

कार्यकारी अभियंता ताकारी यांत्रिकी व विद्युत विभाग वारणाली, सांगली-४१६४१५ यांचे कार्यालय दूरध्वनी क्र.०२३३/२३०२९३२

e-mail: ee.takarimech@gmail.com



दिनांक- १५.५.२०२५

जा.क्र.तायांविवि/सांगली/तांशा-१/८३९/सन २०२५

प्रति.

मा.अधीक्षक अभियंता, यांत्रिकी मंडळ, कोल्हापूर

विषय - म्हैसाळ उपसा सिंचन योजनेच्या विविध टप्प्यावरील पंपांची बाऊल असेंब्ली बदलणेसाठीची दरपत्रके मार्गावणेसाठीची बजेटरी ऑफर प्रसिध्दीस देणेबाबत

उपरोक्त विषयास अनुसरून सिवनय सादर करण्यात येते की, या विभागामार्फत सांगली पाटबंधारे मंडळ, सांगली यांचेकडील विविध उपसा सिंचन योजनांच्या परिचलन, देखभाल-दुरूस्तीची कामे केली जातात. सध्या म्हैसाळ उपसा सिंचन योजनेच्या पंपांची कार्यक्षमता कमी झालेने त्यांची दुरूस्ती प्रस्तावित आहे.

त्यास अनुसरून म्हैसाळ उपसा सिंचन योजनेच्या पंपांची कार्यक्षमता वाढविणेच्या दृष्टीने पंपांच्या बाऊल असेंब्ली बदलणे प्रस्तावित आहे. या कामासाठीची दरपत्रके मागविणेसाठीची बजेटरी ऑफर नोटीस मंडळ कायालर्यामार्फत प्रसिध्दीस देणेसाठी सोबत सादर करणेत येत आहे. तरी सोबत जोडलेल्या अनुसूचीप्रमाणे बजेटरी ऑफर नोटीस प्रसिध्दीस देण्यात यावी, ही विनंती.

सोबत- बजेटरी ऑफर नोटीस

्आ.ना.मार) कार्यकारी अभियंता ताकारी यांत्रिकी व विद्युत विभाग

वारणाली-सांगली

प्रत- उप अभियंता, ताकारी यांत्रिकी उप विभाग क्र.१, सांगली यांना माहितीसाठी रवाना.

Government of Maharashtra

Water Resources Department

Superintending Engineer, Mechanical Circle, Kolhapur

Budgetary offer for the following work (*Non DSR items*) are invited by the Executive Engineer, Takari Mechanical and Electrical Division, Sangli on behalf of Governor of Maharashtra for estimation purpose from the reputed Manufacturers/Suppliers/Job Workers.

The Government of Maharashtra, Water Resources Department, has undertaken the various Lift Irrigation Schemes. In context to this, we propose to refurbish the Kirloskar VT pumps by replacing the bowl assembly with new components as mentioned in schedule attached. The details and short specifications of work are available on the website mentioned below.

It is requested to send the budgetary offer mentioning item wise and complete rate with rate analysis for the same. The rates will cover all taxes and duties applicable. The offer should reach this office on or before <u>04.06.2025</u> by <u>e-mail, post or courier</u>. Further it is requested to forward relevant Technical literature, brochures and your comments if any.

Sr. No.	Name of work	Remarks
1	Refurbishment of Kirloskar VT pumps at Mhaisal LIS Stage 3 by replacing the bowl assembly with new components to restore the pump efficiency: - Make: Kirloskar - Pump Type: Vertical Turbine Pump - HP: 652 - Head: 22.12 meters - Capacity/Discharge per pump: 1.972 m3/sec - Power: 536 kW - RPM: 500	
2	Refurbishment of Kirloskar VT pumps at Mhaisal LIS Stage 4 by replacing the bowl assembly with new components to restore the pump efficiency: - Make: Kirloskar - Pump Type: Vertical Turbine Pump - HP: 960 - Head: 39 meters - Capacity/Discharge per pump: 1.644 m3/sec - Power: 788 kW - RPM: 750	Please refer Website for detailed Schedule
3	Refurbishment of Kirloskar VT pumps at Mhaisal LIS Stage 5 by replacing the bowl assembly with new components to restore the pump efficiency: - Make: Kirloskar - Pump Type: Vertical Turbine Pump - HP: 772 - Head: 23 meters - Capacity/Discharge per pump: 2.240 m3/sec - Power: 634 kW - RPM: 500	
Note:	Please quote your rates for each item separately inclusive of material,	machinery and labour

and transportation charges etc. mentioning GST separately

These rates are required for the purpose of framing of working estimates and hence the urgency. This Budgetary offer is also available on website www.mahayantriki.org.

