PER ISO 9906 GRADE-2B

PERFORMANCE CURVE OF 6HST24 @1480 R.P.M

6HST24/X/301854

HST RANGE

MODEL 6HST24

WORKING PRESS. 30 bar

SIZE 200x150-600

TEST PRESS. 45 bar

TYPE-AXIALLY SPLIT CASE TWO STAGE

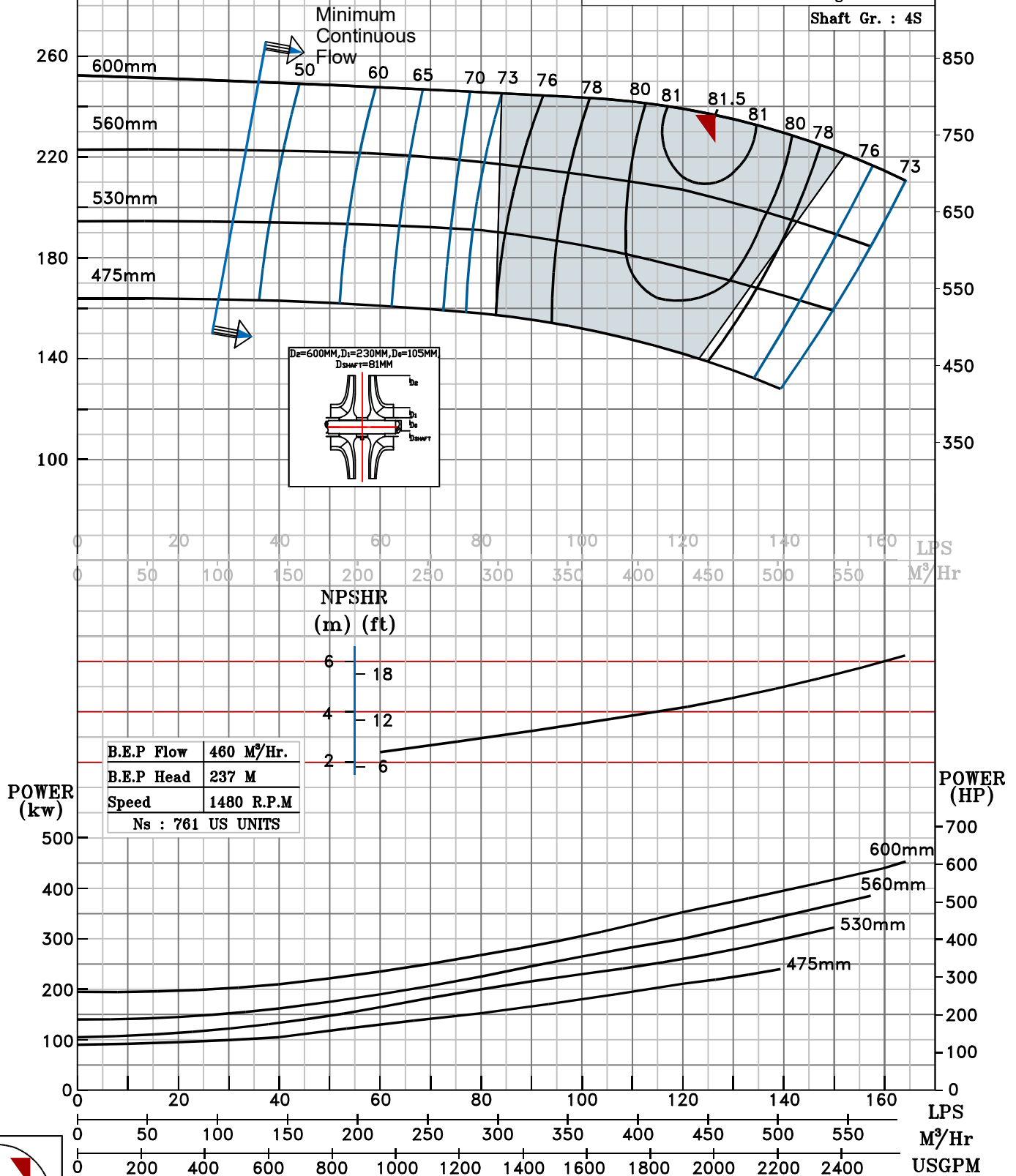
SPEED 1480 rpm

DATE - 04.10.23

SHADED REGION ON THE H-Q CURVE REPRESENTS OPTIMUM SELECTION ZONE

PUMP PERFORMANCE CHARACTERISTICS COMPUTED BASED ON CLEAN COLD WATER S.G 1.0

Max. Impeller Dia.	600mm
Min. Impeller Dia.	475mm
Impeller Drg. No.	318G030P
Volute Drg. No.	318G010P
