

CONTRACT NO.

**GUJARAT WATER INFRASTRUCTURE LIMITED
GANDHINAGAR**



Bid Documents for Supply, Installation, Testing & Commissioning of 700 KW, 989 RPM, 6.6 KV HT 3-Phase Induction Motor compatible to existing base frame of Wilo make HSCF Pump installation with suitable Coupling & other required accessories including Insurance, Transportation, Loading, Unloading, Inspection charges etc. complete for NC-6, Khirai Pumping Station, Tal-Maliya, Dist-Morbi

Rs. 37,98,020.00

**VOLUME - IV
BID DRAWINGS**

**Chief General Manager (Project)
Gujarat Water Infrastructure Limited
1st floor Block - 1, Jivraj Mehta Bhavan, Sector-10 Gandhinagar,
Gujarat - 382015**

Work of Supply, Installation, Testing & Commissioning of 700 KW, 989 RPM, 6.6 KV HT 3-Phase Induction Motor compatible to existing base frame of Wilo make HSCF Pump installation with suitable Coupling & other required accessories including Insurance, Transportation, Loading, Unloading, Inspection charges etc. complete for NC-6, Khirai Pumping Station, Tal-Maliya, Dist-Morbi.

SR NO	DRAWING NAME
<u>VOLUME - IV BID DRAWINGS</u>	
1	Drawing & Datasheet of existing WILLO make HSCF Pumps

Client: Gujarat Water Infrastructure Ltd.
 Contractor: Asiatic Traders
 Project: NC-6 (Maliya to Timbdi)



TECHNICAL DATASHEET				
SR. NO.	DESCRIPTION	UNIT	MANUFACTURER'S DATA	
1	Pump Type		HSCF	
2	Total no of pump	Nos	10 (8 Main + 2 Spare)	
3	Pump Model		20-24 MEDI DV	
4	Number of Stages	Nos	1	
5	Temperature	Deg.C	45	
6	Liquid Handled		Raw Water	
7	Total duration of operation		24 Hours (Continuous)	
8	Zone of operation		Safe Area	
9	Specific Gravity	Kg/cm2	1.00	
10	Viscosity	CST	NA	
11	Frequency	Hz	AT 50 Hz	AT 49 Hz
12	Capacity	M3/Hr	3122.45	3060.0
13	Total Head	MTR	63.52	61.0
14	Shut off Head	MTR	76.0	73.0
15	NPSH (R)	MTR	5.5	5.5
16	Efficiency	%	88.0	88.0
17	Power absorbed	KW	613.74	577.65
18	Existing Motor Rating	KW	700.0	700.0
19	Speed	RPM	989.0	969.0
20	Suction	MM	600	
21	Delivery	MM	500	
22	Bearing Life	HRS	40000	
23	GD^2 Value	KG-M^2	87.85	
24	Noise level	dBA	85 dBA at a distance of 1.86 meters	
25	Velocity of vibration	mm/sec	As Per HIS	
26	Nozzle orientation-Suction		Side suction	
27	Nozzle orientation-Discharge		Side discharge	
28	Direction of rotation		Anti Clock wise from DE	
29	Casing		Split Casing Double Volute Type	
30	Impeller Type		Double Suction Closed Type	
31	Sealing arrangement		Gland Packing	
32	Bearings Type		Antifriction	

APPROVED

Senior Manager
GWIL, Morbi.

Approved

Chief General Manager (P)
Gujarat Water Infrastructure Ltd.
General Manager



Client: Gujarat Water Infrastructure Ltd.
 Contractor: Asiatic Traders
 Project: NC-6 (Maliya to Timbdi)

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Mather+Platt
 A WILLO BRAND

EXISTING PRIME MOVER PARTICULARS			
33	Motor Rating	KW	700
34	Type Of Prime Mover		Squirrel cage induction motor
35	Supply Condition		6.6 KV 3- ϕ , 50 Hz
36	Full Load Speed	RPM	1488
37	Make Of Motor		BHEL
38	Mounting		Horizontal (B3)
39	Enclosure		TETV
MATERIAL OF CONSTRUCTION			
40	Casing		Cast Steel : ASTM A216 : Grade WCB
41	Impeller		Stainless Steel: ASTM A743 CF8M
42	Shaft		Stainless Steel: ASTM A276 Gr. 431
43	Shaft Sleeve		Stainless Steel : ASTM A276 Gr. 410H
44	Casing Rings		Stainless Steel : ASTM A743 CA15
45	Impeller Ring		Stainless Steel : ASTM A743 CA15
46	Gland		Bronze :IS 318 Gr. LTB2
47	Base Frame		MS Fabricated
48	Rest of Parts		Please refer C.S. Drawing
SCOPE OF SUPPLY			
49	Pump		YES
50	Motor		NO
51	Base Frame		YES
52	Coupling and coupling guard		YES
53	Foundation bolts		YES
54	Companion flanges		YES

GP

Senior Manager
 GWIL, Morbi.

THE APPROVAL OF THIS DRAWING DOES NOT ABSOLVE THE CONTRACTOR TOWARDS THE STIPULATIONS OF THE CONTRACTOR TOWARDS THE CORRECTNESS OF DRAWINGS & DESIGNS. ALL THE CONTRACTUAL PROVISIONS AND SPECIFICATIONS NEED TO BE MANDATORILY ADHERED TO

APPROVED

NOTE: There shall be difference of 50 BHN hardness between casing & Impeller Ring.

Approved

Chief General Manager (P)
 Gujarat Water Infrastructure Ltd.
 Gandhinagar