Manufacturers/Suppliers/Job Workers is requested to act in given time frame.

No. TMED/Sangli/TS-1/<u>839</u>/of 2025 Office of the Executive Engineer, Takari Mechanical and Electrical Division, Sangli - 416415

Telephone No.: 0233/2302932 e-mail: ee.takarimech@gmail.com

Date: 15.05.2025

(A.N.More)
Executive Engineer
Takari Mechanical and Electrical Division
Sangli

Copy submitted to the Superintending Engineer, Mechanical Circle, Kolhapur for favor of information please.

Enclosure: Schedule

Copy forwarded to Deputy Engineer, Takari Mechanical Sub Division No.1, Sangli.

Enclosure: Schedule

SCHEDULE-1

Budgetary Offer for Refurbishment of Kirloskar make VT Pumps at Mhaisal LIS Stage-3

Sr. No.	Description	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
1	Refurbishment of Kirloskar make VT pumps at Mhaisal Stage-3 of following duties which includes replacement of full bowl assembly, transmission shafts with sleeves, muff couplings, transmission bearing, thrust bearing etc. (The detailed spare list is as per Annexure-1) Pump Details: - Make: Kirloskar - Pump Type: Vertical Turbine Pump - HP: 652 - Head: 22.12 meters - Capacity/Discharge per pump: 1.972 m3/sec - Power: 536 kW - RPM: 500 Our scope of work includes:	4	No.		
	Dis-assembly and Inspection: Careful dis-assembly of the pump to inspect and identify worn-out parts	1	Job		
	2. Transportation	1	Job		
	3. Supply and Installation of New Bowl Assembly: Supply and installation of new bowl assembly components, including: i) Impeller ii) Diffuser iii) Wear rings iv) Shaft sleeve and v) Other necessary components	1	Job		
	4. Coro coating to pump components	1	Job		
	5. Reassembly and Testing: Reassembly of the pump and testing to ensure the pump efficiency at least 85% (Designed pump efficiency is 91%)	1	Job		
	6. Commissioning: Commissioning of the refurbished pump to ensure smooth operation at work site	1	Job		
	7. Any other costs (specify)	1	Job		
2	HT Motor: Supply, installation and commissioning at site of works and testing to full capacity, Solid shaft, squirrel cage induction motors CACW type 'F' class installation suitable for operation on voltage mentioned below 3 phase 50 Hz energy efficient with voltage variation of +10% and frequency variation + 3% suitable for direct coupling with pumps under item No.1 as per latest revision of IS 325, IS 4722 and other relevant IS specifications. Suitable for following duties, specifications and confirming to detailed specifications: Operating voltage: 6.6 kV Minimum (KW) rating of motor: 634 kW RPM: 500	1	No.		
	Total cost Rs.				
		Add G	ST @		
			Gros	s Total Rs.	

<u>Terms and Conditions:</u>
1. Work is to be executed at Mhaisal LIS Stage 3 Tal - Miraj, Dist - Sangli.

- 2. The rates quoted should be item wise and exclusive of GST.
- 3. The material should be as per relevant IS specification.
- 4. This budgetary offer is called for estimation purpose only.
- 5. Please mention approximate weight of bowl assembly.
- 6. Please submit performance curve with offer for given duties.