Hydraulic Data	
Eye Area 329cm ²	Throat Area 82.9cm ²
Impeller Width 20mm	No. of Vanes 6
Volute Construction - Two Single Volute	
Shaft Gr. : 4S	

HEAD
(M)HEAD
(FT)

1480 RPM

NOTE- PERFORMANCE AS PER ISO 9906 GRADE-2B

PERFORMANCE CURVE OF 6HST24 @1780 R.P.M

6HST24/X/301864

**HST RANGE****MODEL 6HST24**

SIZE 200x150-600

TYPE-AXIALLY SPLIT CASE TWO STAGE

WORKING PRESS. 40 bar

TEST PRESS. 60 bar

SPEED 1780 rpm

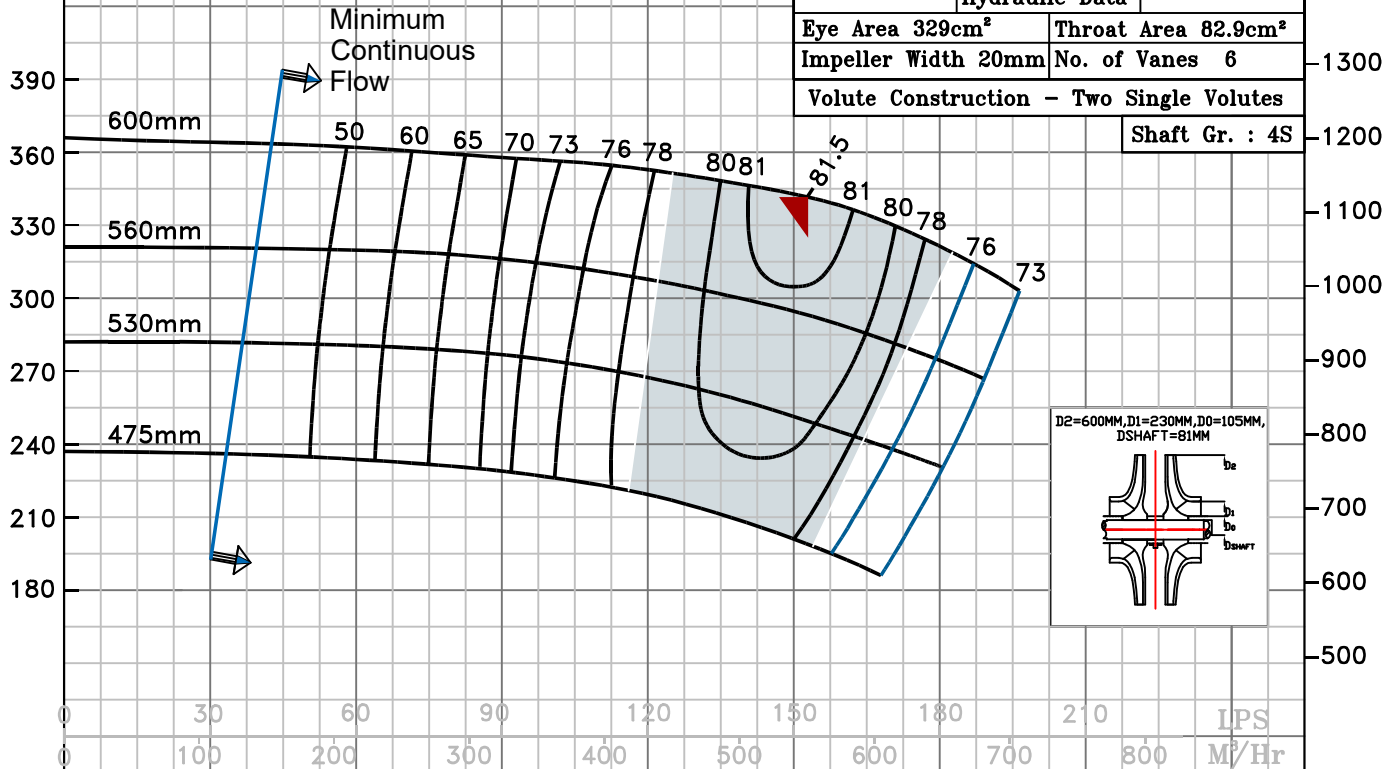
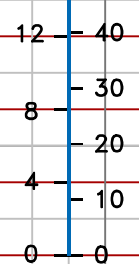
DATE - 10.12.14

