

**Government of Jharkhand**  
**Office of the Executive Engineer**  
**Drinking Water & Sanitation Mechanical Division, Ranchi**

**Very Short Notice Inviting Quotation for preparation of Jharkhand Scheduled of Rate**

<b>Sl.</b>	<b>Particulars</b>	<b>Rate</b>
	<b>Sealed quotation are hereby invited from the reputed manufacturer/authorized dealer for the following items</b>	
<b>1</b>	<b>2</b>	<b>3</b>
<b>1</b>	<b>PUMPS</b>	<b>Rate</b>
	Supplying Submersible pump sets confirming to IS 8034 and motor confirming to IS 9283. Pump shall be suitable for various delivery head and discharge with stainless steel pump shaft and polypropylene/ noryl impeller. Motor suitable for working on 415V+10%, 3PH, 50 Hz, A.C. supply with cable guard, thrust carbon/ fiber bearing to withstand entire hydraulic thrust, water proof winding shall be provided. The pump set shall be suitable for direct coupling. Pump shall have suitable outlet as per manufacturers design. Anti thrust stream lined non return valve shall be provided with pump. 3 meter submersible copper conductor cable in single/ double run shall be provided with each pump.	
	Submersible Pump set 100 mm dia (range 1 HP to 5 HP) up to 20 stages	Rs./Each
	Submersible Pump 150 mm dia (range 1 HP to 7.5 HP) up to 8 stages	Rs./Each
	Submersible Pump 150 mm dia (range 8 HP to 15 HP) up to 12 stages	Rs./Each
	Submersible Pump 150 mm dia (range 17.5 HP to 25 HP) up to 20 stages	Rs./Each
	Supply of horizontal split casing centrifugal pump conforming to IS 1520 with CI casing and split glands, stainless steel shaft, hydraulically and dynamically balanced bronze impeller capable of discharging required quantity of water against a desired head due to all causes and with the accessories such as G.M air release cock, grease cup, G.I priming funnel, M.S lifting hook, drip water G.I pipe connections, leading to the outside of pump house rubber water deflector, double flap foot valve, G.M strainer including unique tyre type coupling, common M.S fabricated base to mount pump and motor and other standard fittings etc. complete. The pump shall be suitable for operation in AC three phase, 415 V, 50 Hz .The Speed, No. of stages is based on site condition prevailing during investigation.	
	Centrifugal Pump set (range 10 HP to 200 HP)	Rs./Each
	Supply of vertical water/oil lubricated statically, hydraulically and dynamically balanced turbine pump capable of discharging required quantity of water due to all causes with surface discharge head confirming to IS 1710 and as amended as on date with accessories as per IS 5120/1977 (Reaffirmed 2011) and as amended thereafter to suit the site condition. The Speed, No. of stages, sizes of column pipes and line shaft indicated is based on site condition prevailing during investigation. The pump should be supplied with non reversable ratchet pin housing safety clutch, suction strainer etc. The Pump bowl assembly shall be with bronze impeller running at 1450 RPM. The Pump includes suitable head shaft, suitable 1.5 metre long SS line shaft required Nos. to suit the well depth, rubber line shaft bearing of required Nos. C.I bearing retainer of required Nos. suitable ERW column pipe of each 1.5 m long of required Nos. to suit the well depth, suction bell mouth of suitable size, M.S clamps suitable for column pipe/line shaft-2 set and spanner -1 set etc complete	
	Vertical Pump set (range 10 HP to 100 HP)	Rs./Each
<b>2</b>	<b>PRESSURE GAUGE</b>	<b>Unit</b>
	Providing, fabricating, erecting, testing and Commissioning pressure vessel fabricated in M.S. plate on provided foundation including epoxy paint.	
	Pressure gauge (100 mm dia)	Rs./Each
	Pressure gauge (150 mm dia)	Rs./Each
	Vacuum / Combination gauge	
	Supplying Vacuum Gauge/ Combination gauge of required range complete with siphon tube, isolating cock suitable for 12 mm dia G.I. pipe.	
	Vacuum / Combination gauge – 100 mm dia	Rs./Each
	Vacuum / Combination gauge – 150 mm dia	Rs./Each
<b>3</b>	<b>LIFTING EQUIPMENTS</b>	<b>Unit</b>
	<b>Chain Pulley Block</b>	
	Supplying triple spur gear type chain pulley block suitable for capacity as below with 3 m lift complete with load chain and hand chain suitable for above lift, tested to 50% over load as per IS 3832 carrying ISI mark.	