(A.N.More)

Executive Engineer
Takari Mechanical and Electrical Division
Sangli

<u>SCHEDULE-2</u> Budgetary Offer for Refurbishment of Kirloskar make VT Pumps at Mhaisal LIS Stage-4

Sr. No.	Description	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
1	Refurbishment of Kirloskar make VT pumps at Mhaisal Stage-4 of following duties which includes replacement of full bowl assembly, transmission shafts with sleeves, muff couplings, transmission bearing, thrust bearing etc. (The detailed spare list is as per Annexure-1) Pump Details: - Make: Kirloskar - Pump Type: Vertical Turbine Pump - HP: 960 - Head: 39 meters - Capacity/Discharge per pump: 1.644 m3/sec - Power: 788 kW - RPM: 750 Our scope of work includes:	4	No.		
	Dis-assembly and Inspection: Careful dis-assembly of the pump to inspect and identify worn-out parts	1	Job		
	2. Transportation	1	Job		
	 Supply and Installation of New Bowl Assembly: Supply and installation of new bowl assembly components, including: Impeller ii) Diffuser iii) Wear rings Shaft sleeve and v) Other necessary components 	1	Job		
	4. Coro coating to pump components	1	Job		
	5. Reassembly and Testing: Reassembly of the pump and testing to ensure the pump efficiency at least 85% (Designed pump efficiency is 91%)	1	Job		
	6. Commissioning: Commissioning of the refurbished pump to ensure smooth operation at work site	1	Job		
	7. Any other costs (specify)	1	Job		
	Total cost Rs.				
	Add GST @ %				
			Gros	s Total Rs.	

Terms and Conditions:

- 1. Work is to be executed at Mhaisal LIS Stage 4 Tal Miraj, Dist Sangli.
- 2. The rates quoted should be item wise and exclusive of GST.
- 3. The material should be as per relevant IS specification.
- 4. This budgetary offer is called for estimation purpose only.
- 5. Please mention approximate weight of bowl assembly.
- 6. Please submit performance curve with offer for given duties.

Executive Engineer
Takari Mechanical and Electrical Division
Sangli

(A.N.More)

SCHEDULE-3

Budgetary Offer for Refurbishment of Kirloskar make VT Pumps at Mhaisal LIS Stage-5

Sr. No.	Description	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
1	Refurbishment of Kirloskar make VT pumps at Mhaisal Stage-5 of following duties which includes replacement of full bowl assembly, transmission shafts with sleeves, muff couplings, transmission bearing, thrust bearing etc. (The detailed spare list is as per Annexure-1) Pump Details: - Make: Kirloskar - Pump Type: Vertical Turbine Pump - HP: 772 - Head: 23 meters - Capacity/Discharge per pump: 2.240 m3/sec - Power: 634 kW - RPM: 500 Our scope of work includes:	4	No.		
	Dis-assembly and Inspection: Careful dis-assembly of the pump to inspect and identify worn-out parts	1	Job		
	2. Transportation	1	Job		
	3. Supply and Installation of New Bowl Assembly: Supply and installation of new bowl assembly components, including:i) Impeller ii) Diffuser iii) Wear ringsiv) Shaft sleeve and v) Other necessary components	1	Job		
	4. Coro coating to pump components	1	Job		
	5. Reassembly and Testing: Reassembly of the pump and testing to ensure the pump efficiency at least 85% (Designed pump efficiency is 91%)	1	Job		
	6. Commissioning: Commissioning of the refurbished pump to ensure smooth operation at work site	1	Job		
	7. Any other costs (specify)	1	Job		
			To	tal cost Rs.	
		Add G	ST @	%	
			Gros	s Total Rs.	

Terms and Conditions:

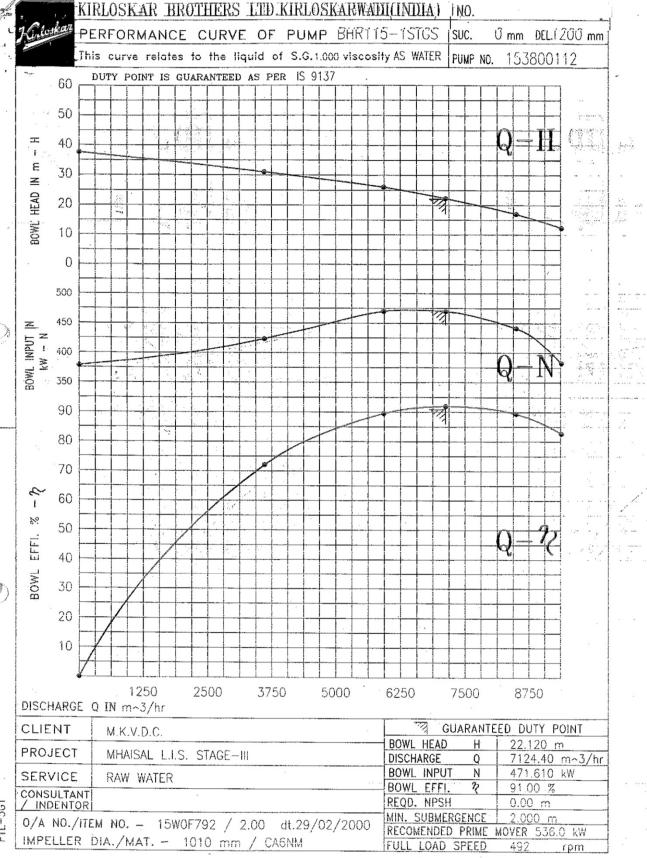
- 1. Work is to be executed at Mhaisal LIS Stage-5 Tal Miraj, Dist Sangli.
- 2. The rates quoted should be item wise and exclusive of GST.
- 3. The material should be as per relevant IS specification.
- 4. This budgetary offer is called for estimation purpose only.
- 5. Please mention approximate weight of bowl assembly.
- 6. Please submit performance curve with offer for given duties.

(A.N.More)

Executive Engineer
Takari Mechanical and Electrical Division
Sangli

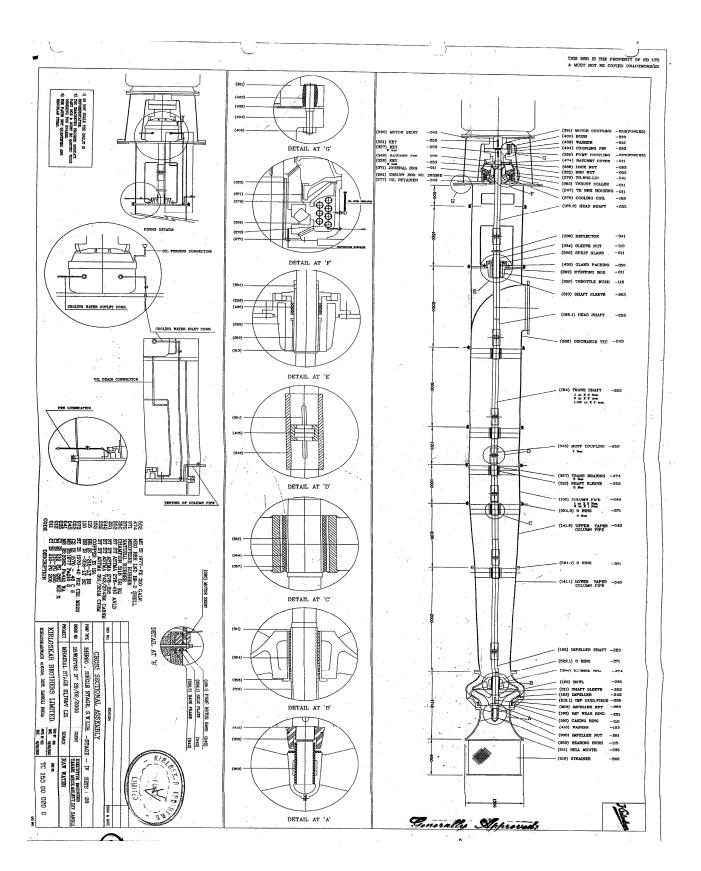
Annex 1
Refurbishment of pumps @ Mhaisal stage 3.