SHADED REGION ON THE H-Q CURVE REPRESENTS OPTIMUM SELECTION ZONE

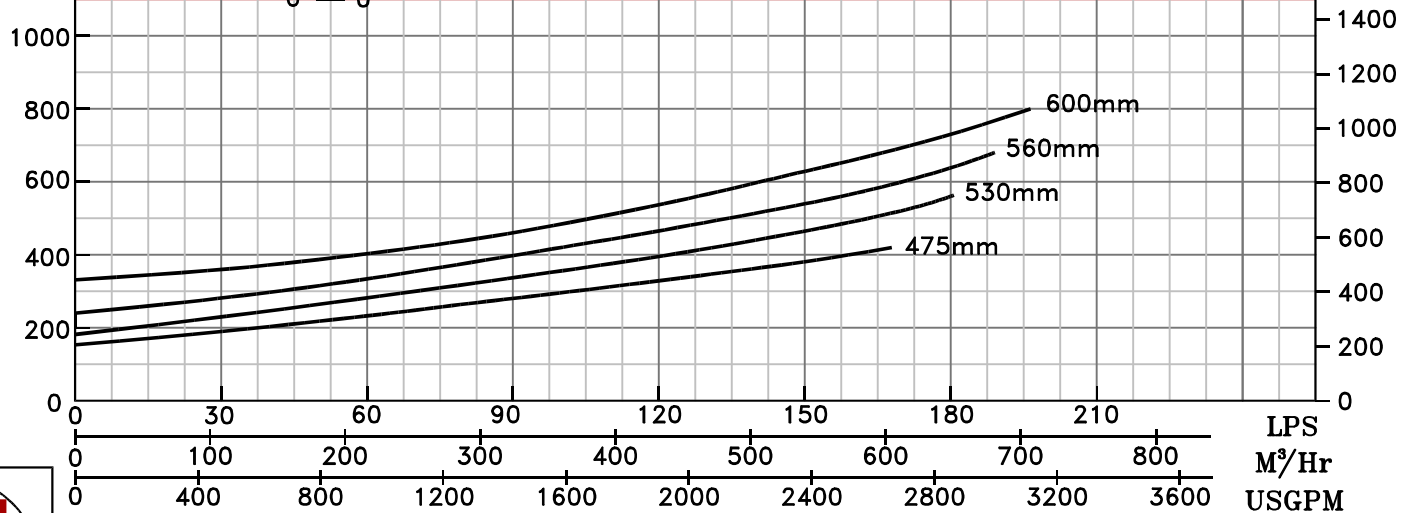
PUMP PERFORMANCE CHARACTERISTICS COMPUTED BASED ON CLEAN COLD WATER S.G 1.0

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Volute Drg. No.	318G010P
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Eye Area 329cm ²	Throat Area 82.9cm ²
Impeller Width 20mm	No. of Vanes 6
Volute Construction - Two Single Volute	

