

**Mechanical Organization, Water Resource Department, Maharashtra**

Rates for the Overhauling, repair & spare parts for pumps as shown below are invited from contractors having experience of the said work for estimate purpose. Please submit the rate to The Executive Engineer, Takari Mechanical & Electrical Division, Warnali, Sangli 416415 Maharashtra within 10 days from date of publishing.

ITEM NO	DISCRIPTION OF ITEM	UNIT	RATE
<b>Consumables &amp; minor spares</b>			
<b>A.1.1</b>	<b>Gland packing</b>		
	8 mm	Kg	
	10 mm	Kg	
	12 mm	Kg	
	16 mm	Kg	
	18 mm	Kg	
	20 mm	Kg	
	22 mm	Kg	
	24 mm	Kg	
	26 mm	Kg	
<b>A.1.2</b>	<b>Oil level indicator</b>		
<b>A.1.3</b>	<b>Cooling system piping work</b>		
	Ø 50 mm ball valve	No.	
	Ø 40 mm ball valve	No.	
	Ø 20 mm ball valve	No.	
	Ø 100 mm, 8 mm thick MS pipe	Rmt	
	Ø 100 mm, 6 mm thick MS pipe	Rmt	
	Ø 100 mm, 4 mm thick MS pipe	Rmt	
	Ø 150 mm, 8 mm thick MS pipe	Rmt	
	Ø 150 mm, 6 mm thick MS pipe	Rmt	
	Ø 150 mm, 4 mm thick MS pipe	Rmt	
	Ø 200 mm, 8 mm thick MS pipe	Rmt	
	Ø 200 mm, 6 mm thick MS pipe	Rmt	
	Ø 200 mm, 4 mm thick MS pipe	Rmt	
	Ø 50 mm, 6 mm thick MS pipe	Rmt	
	Ø 50 mm, 6 mm thick MS pipe	Rmt	
	Ø 20 mm, 6 mm thick MS pipe	Rmt	
	200 mm elbow	No.	
	100 mm elbow	No.	
	150 mm elbow	No.	
	50 mm elbow	No.	
	50 mm elbow	No.	
	20 mm elbow	No.	
<b>A.1.4</b>	<b>Flexible coupling for HSC pump</b>		
	up to 30 hp	No.	
	31 hp to 50 hp	No.	
	51 hp to 70 hp	No.	
	71 hp to 100 hp	No.	

ITEM NO	DISCRIPTION OF ITEM	UNIT	RATE
<b>A.1.5</b>	<b>Pressure guage with necessary piping</b>		
	Bourden type upto 100 kgf/cm2 of 150 mm dia	No.	
	Bourden type oil filled upto 100 kgf/cm2 of 150 mm dia	No.	
	Presure transducer with display unit	No.	
<b>A.1.6</b>	<b>Coupling bolt with rubber bush</b>		
	pump hp up to 100 hp	No.	
	101 hp to 250 hp	No.	
	251 hp to 500 hp	No.	
	501 hp to 750 hp	No.	
	751 to 1000 hp	No.	
	1001 hp to 1500 hp	No.	
	1501 hp to 2000 hp	No.	
	2001 hp to 2500 hp	No.	
<b>A.1.7</b>	<b>M.S. fastners</b>	Kg	
<b>A.1.8</b>	<b>S.S. fastners</b>	Kg	
<b>A.1.9</b>	<b>Cotton waste</b>	Kg	
<b>A.1.10</b>	<b>Embry paper</b>	sq mm	
<b>A.1.11</b>	<b>Teflon packing</b>	m	