Tonne Capacity ( 1 ,2 & 3 Tonne)	Rs./Each
<b>Hand operated Circular or Rectangular Travelling Crane (Single Girder)</b>	
Supplying Single Girder Hand Operated Circular/ Rectangular Travelling Crane with 6 m lift complete with chain pulley block ISI marked and travelling trolley both tested for 50% overload including arrangement for longitudinal travel / circular travel and cross travel with wheel, hand chain, etc complete.	
<b>3 Tonne Capacity</b>	
Up to 5 m span , Above 5 m up to 6 m span & Above 6 m up to 8 m span	Rs./Each
<b>5 Tonne Capacity</b>	
Up to 5 m span , Above 5 m up to 6 m span & Above 6 m up to 8 m span & Above 8 m up to 10 m span	Rs./Each
<b>Electric Operated Circular or Rectangular Travelling Crane (Single Girder)</b>	
Supplying single girder Electrically Operated Rectangular Over head Travelling Crane with 6 m lift complete with wire rope hoist, class II duty, all three motions electrically operated by suitable rating motor IP 54, control panel and down pendant control block.	
<b>5 Tonne Capacity</b>	
Above 6 m up to 8 m span & Above 8 m up to 10 m span	Rs./Each
<b>7.5 Tonne Capacity</b>	
Above 6 m upto 8 m span & Above 8 m up to 10 m span	Rs./Each
<b>10 Tonne Capacity</b>	
Above 6 m up to 8 m span & Above 8 m up to 10 m span	Rs./Each
<b>Square Bar / Rail</b>	
Providing, erecting and fixing square bar of EN 8 as rail for over head crane on provided track, girder / continuous corbel beam, including supporting plate and "J" bolts.	
50 X 50 mm (EN 8) & 40 X 40 mm (EN 8)	Rs./m
<b>4 Lightening Arrester, AB Switch, Insulators</b>	<b>Unit</b>
<b>Lightening Arrestor</b>	
Supplying, erecting approved make thyrite type Lightening Arrestor suitable for H.T. supply with necessary ancillary material complete on provided cross arm and connected to overhead line.	
Suitable for 11 kV & 22 KV Supply, Distribution class	Rs./Set
Suitable for 33 kV Supply, Station class	Rs./Set
<b>Disc Insulator</b>	
Supplying, erecting porcelain Disc Type Insulators with hardware fittings suitable for H.T. overhead line complete erected with nuts and bolts on provided cross arm	
Suitable for 11KV line & 33 KV line	Rs./Each
<b>Pin Insulator</b>	
Supplying, erecting porcelain Pin Type Insulators with hardware fittings suitable for H.T. overhead line complete erected with nuts and bolts on provided cross arm	
Suitable for 11KV line & 33 KV line	Rs./Each
<b>Air break switch without Earth switch</b>	
Supplying, erecting approved make H.T. outdoor type gang operated air break triple pole switch of required capacity with 3 post / pin type insulator per phase , mounted in horizontal or vertical position on provided cross arm with adequate length of G.I. pipe for operating handle erected on extended square shaft. The operating handle provided with lock and key at suitable height from ground with necessary clamps	
<b>Suitable for 11KV line &amp; 33 KV line</b>	
Rocking / Tilting type	Rs./Set
Rotating type	Rs./Set
<b>Air break switch with Earth switch</b>	
Supplying, erecting approved make H.T. outdoor type gang operated air break triple pole switch with earth switch of required capacity with 3 post / pin type insulator per phase , mounted in horizontal or vertical position on provided cross arm with adequate length of G.I. pipe for operating handle erected on extended square shaft. The operating handle provided with lock and key at suitable height from ground with necessary clamps	
<b>Suitable for 11KV line &amp; 33 KV line</b>	
Rotating type	Rs./Set
<b>Drop out Fuse (channel mounted)</b>	
Supplying, erecting approved make out door type Drop out fuse channel type with insulator complete with	