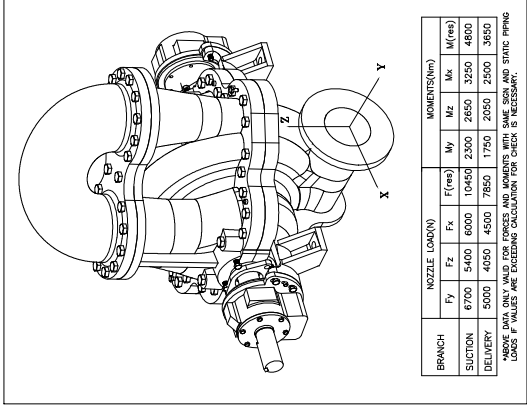
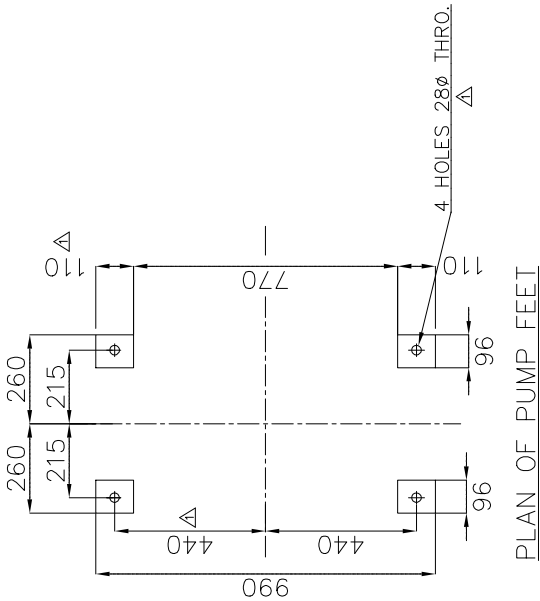
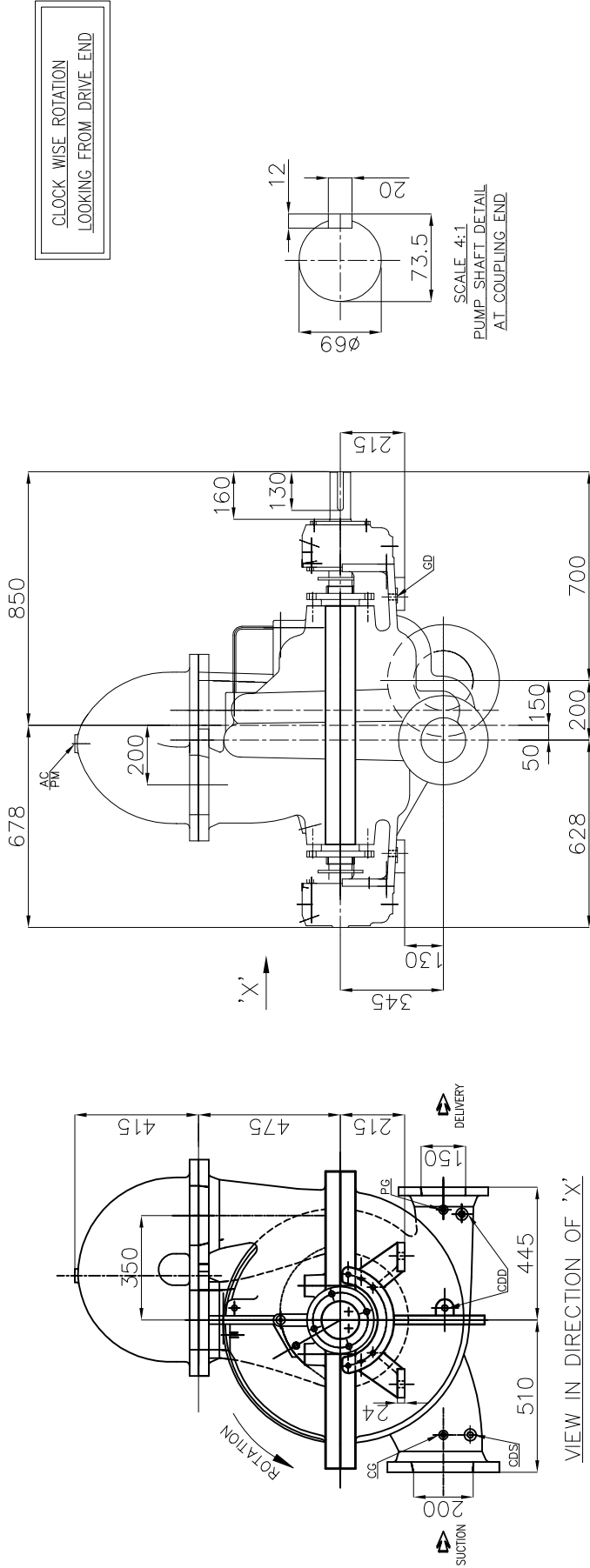
Shaft Gr. : 4S