ITEM NO	DISCRIPTION OF ITEM	UNIT	RATE
<b>SPARES FOR VERTICAL TURBINE PUMPS</b>			
<b>1</b>	<b>Transmission bearing</b> (Material spec.Neo. Rubber LND BR 2 Shell)		
	shaft dia up to 80 mm	kg	
	shaft dia above 80 mm	kg	
<b>2</b>	<b>Muff coupling</b> (Material spec.ST ASTM 276-410 ANLD)		
	shaft dia up to 80 mm	kg	
	shaft dia above 80 mm	kg	
<b>3</b>	<b>Split ring</b> (Material spec.ST ASTM 276-410 ANLD)		
	shaft dia up to 80 mm	kg	
	shaft dia above 80 mm	kg	
<b>4</b>	<b>Shaft sleeve</b> (Material spec.ST ASTM 276-410 ANLD)		
	shaft dia up to 80 mm	kg	
	shaft dia above 80 mm	kg	
<b>5</b>	<b>Bowl bearing</b> (Material spec.Neo. Rubber LND BR 2 Shell)		
	shaft dia up to 80 mm	kg	
	shaft dia above 80 mm	kg	
<b>6</b>	<b>Ratchet Housing</b> (Material spec.CI IS 210 FG200)	kg	
<b>7</b>	<b>Bearing Housing</b> (Material spec.CI IS 210 FG200)	kg	
<b>8</b>	<b>Ratchet cover</b> (Material spec.CI IS 210 FG200)	kg	
<b>9</b>	<b>Thrust bearing holder OR Thrust collar</b> (Material spec.CI IS 210 FG200)	kg	
<b>10</b>	<b>Transmission shaft</b> (Material spec.ST ASTM 276-410 ANLD)	kg	
<b>11</b>	<b>Impeller shaft</b> (Material spec.ST ASTM 276-410 ANLD)	kg	
<b>12</b>	<b>Head shaft</b> (Material spec.CS IS 1710 - 40C8)	kg	
<b>13</b>	<b>Bell mouth</b> (Material spec.CI IS 210 FG260 Ni 2%)	kg	
<b>14</b>	<b>Casing ring</b> (Material spec.BR IS 318 LT B2)	kg	
<b>15</b>	<b>Wearing ring</b> (Material spec.ST ASTM 276-316)	kg	
<b>16</b>	<b>Column pipe/ suction pipe</b> (Material spec.MS IS 1977 Fe310)	Kg	
<b>17</b>	<b>Taper column pipe</b> (Material spec.MS IS 1977 Fe310)	Kg	
<b>18</b>	<b>Guide spider fabricated</b> (Material spec.MS IS 1977 Fe310)	Kg	
<b>19</b>	<b>Guide spider</b> (Material spec.CI IS 210 FG200)	Kg	
<b>20</b>	<b>Enclosed tube for forced water lubricated pump</b>	Kg	
<b>21</b>	<b>Strainer</b> (Material spec.MS IS 1977 Fe 310 Galvnised)	Kg	
<b>22</b>	<b>SS KEY</b> (Material spec.ST ASTM 276-410 ANLD)	Kg	
<b>23</b>	<b>Thrust block tie rod</b> (Material spec. EN8)	Kg	
<b>24</b>	<b>Check &amp; lock nut</b> (Material spec.CS IS 1710 - 40C8)	Kg	
<b>25</b>	<b>Bowl bush</b> (Material spec.BR IS 318 LT B3)	kg	

ITEM NO	DISCRIPTION OF ITEM	UNIT	RATE
<b>Pump repair work</b>			
Sr. No.	Item	Unit	
O1	Job work of overhauling of V.T. Pumps as per manufacturers instruction manual with all tools, tackles etc. This job includes labour charges, consumables like O - ring, shims, gland packing, sundry cleaning material etc. This job includes removal motor from pump, dismantling of all sub assemblies such as cooling pipes, bearing housing, stuffing box, discharge tee,muff couplings, shafts, column pipes, bowl assembly,bell mouth, strainer etc. Reconditioning of all parts, inspection of all parts & replace these parts as per instructions of concerned authority (spares cost excluded) straightthening of shafts & refitting of all parts & sub assemblies with motor proper alignment. test & trial for 72 hrs. etc complete <b>(Up to 6 Joints)</b>		
	column pipe dia up to 500 mm	Job	
	column pipe dia 501 to 1000 mm	Job	
	column pipe dia 1001 to 1500 mm	Job	
	column pipe dia 1501 to 2000 mm	Job	
	<b>Additional Joint above 6 joints</b>		
	column pipe dia up to 500 mm	Joint	
	column pipe dia 501 to 1000 mm	Joint	
	column pipe dia 1001 to 1500 mm	Joint	
	column pipe dia 1501 to 2000 mm	Joint	
2	Job work of replacement of damaged thrust bearing of V.T. pumps as per manufacturers instruction manual with all tools, tackles, consumables such as gland packing etc . This job includes removing of motor from pump, dismatling of bearing housing assembly, reconditioning of all parts, refitting bearing housing assembly, motor with alignment test & trial for 72 hrs complete ( Bearing cost excluded)		
	column pipe dia up to 500 mm	Job	
	column pipe dia 501 to 1000 mm	Job	
	column pipe dia 1001 to 1500 mm	Job	
	column pipe dia 1501 to 2000 mm	Job	

ITEM NO	DISCRIPTION OF ITEM	UNIT	RATE
2	Job work of replacement of head shaft of V.T. pumps as per manufacturers instruction manual with all tools, tackles, consumables such as gland packing etc . This job includes removing of motor from pump, dismatling of bearing housing assembly, head shaft, reconditioning of all parts, refitting bearing housing assembly, motor with alignment test & trial for 72 hrs complete (shaft cost excluded)		
	column pipe dia up to 500 mm	Job	
	column pipe dia 501 to 1000 mm	Job	
	column pipe dia 1001 to 1500 mm	Job	
	column pipe dia 1501 to 2000 mm	Job	

This information is required for the purpose of framing of working estimates and hence the urgency. This Budgetary offer is also available on website [www.mahayantriki.gov.in](http://www.mahayantriki.gov.in)

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