	fuse holders fuse barrel with metal fittings, fuse element, with working current up to 50 Amp, capacity complete erected on provided cross arm, each set comprising 3 units	
	Suitable for 11 KV line & 33 KV line	Rs./Set
	<b>Horn gap fuse ( channel mounted)</b>	
	Supplying, erecting approved make out door type Horn gap type fuse with insulator, fuse element, with working current up to 50 Amp, capacity complete erected on provided cross arm, each set comprising 3 units	
	Suitable for 11 KV line & 33 KV line	Rs./Set
<b>5</b>	<b>TRANSFORMER</b>	<b>Unit</b>
	<b>Transformer</b>	
	<b>Power Transformer (with off load Tap changer)</b>	
	Supplying outdoor type copper wound transformer continuously rated for 3Ph, 50 Hz, at full load and temp. rise not exceeding 45° C by thermometer in oil and 50° C by the resistance in winding after continuous run at full load rating, the transformer should have oil immersed winding having vector group DY11, HT side connected in delta and LT side connected in star with neutral brought out connected to provide separate earthing. The Transformer shall have power terminal arrangement, bushing/ cable end box on HT side and cable end box on LT side. 2 Nos channels with stoppers shall be provided and fixed on the provided plinth for mounting the transformer. Transformer shall be latest manufacturing standards as per amended IS specifications and the load & No load losses shall be limited to the values given below or as per IS or Norms issued by JSEB or which ever are lower. The transformer should have all standard fittings.	
	<b>Power Transformer 11000/433 volts With off load Tap Changer – 12.5% to +2.5% in steps of 2.5%</b>	
	63 KVA ( No load loss 180w and load loss 1235w)	Rs./Each
	100 KVA (No load loss 260w and load loss 1760w)	Rs./Each
	160 KVA (No load loss 260w and load loss 1760w)	Rs./Each
	200 KVA (No load loss 500w and load loss 3000w)	Rs./Each
	250 KVA (No load loss 500w and load loss 3000w)	Rs./Each
	315 KVA (No load loss 580w and load loss 4200w)	Rs./Each
	400 KVA (No load loss 715w and load loss 5000w)	Rs./Each
	500 KVA (No load loss 850w and load loss 5800w)	Rs./Each
	630 KVA (No load loss 1000w and load loss 7000w)	Rs./Each
	750 KVA (No load loss 1500w and load loss 8000w)	Rs./Each
	<b>Power Transformer (with on load Tap changer)</b>	
	Supplying outdoor type copper wound transformer continuously rated for 3Ph, 50 Hz, at full load and temp. rise not exceeding 45° C by thermometer in oil and 50° C by the resistance in winding after continuous run at full load rating, the transformer should have oil immersed winding having vector group DY11, HT side connected in delta and LT side connected in star with neutral brought out connected to provide separate earthing. The Transformer shall have power terminal arrangement, bushing/ cable end box on HT side and cable end box on LT side. 2Nos channels with stoppers shall be provided and fixed on the provided plinth for mounting the transformer. The OLTC should be suitable for minimum 50 operations per day. Transformer shall be latest manufacturing standards as per amended IS specifications and the load & No load losses shall be limited to the values given below or as per IS or Norms issued by JSEB or which ever are lower. The transformer should have all standard fittings.	
	Transformer 11000/433 volts With on load Tap Changer – 15% to +5% in steps of 1.25% with RTCC, AVR and marshalling box and other specification as per TR-1	
	750 KVA	Rs./Each
	1000 KVA	Rs./Each
	1250 KVA	Rs./Each
	1600 KVA	Rs./Each
	2000 KVA	Rs./Each
<b>6</b>	<b>Motors</b>	<b>Unit</b>
	<b>Foot Mounted Motors SPDP/TEFC 1500 RPM</b>	
	Supplying Foot Mounted SPDP/ TEFC 1500 RPM, squirrel cage induction motor, conforming to IS 325 having continuous rating suitable for operation at 415 volts +/-10%, 3 Phase, 50 HZ +/-3% with "F" class insulation temperature rise limited to class "B" insulation	
	15 KW (20 HP) to 250KW (335 HP)	Rs./Each