HEAD
(M)HEAD
(FT)NPSHr
(M) (FT)

B.E.P Flow	553.2 M ³ /Hr.
B.E.P Head	342.8 M
Speed	1780 R.P.M
Ns : 761 US UNITS	

POWER
(kw)POWER
(HP)

1780 RPM



CONNECTIONS	
ITEM	SIZE(NPT)
GD	GLAND DRAIN
CG	COMPOUND GAUGE FOR SUCTION
PG	PRESSURE GAUGE FOR DELIVERY
AC	AIR COCK
PM	PRIMING
CDS	CASING DRAIN(SUCTION SIDE)
CDD	CASING DRAIN(DELIVERY SIDE)

- NOTE:
1. ALL DIMENSIONS ARE IN MM.
 2. BARE PUMP WEIGHT APPROX. 1370 KG.

S	PN 25	300	310	30	12	426	—	—	—	—	—	—	—
D	PN 25	—	—	—	—	—	—	—	—	—	—	—	—
REF. NO.	TYPE OF FLANGE	O.D. P.C.D. MIN	THK OF HOLE	NO. SIZE OF HOLE	RF THK	RF THK	O.D. P.C.D. MIN	THK OF HOLE	NO. SIZE OF HOLE	RF THK	RF THK	RF THK	RF THK
SUCTION – Ø200(8")										DELIVERY – Ø150(6")			