Sr. No.	Work description	Qty / pump
		Stage 3
1	Dismantling of existing pump	
2	Manufacture & supply following spares	
а	Taper Pipe	1
b	Flange pair	1
С	Journal brg	1
d	Distance sleeve	1
е	Bowl	1
f	Transmission Shaft	1
g	Impeller shaft	1
h	Shaft sleeve	6
i	Muff coupling	6
j	Gland sleeve	1
k	Impeller sleeve	1
l	Key	9
m	Impeller wear ring	1
n	Impeller nut, lock nut tc	1
0	Fastners	1200 Kg
р	Impeller	1
q	Head Shaft	1
r	Transmission bearing	6
s	Bearing bush	1
t	Bowl bearing	1
u	Casing wear ring	1
V	Sleeve nut	1
3	Factory test of pump with new bowl unit	
4	Reconditioning of all other spares & painting to column pipes internally & externally	
5	Assembling pump & give test trial	
6	Carry out performance test on site	



Annex 1
Refurbishment of pumps @ Mhaisal stage 4.

Sr. No.	Work description	Qty / pump
		Stage 4
1	Dismantling of existing pump	
2	Manufacture & supply following spares	
а	Taper Pipe	1
b	Flange pair	1
С	Journal brg	1
d	Distance sleeve	1
е	Bowl	1
f	Transmission Shaft	1
g	Impeller shaft	1
h	Shaft sleeve	7
i	Muff coupling	7
j	Gland sleeve	1
k	Impeller sleeve	1
I	Key	11
m	Impeller wear ring	1
n	Impeller nut, lock nut tc	1
0	Fastners	1000 Kg
р	Impeller	1
q	Head Shaft	1
r	Transmission bearing	7
S	Bearing bush	1
t	Bowl bearing	1
u	Casing wear ring	1
٧	Sleeve nut	1
3	Factory test of pump with new bowl unit	
4	Reconditioning of all other spares & painting to column pipes internally & externally	
5	Assembling pump & give test trial	
6	Carry out performance test on site	





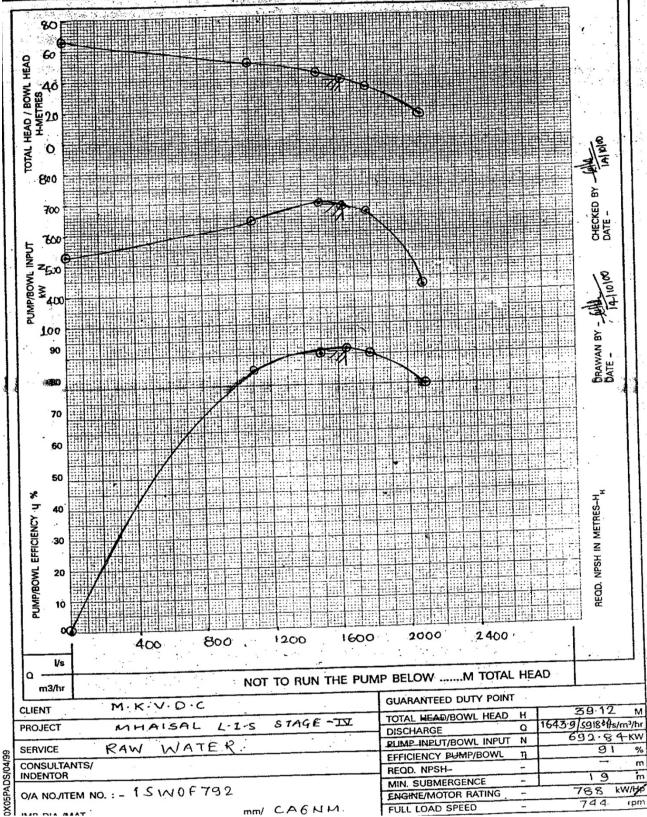
PERFORMANCE CURVE OF PUMP TYPE BHR 90-15TG

& viscosity

Suc.mm | Del.1000mm.