	<b>Foot Mounted Motor TEFC 1500 RPM</b>	
	0.75 KW (1 HP) to 9.3/11 KW ( 12 .5/15 HP)	Rs./Each
<b>7</b>	<b>Aluminium Cable</b>	<b>Unit</b>
	<b>CABLE</b>	
	<b>Aluminium conductor three core, XLPE / PVC insulated &amp; armoured cable .</b>	
	Supplying XLPE / PVC insulated, armoured cable 1100 V grade with ISI mark Three core, solid / stranded aluminium conductor with 6 mm thick 25 mm width M.S. spacer with G.I. Earth wire 6 sq mm, complete in an approved manner.	
	3 core 2.5 sq mm to 400 sq mm	Rs./M
	<b>Aluminium conductor 3.5 core, XLPE / PVC insulated &amp; unarmoured cable</b>	
	Supplying XLPE / PVC insulated, unarmoured cable 1100 V grade with ISI mark Three and half core, stranded aluminium conductor with 6 mm thick 25 mm width M.S. spacer with G.I. Earth wire 6 sq mm, complete in an approved manner.	
	3.5 core 25 sq mm to 400 sq mm	Rs./M
	<b>HT Aluminium three core 3.3 KV E cable XLPE insulated</b>	
	Supplying HT Aluminium three core cable XLPE insulated ,insulation screened with extruded semi conducting compound in combination with copper tape (0.3 kA for 1 sec.) cores laidup inner sheath of PVC tape ,galvanised steel flat strip armoured, and overall PVC sheathed cable conforming to IS :7098 /II/85 with latest amendments	
	3 core 35 sq mm to 400 sq mm	Rs./M
	<b>HT Aluminium three core 6.6 KV(UE)/11KV E cable XLPE insulated</b>	
	Supplying HT Aluminium three core cable XLPE insulated ,insulation screened with extruded semi conducting compound in combination with copper tape (0.3 kA for 1 sec.) cores laidup inner sheath of PVC tape ,galvanised steel flat strip armoured, and overall PVC sheathed cable conforming to IS :7098 /II/85 with latest amendments	
	3 core 35 sq mm to 400 sq mm	Rs./M
	<b>HT Aluminium three core 11KV(UE) cable XLPE insulated</b>	
	Supplying HT Aluminium three core cable XLPE insulated ,insulation screened with extruded semi conducting compound in combination with copper tape (0.3 kA for 1 sec.) cores laidup inner sheath of PVC tape ,galvanised steel flat strip armoured, and overall PVC sheathed cable conforming to IS :7098 /II/85 with latest amendments	
	3 core 35 sq mm to 400 sq mm	Rs./M
	<b>Aluminium conductor three core, XLPE / PVC insulated &amp; unarmoured cable .</b>	
	Supplying XLPE / PVC insulated,unarmoured cable 1100 V grade with ISI mark Three core, solid / stranded aluminium conductor with 6 mm thick 25 mm width M.S. spacer with G.I. Earth wire 6 sq mm, complete in an approved manner.	
	3 core 4 sq mm to 400 sq mm	Rs./M
	<b>Aluminium conductor 3.5 core, XLPE / PVC insulated &amp; armoured cable</b>	
	Supplying XLPE / PVC insulated,armoured cable 1100 V grade with ISI mark Three and half core, stranded aluminium conductor with 6 mm thick 25 mm width M.S. spacer with G.I. Earth wire 6 sq mm, complete in an approved manner.	
	3.5 core 25 sq mm to 400 sq mm	Rs./M
<b>8</b>	<b>Copper Cable</b>	<b>Unit</b>
	<b>CABLE</b>	
	<b>3 Core PVC insulated, PVC sheathed copper conductor flat submersible cable .</b>	
	Supplying , Flat flexible submersible cable with, copper conductor, PVC insulated, and PVC sheathed .	
	3 core 1.5 sq mm to 35 sq mm	Rs./M
	<b>Copper conductor three core, XLPE / PVC insulated &amp; unarmoured cable .</b>	
	Supplying XLPE / PVC insulated, unarmoured cable 1100 V grade with ISI mark Three core, solid / stranded copper conductor with 6 mm thick 25 mm width M.S. spacer with G.I. Earth wire 6 sq mm, complete in an approved manner.	
	3 core 1.5 sq mm to 95 sq mm	Rs./M
	<b>Copper conductor 3.5 core, XLPE / PVC insulated &amp; armoured cable .</b>	
	Supplying XLPE / PVC insulated, armoured cable 1100 V grade with ISI mark 3.5 core, solid / stranded	