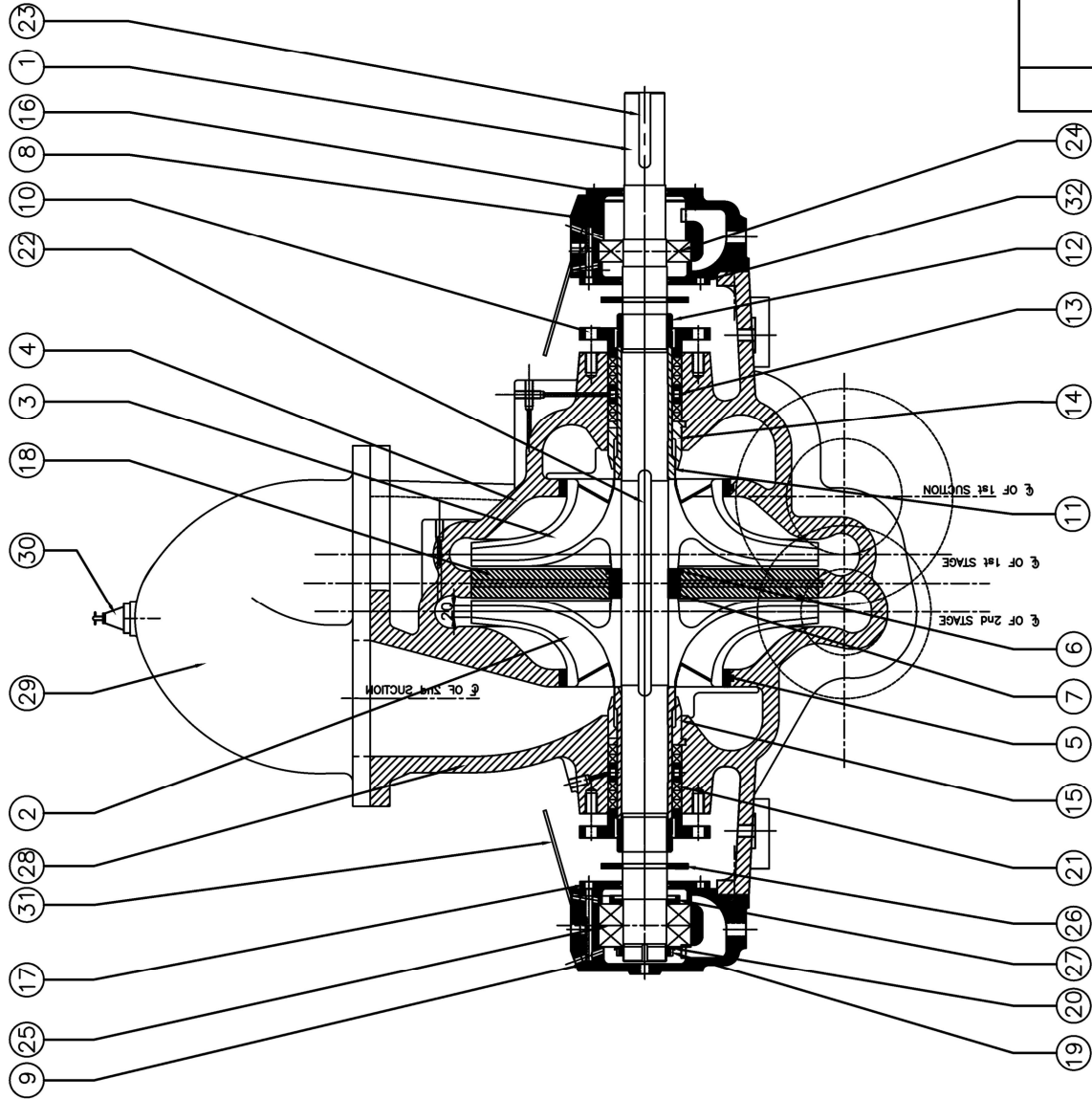
PUMPSENSE		TITLE		SCALE	
GA DRAWING FOR 6HST24		1:1		REV.	
DRN	AD	01.06.17	DRG NO.	1	
CHKD	SP	01.06.17	318CA11Z		
APPD	HS	01.06.17			

