FAUJI TRANS TERMINAL LIMITED

FTTL STORAGE TERMINAL PROJECT

DATA SHEET FOR
RAW WATER PUMP (P-0502)

Consultant	Data Sheet			
ZISHAN ENGINEERS (PVT.) LTD.	DATA SHEET FOR RAW WATER PUMP (P-0502)			
	Document No.		Revision	DATE
Client	123-6-DSM-032		A	17-06-2019
FAUJI TRANS TERMINAL LIMITED	Prepared by	Checked by	Approved by	SHEET
	MW	RA	MM	2 OF 2

Applicable To: ● Proposals ○ Purchase ○ As Built

Note: ○ Indicates information to be completed by purchaser.

○ Indicates information to be completed by manufacturer.

For	**RAW WATER**	Site	PORT QASIM, KARACHI
Unit	RAW WATER PUMP	Service	RAW WATER
No. Pumps Req'd.	1 No. Motors Req'd 1	Provided By	Mtd By
Item No.	P-0502	Item Description	
No. Engines Req'd.	--- No. Turbines Req'd ----	Provided By	Mtd By
Pump Mfr.		Size and Type	HORIZONTAL CENTRIFUGAL Serial No.

OPERATING CONDITIONS, EACH PUMP

Liquid	RAW WATER	Flow at PT. m^3/hr (GPM) Nor.	11.4 (50)	Rated	11.4 (50)
		Disch. Press. Bar (Psi G)	2.152 (31.2)		
PT.(ºF) Nor.	AMB Max.	Suct. Press. Barg (Psi G)	Min -0.348 (-5.1)	Max	
Sp.Gr. at PT.	1	Diff. Press. Bar (Psi)	2.5 (36.25)		
Vap. Press. at PT. (psia)	1	Diff. Head m (ft)	25.5 (82.9)		
Vis. at PT.	cP 1	NPSHA m (ft)	2.5 (8.2)		
Corr/Eros. Caused by		Hyd.KW	0.80		

Location: ○ Indoor ● Outdoor Area: ● Safe ○ Hazardous

Working: ○ Continuous ● Intermittent ○ Random

PERFORMANCE (VTA)

Proposal Curve No.

RPM NPSHR (Water)

Eff. BHP Rated

Max. BHP rated IMP

Max. Head Rated IMP

gpm

Rotation (Viewed from CPLG End)

Head rise to shut off

CONSTRUCTION

Nozzles	Size	Rating	Facing	Location
Suction	VTS	VTS	RF	
Discharge	VTS	VTS	RF	

Case-mount: ● Centerline ○ Foot ○ Bracket ○ Vert. (Type)

- Split: ○ Axial ○ Rad; Volute Type: ○ SGL ○ DBL ○ Diffuser
- Press: ○ Max. Allow, psig @ ºC; ○ Hydro Test psig
- Connect: ○ Vent ○ Drain ○ Gage

Impeller Dia. : ○ Rated ○ Max. Type:

Mount: ○ Between Bearings ○ Overhung

Bearings-type: ○ Radial ○ Thrust

Lube: ○ Ring Oil ○ Flood ○ Oil Mist ○ Flinger ○ Pressure

Coupling: ○ Mfr. ○ Model

Driver Mtd. By: ○ Pump Mfr. ○ Driver Mfr. ○ Purchaser

Packing: ○ Mfr. & Type ○ Size/No. of Rings

Mech. Seal: ○ Mfr. & Model

○ Mfr. Code --

SHOP TESTS

○ Non-Wit. Perf.	● Wit. Perf.
○ Non-Wit. Hydro	● Wit. Hydro
○ NPSH Req'd.	● Wit. NPSH
● Shop Inspection	
○ Dismant. & Insp. After Test	
● Inspection Required For Nozzle Welds.	
● Inspection Required For Casing	
● Radiography	● Ultrasonic
○ Other	

MATERIALS

MATERIAL CLASS	
CASE	NODULAR CAST IRON (VTC)
IMPELLER (S)	BRONZE (VTC)
WEAR RING	BRONZE (VTC)
SHAFT	304SS (VTC)

AUXILIARY PIPING

○ C.W. Pipe Plan ○ CU ○ SS ○ Tubing; ○ Pipe

○ Total Cooling Water Req'd (m^3/hr) req gpm ○ Sight F.I. Req'd

○ Packing Cooling Injection Req'd: ○ Total . gpm ○ psig

○ Seal Flush Piping Plan ○ CS ○ SS ○ Tubing ○ Pipe

○ External Seal Flush Fluid ○ gpm ○ psig

○ Auxiliary Seal Plan ○ CS ○ SS ○ Tubing ○ Pipe

○ Aux. Seal Quench Fluid

VERTICAL PUMPS

Pit or Sump Depth

Min. Submergence Req'd.

Column Pipe: ○ Flanged ○ Threaded

Line Shaft: ○ Open ○ Enclosed

Brgs: ○ Bowl ○ Line Shaft

Brg.Lube ○ Water ○ Oil ○ Grease

Float & Rod ○ CS ○ ss ○ BRZ ○ None

Float Switch

Pump thrust,lb. ○ UP ○ Down

MOTOR DRIVER

HP	VTS	RPM	VTS	Frame	TEFC	Volts/Phase/Cycles	400/3/50
Mfr.	VTS			Bearings	VTS		
Cooling Type	VTS			Insulation	Class F	Full Load Amps	VTS
Cable Entries	VTS			Temp. Rise(°C)	Class B	Locked Rotor Amps	VTS
Enclosure	IP 55(min)						
Starter	DOL						

Approx. WT. Pump & Base

Motor Turbine

NOTES:

1) NPSH(A) at Pump suction Nozzle

2) VTA: Vendor to Advise , VTC = Vendor To Confirm

3) Temperature rise shall be adjusted for ambient temperature of 122 °F

4) Vendor shall comply all requirements of pumps and its acessories according to the ANSI.

5) VTS = Vendor To Specify

6) Motor to be selected for end of curve operation

7) Pump shall be suitable for suction lift of 12 Ft.