	copper conductor with 6 mm thick 25 mm width M.S. spacer with G.I. Earth wire 6 sq mm, complete in an approved manner.	
	3.5 core 1.5 sq mm to 400 sq mm	Rs./M
	<b>Copper conductor 3.5 core XLPE/PVC unarmoured</b>	
	Supplying XLPE / PVC insulated, unarmoured cable 1100 V grade with ISI mark 3.5 core, solid / stranded <b>copper</b> conductor with 6 mm thick 25 mm width M.S. spacer with G.I. Earth wire 6 sq mm, complete in an approved manner.	
	3.5 core 25 sq mm to 400 sq mm	Rs./M
	<b>Copper conductor three core, XLPE / PVC insulated &amp; armoured cable .</b>	
	Supplying XLPE / PVC insulated, armoured cable 1100 V grade with ISI mark Three core, solid / stranded copper conductor with 6 mm thick 25 mm width M.S. spacer with G.I. Earth wire 6 sq mm, complete in an approved manner.	
	3 core 1.5 sq mm to 400 sq mm	Rs./M
<b>9</b>	<b>Foot valve</b>	<b>Unit</b>
	Supplying C.I. foot valve having single leather flap and gunmetal seating. Valve shall be fixed on suction side of pump as per requirement including jointing material and hardware.	
	Flanged type	
	50 mm to 150 mm	Rs./Each
<b>10</b>	<b>MCCB</b>	<b>Unit</b>
	Conforming to IS/IEC60947-2 & IEC 60947-2 compact size in SS Enclosure, 3 pole, 50 kA breaking capacity, Adjustable thermal setting	
	Thermal Release Range 16-20A likewise upto 630 A	Rs./Each
	Conforming to IS/IEC60947-2 & IEC 60947-2 compact size in SS Enclosure, 3 pole , 36 kA breaking capacity, Adjustable thermal setting	
	80-100 A likewise upto 200-250 A	Rs./Each
<b>11</b>	<b>Change Over Switch</b>	<b>Unit</b>
	Change over switch TPN on load with SS Enclosure	
	63A to 1000A	Rs./Each
<b>12</b>	<b>Switch Disconnector</b>	<b>Unit</b>
	Switch Disconnector without fuse links IS: 13703 and IS: 13947(Part-3) IEC : 60947-3 Door interlock & padlock facility with S.S. Enclosure	
	32A to 800A	Rs./Each
<b>13</b>	<b>Air Circuit Breaker</b>	<b>Unit</b>
	ACB breaking capacity 50kA Thermal Magnetic Manual draw Out type 3 pole	
	630A to 2000A	Rs./Each
<b>14</b>	<b>STARTER</b>	<b>Unit</b>
	<b>D.O.L. starter</b>	
	D.O.L. starter with SS Enclosure with 380/415 Volt coil	
	7.5 H.P. & 10 HP	Rs./Each
	<b>F.A.S.D starter</b>	
	Supplying Fully automatic star delta starter to operate induction motor working on 415V, 3 phase, 50 hz with no volt coil, Over load element, ON-OFF push buttons, with necessary materials and connected to supply, etc complete starter with original sheet steel encloser	
	10.0 H.P. to 250 HP	Rs./Each
<b>15</b>	<b>Servo Controlled Automatic Voltage Stabilizer</b>	<b>Unit</b>
	Providing, erecting Servo Controlled Automatic Voltage stabiliser suitable for out put voltage of 415 Volt +/-1%, 3 Ph, 50 Hz, with copper wound transformer (air/oil cooled) as mentioned below. The stabilizer shall function satisfactorily even if incoming supply is unbalanced between phases within range of 10%. The stabilizer should be constructed in cubical box, with bidirectional wheels for easy handling, necessary monitors and user's controls on front panel such as indication, alarm, volt meter and selector switch for measuring input and out put voltage, Auto/Manual selector switch, Raise/Low push buttons etc. Suitable capacity termination strips and bus bars for incoming and out going cables, earthing with change over switch should be provided. All three phases shall be independently monitored and corrected. Following protections and indications shall be incorporated	
	<input type="checkbox"/> Over Voltage / Under Voltage	
	<input type="checkbox"/> Single Phasing	
	<input type="checkbox"/> Cut off contactor with electronic output sensing unit.	

