Owner : کارفرما : Iran Water & Power Resources Development Co.	**Project :** **JAVEH PUMP STATION DESIGN , CONSTRUCTION, PURCHASING INSTALLATION & OPERATION**	**Contractor :** پیمانکار: مهندسین مشاور گاماسیاب Gamasiab Consulting Engineers Co. شرکت ساختمانی معتبر	
Consultant: مشاور: مشانیر Aban Pazhouh Consulting Engineers Co.	طراحی ، اجرا ، خرید، نصب ، راه اندازی و بهره برداری از ایستگاه های پمپاژ ژاوه	tara engineering co. شرکت مهندسی تارا	
شماره مدرک JPS-D-ME-DS-18.1	INTAKE STATION PUMPS MECHANICAL DATA SHEET & SPECIFICATION	REV-00	شماره صفحه: 1 از 3

DOCUMENT TITLE:

مشخصات و برگه های اطلاعاتی پمپ های ایستگاه پمپاژ شناور

INTAKE STATION PUMPS MECHANICAL DATA SHEET & SPECIFICATION

REVISION	DESCRIPTION	DATE	PREAPARED BY	CHECKED BY	APPROVED BY
00	ISSUE FOR COMMENT	1397.11.16	M.QOBADI	N.HOSEINZADEH	M.MADDAH

OWNER:	PROJECT:	CONTRACTOR:
Iran Water & Power Resources Development Co.	JAVEH PUMP STATION DESIGN, CONSTRUCTION, PURCHASING, INSTALLATION & OPERATION طراحی ، اجرا ، خرید، نصب ، راه اندازی و بهره برداری از ایستگاه های پمپاژ ژاوه	مهندسین مشاور گاماسیاب Gamasiab Consulting Engineers Co. شرکت ساختمانی معتبر tara engineering co. شرکت مهندسی تارا
CONSULTANT: مشانیر Aban Pazhouh Consulting Engineers Co.		
DOC. NO. : JPS-D-ME-DS-18.1	DOC. TITLE: INTAKE PUMP MECHANICAL DATA SHEET	PAGE NO. : 1 OF 2

1	**PROCESS AND OPERATING CONDITIONS**					
2	**Liquid**	Raw water Form Intake Dam		**Capacity (Each pump)**	1500	lit/s
3	**Density**	0.977 -0.981	Kg/dm^3	**Max./ Min. Capacity (Each pump)**	450 / 2200	lit/s
4	**PH value**	6.5-8	-	**Static Head**	28	m
5	**Viscosity**	1.3	cp	**NPSH Available**	12	m
6	**Solids content**	100	ppm	**NPSH Required**	8.5	m
7	**Particle size**	0.5	mm	**NPSH 3 %**	-	m
8	**Vapour pressure**	0.13-0.43	m	**Differential Pressure**	35	m
9	**Liquid Temperature (Min/Norm/Max)**	5/20/30	°C	**Pump Service**	continuous	-
10	**Indoor Temperature (Min/Max)**	-5 / 40	°C	**Pump Operation**	Parallel	-
11	**Ambient Temperature(Min/Max)**	-15 / 45 (Outdoor)		**Location**	Indoor	-
12	**Elevation from Sea Level**	1630		**Relative Humidity**	17/83	%
13	**Ambient Conditions**	Dusty		**Solid Size**	≤ 200	mm
14	**TECHNICAL SPECIFICATION**					
15	**Pump Type**	Centerifugal - Submersible		**Motor General Specification:**		
16	**Quantity**	4+2		**Motor Rated Power**	700 kw	
17	**Manufacturer**	Termomechanica - Italy		**Motor Type**	8 pole submersible Squirrel Cage	
18	**Model**	-		**Motor Rated Voltage**	6 KV	
19	**Arrangement**	Vertical		**Frequency**	50 HZ	
20	**Installation Type**	Auto Coupling		**Motor Speed**	760 rpm	
21	**Impeller Type**	Non-Block 3 channel type		**Motor Insulation Class**	H	
22	**Impeller Diam. Min/Max**	-		**Motor IP**	68	
23	**Impeller Diam. Designed**	800 mm				
24	**Shaft Diameter**					
25	**No. of Start Per Hours:**	6				
26	**Discharge Size /standard**	600 mm		**Bearing General Specification:**		
27	**Pump Speed**	740 RPM		**Bearing Type-axial**		
28	**Required Power**	605.3 kw		**Bearing Type-radial**		
29	**Direction of rotation**	One Side		**Bearing Lubrication/Lub Type**		
30	**Pump Weight**	9100 Ton				
31	**ACCESSORIES**					
32	**Name Plate Including TAG**	Required		**Water Leakage Sensor**	Required	
33	**Transport packing**	Required		**Over Heat Sensor**	Required	
34	**Oil Leakage Sensor**	Required		**Recirculation Oil Cooling jacket**	Required	
35	**Power & Contol Cable**	Required/ 1*60 meter power /2*60 control cable		**Lifting Chain**	Required/ 40 meter	

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36	**MATERIAL SPECIFICATION**			
37	**Casing**	Cast Iron	**Lifting Chain**	Stainless steel
38	**Shaft**	AISI431	**Flanges**	Cast Iron - ASTM A216 WCB
39	**Impeller**	Stainless steel AISI329 (Duplex s.s)	**Auxiliary piping**	Carbon Steel
40	**Impeller wear ring**	Stainless steel	**Bolts and nuts**	Carbon Steel
41	**Bearing**	SKF		
42	**Motor Casing**	Carbon steel Q235		
43	**Auto Coupling Device**	Ductile Cast Iron QTC500		
44	**PERFORMANCE DATA**			
45	**Pump Efficiency (In working point)**	85.00%	**Minimum flow for continous operation**	-
46	**Pump Efficiency (Min/Max)**	78.3% -83.4%	**Minimum flow for starting**	-
47	**Pump Absorbed Power**	605.3 kw	**Maximum Head**	53 m
48	**Drive Rated Power**	700 kw	**Shut-off Head**	53 m
49	**CONSTRUCTION FEATURES**			
50	**Casing Design**	MAWP 10 Bar	**Bearing Type**	Rolling Bearing
51	**Design Pressure**		**Bearing working hours**	100,000 Hours
52	**Test Pressure**	MAWP 10 Bar	**Coupling Type**	Auto coupling
53	**Shaft Sealing**	Mechanical Seal	**Cooling Jacket Type**	Oil Type
54	**Seal Manufacturer & Model**	By Vendor	**Wear ring Type**	
55	**TEST & CERTIFICATES**			
56	**Performance**	Witness +Certificated	**Material**	UW +Certificated
57	**Vibration**	Witness +Certificated	**Hydrostatic**	UW +Certificated
58	**NPSH**	Witness +Certificated	**Bearing Temp. Rise**	UW +Certificated
59	**Shop**	UW +Certificated	**Dimensional**	UW +Certificated
60	Note 1 :Performance Test according to ISO9906 Class 1B is done for one pump.			