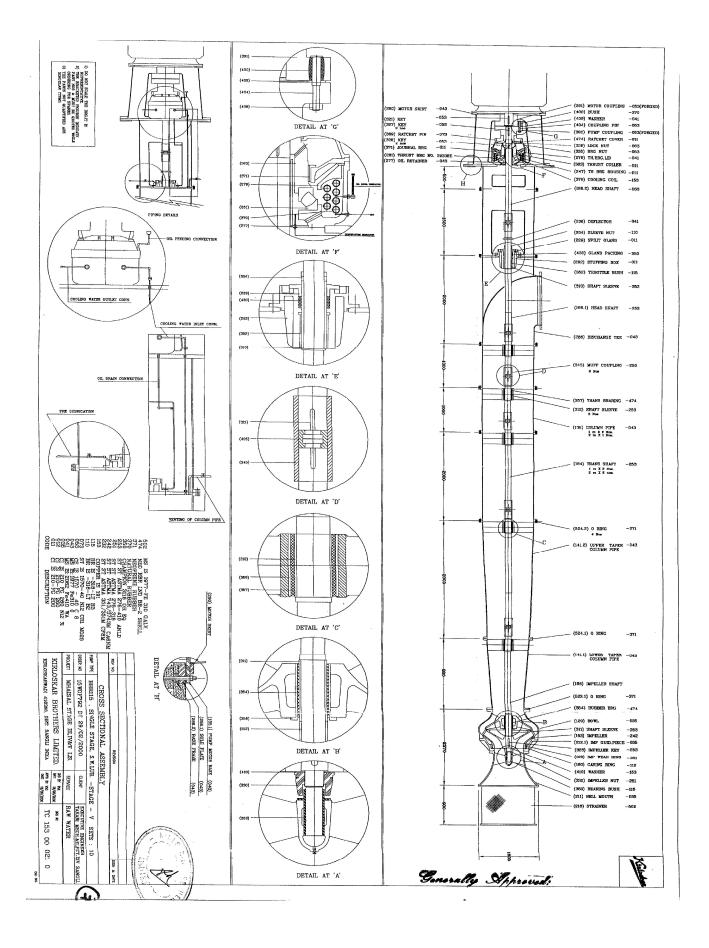
This curve relates to the liquid of S.G. 1.0

Pump No. 153740001



Annex 1
Refurbishment of pumps @ Mhaisal stage 5.

Sr. No.	Work description	Qty / pump
		Stage 5
1	Dismantling of existing pump	
2	Manufacture & supply following spares	
а	Taper Pipe	1
b	Flange pair	1
С	Journal brg	1
d	Distance sleeve	1
е	Bowl	1
f	Transmission Shaft	1
g	Impeller shaft	1
h	Shaft sleeve	6
i	Muff coupling	6
j	Gland sleeve	1
k	Impeller sleeve	1
l	Key	9
m	Impeller wear ring	1
n	Impeller nut, lock nut tc	1
0	Fastners	1200 Kg
р	Impeller	1
q	Head Shaft	1
r	Transmission bearing	6
s	Bearing bush	1
t	Bowl bearing	1
u	Casing wear ring	1
٧	Sleeve nut	1
3	Factory test of pump with new bowl unit	
4	Reconditioning of all other spares & painting to column pipes internally & externally	
5	Assembling pump & give test trial	
6	Carry out performance test on site	



KIRLOSKAR BROTHERS LTD.KIRLOSKARWADI(INDIA) NO. PERFORMANCE CURVE OF PUMP BHR115 SUC. 0 mm DEL.1200 mm This curve relates to the liquid of S.G.1.000 viscosity AS WATER PUMP NO. 153800119 DUTY POINT IS GUARANTEED AS PER IS 9137 60 50 40 . E 30 Z HEAD 20 BOWL 10 0 700 600 BOWL INPUT I 500 400 90 80 70 60 BOWL EFFI. % 50 40 30 20 10 1600 3200 4800 6400 0008 9600 11200 DISCHARGE Q IN m-3/hr GUARANTEED DUTY POINT CLIENT M.K.V.D.C. **BOWL HEAD** H 23.190 m PROJECT MHAISĄL L.I.S. STAGE-V 8064.00 m-3/hr DISCHARGE Q **BOWL INPUT** N 559.640 kW SERVICE RAW WATER r BOWL EFFI. 91.00 % CONSULTANT / INDENTOR REQD. NPSH 0.00 m MIN. SUBMERGENCE 2.000 m O/A NO./ITEM NO. - 15WOF792 / 47.00 dt.29/02/2000 RECOMENDED PRIME MOVER 634.0 kW IMPELLER DIA./MAT. mm / CA6NM FULL LOAD SPEED 492 rpm