	<b>Servo Controlled Automatic Voltage Stabiliser (Output 415 +/-1%) Input 150 to 450 Volt</b>	
	20 kVA to 125 KVA Air cooled	Rs./Each
	<b>Servo Controlled Automatic Voltage Stabiliser (Output 415 +/-1%) Input 270 to 460 Volt</b>	
	15 KVA to 400 KVA Air cooled	Rs./Each
<b>16</b>	<b>Termination Kit</b>	<b>Unit</b>
	<b>Providing and erecting IN-DOOR type termination kit, for 3.3 kV/ 6.6 kV / 11 kV/ 22 kV/33 kV XLPE Screened 3 core cable</b>	
	<b>IN-DOOR Termination KIT for 3.3 kV / 6.6 kV XLPE 3 core cable</b>	
	25-50,70-120,150-185,240-400 mm <sup>2</sup>	Rs./Each
	OUT-DOOR Termination KIT for 3.3/6.6 KV XLPE 3 core cable	
	25-5070-120,150-185,240-400 mm <sup>2</sup>	Rs./Each
	Straight through Joint for 3.3/ 6.6 KV XLPE 3 core cable	
	25-50,70-120,150-182,240-400 mm <sup>2</sup>	Rs./Each
	IN DOOR Termination KIT for 11KV XLPE Screened 3 core cable	
	25-50, 70-120,150-185,240-400 mm <sup>2</sup>	Rs./Each
	OUT DOOR Termination KIT for 11KV XLPE Screened 3 core cable	
	25-50,70-120-150-185,240-400 mm <sup>2</sup>	Rs./Each
	Straight through Joint for 11 KV XLPE Screened 3 core cable	
	25-50,70-120,150-185,240-300 mm <sup>2</sup>	Rs./Each
	IN DOOR Termination KIT for 22KV XLPE Screened 3 core cable	
	25-50,70-120,150-185,240-400 mm <sup>2</sup>	Rs./Each
	OUT DOOR Termination KIT for 22KV XLPE Screened 3 core cable	
	25-50,70-120,150-185,240-400 mm <sup>2</sup>	Rs./Each
	Straight through Joint for 22 KV XLPE Screened 3 core cable	
	25-50,70-5,120-150,185-240,300-400 mm <sup>2</sup>	Rs./Each
	IN DOOR Termination KIT for 33KV XLPE Screened 3 core cable	
	50,70-95,120-185,240-400 mm <sup>2</sup>	Rs./Each
	OUT DOOR Termination KIT for 33 KV XLPE Screened 3 core cable	
	50,70-95,120-185,240-400 mm <sup>2</sup>	Rs./Each
	Straight through Joint for 33 KV XLPE Screened 3 core cable	
	50-70,95-150,185-300,400 mm <sup>2</sup>	Rs./Each

Note :-

- 1- Item wise quotation as per serial number should be quoted separately.
- 2- The undersigned reserves to accept or reject any or all quotations without assigning any reason whatsoever.
- 3- The quotation also be seen on **dwsd.jharkhand.gov.in**
- 4- The agencies should contact for detail information in division office sand mobile no-9471182629 in working days from 10.00 AM to 5.00 PM.
- 5- Materials quotation rate should be F.O.R with and without taxes separately.

Last date for submission of quotation : 24/10/2019 till 3.00 PM at D. W & S Mechanical Division, Zila school campus water tower, Ranchi - 834001 (Jharkhand)

Rates may be send via Email : [dwsdmechranchi@gmail.com](mailto:dwsdmechranchi@gmail.com)

Executive Engineer  
 D. W & S Mechanical Division,  
 Ranchi