PUMPSENSE FLUID ENGINEERING PVT LTD

Datasheet For: 6HST24

	PARAMETERS	UNIT	VALUE
RATED DUTY	Capacity	M ³ /hr	553.0
	Total Head	Mt	349.0
	Speed	RPM	1780
	Type of Pump		Horizontal Two Stage Pump
	Liquid		Clear Water
	Specific Gravity		1
	Temperature	°C	32
	Driver		Diesel Engine
	No. Off		1
PUMP DETAILS	Make		PUMPSENSE
	Model No.		6HST24
	Stages		Two Stage
	Cross Over Design		External Cross Over Design
	Discharge	mm	150
	Flange Rating Discharge		PN 25 - BS EN 1092-2
	Suction	mm	200
	Suction Flange Rating		PN 25 - BS EN 1092-2
	Type of Casing		Single Volute
	Type of Impeller		Two Shrouded Single Entry - Axially Balance
	Impeller Diameter Max	mm	600
	Impeller Diameter Min	mm	475
	Rotation		CW
PERFORMANCE DETAILS AS RATED DUTY	Efficiency	%	81.5
	Rated Speed	RPM	1780
	NPSHr	Mt	6.1
	Power Absorbed	kW	645.2
	Recommended Driver Power	kW	774
	Driver Details		Diesel Engine @ 1800 RPM
	Closed Valve Head (Approx.)	Mt	368
	Head Rise to Shut-Off Head	%	5
	Working Pressure	Bar	40
	Test Pressure	Bar	60
MECHANICAL DATA	Bare Pump Weight	kg	1370
	Shaft dia. at coupling	mm	69
	N.D.E. Bearing		2 X SKF BECBP 7315
	D.E. Bearing		1 X SKF 6315
	Packing Size		16 x 16 - Soft Packing
MATERIALS OF CONSTRUCTION	Casing		Ductile Iron GGG 50
	External Cross Over		Ductile Iron GGG 50
	Impeller		ASTM A743 Gr CF 8M
	Casing Wear Ring		Leaded Bronze BS 1400 LB2
	Shaft		ASTM A 276/ A 182 Type 410
	Shaft Sleeve & Nuts		Tin Bronze/ Zinc Free Bronze BS 1400 CT1
	Inter Stage Bush		Bronze SAE 660 ASTM B505
	Inter Stage Collar		ASTM A 276 Type 316
	Bearing Bracket		Cast Iron CI FG 260
	Split Gland		Leaded Gunmetal BS 1400 LG2
	Lantern Ring		Leaded Gunmetal BS 1400 LG2
	Stuffing Box		Gland Packed Fitted
	Packing		CARRARA Make Soft Packing Style R 4804
	Fastners		HTS GR. 10.9

CROSS SECTION OF TWO STAGE HORIZONTAL
SPLIT-CASE PUMP WITH EXTERNAL CROSS OVER (SINGLE ENTRY IMPELLER)



SL.NO.	DESCRIPTION	QTY.	PART NO.
1	SHAFT	1	101
2	IMPELLER 1st STAGE (L.H.)	1	102-L
3	IMPELLER 2nd STAGE (R.H.)	1	102-R
4	CASING	1	183
5	CASING WEAR RING	2	129
6	INTER STAGE BUSH	1	300
7	INTER STAGE COLLAR	1	301
8	BEARING BRACKET (P.E)	1	254
9	BEARING BRACKET (F.E)	1	271
10	SPLIT GLAND	2	144
11	SHAFT SLEEVE	2	150
12	SLEEVE NUT (L.H & R.H)	2+2	146
13	LANTERN RING	2	149
14	STUFFING BOX BUSH (P.E)	1	260
15	STUFFING BOX BUSH (F.E)	1	292
16	BEARING END COVER OUTER (P.E)	1	134
17	BEARING END COVER INNER (F.E)	1	277
18	INTER STAGE RING PLATE	1	428
19	BEARING LOCK NUT	1	141
20	BEARING LOCK WASHER	1	142
21	GLAND PACKING	-	143
22	IMPELLER KEY	1	180
23	COUPLING KEY	1	138
24	BEARING AT POWER END	1	272
25	BEARING AT FREE END	2	257
26	WATER THROWER	2	145
27	THRUST COLLAR	1	125
28	WATER SEALING PIPE	2	118
29	EXTERNAL CROSS OVER	1	306
30	AIR COCK	1	114
31	SHAFT GUARD	2	252
32	BEARING END COVER INNER (P.E)	1	276

** P.E- POWER END , F.E -FREE END.

PUMPSENSE FLUID ENGG. PVT. LTD.					
TITLE- CROSS SECTIONAL FOR 6HST24 TWO STAGE SPLIT-CASE PUMP				SCALE: FULL	
DRN	AD	26.05.17	DRG. NO.	ASSEMBLY NO.	
CHKD	ST	26.05.17	318CS10Y	3183420	
APPD	HS	26.05.17		REV.	
DESCRIPTION				0	