



BOQ Dust suppression system

Sl. No.	Item Description	Qty	UOM	Unit Rate(in Rs)	Total Cost (in Rs.)
SUPPLY					
A	MECHANICAL SCOPE				
1	Vertical turbine fire water pump of cap 137 M3/hr at 70 meter head with suction strainer	2	Nos		
2	Pressure guage Pr. Range 0-16kg/cm2 including cut-off ball valve	5	Nos		
3	Sprinklers	20	Nos		
4	Valves				
4.1	Sluice valve 150 NB (PN-16) with required counter flanges, nuts, bolts & washer etc. complete.	2	Nos		
4.2	NRV 150 NB CI (PN-16) with required counter flanges, nuts, bolts & washer etc. complete.	2	Nos		
4.3	Butterfly valve 150 NB Cast iron butterfly valves tested to ISI marked,PN16 tested to 500 psi	1	Nos		
4.4	Ball valve brass 25 NB	22	Nos		
4.5	Ball valve brass 15 NB	2	Nos		
4.6	Air release valve 25 NB	2	Nos		
5	MS class C Heavy duty pipes as per IS : 1239 Part I or IS:3589 including fittings like flanges, tees, elbows, bends junctions, reducers etc.				
5.1	150 NB	822	Mtrs.		
5.2	80 NB	6	Mtrs.		
5.3	25NB	66	Mtrs.		
5.4	15 NB	6	Mtrs.		
6	Structural steel supports such as MS channels, angles, flats, rods as required at site with anchor fasteners, clamps, threaded rods, nuts, bolts, washers etc.)				
6		1000	KG		
7	Fire Accessories.				
7.1	Fire Brigade connection 150 mm size breach inlet connection with four connecting points 63 mm size fixed over 150 mm dia Pipe with necessary companion flanges,nuts,bolts,gasket,washers,outlets,necessary as specified	1	Nos		
7.2	Single headed hydrant valve as per IS 5290, made of Stainless Steel with 63 mm dia instantaneous outlet and 80 mm dia fanged inlet ,Blank caps , chain and hand wheels etc complete. with Orifice plate (6MM THK) as required to minimize the pressure at discharge.	4	Nos		
7.3	fire hose cabinet of about 750 mm x 600 mm x 250 mm size made of 16 SWG M.S plate capable of accommodating two lengths of 65 mm dia. delivery hose of 15 Mtr. length with locking arrangement, and lever for opening the door after breaking glass. Each hose box to be fitted with glass door in front, painted 'FIRE' in red luminous paint. Hinges should be sturdy to bear the weight of fully open door without sagging. Cabinet should be painted two coats of red enamel paint over a primer suitable for fixing to wall /floor with all necessary supports etc. complete as specified.	2	Nos		
7.4	Fire Hose 63x15 mtr long, lexible RRL (Rubber reinforced Lining) type & ISI marked hose including SS male and female instantaneous type coupling with ISI marked (IS: 636) machine wound complete in all respect.	4	Nos		
7.5	SS304 material Standard Branch pipe, ISI Mark having 63 mm male inlet and fitted with 20 mm nozzle.	4	Nos		
8	Civil work- pedstal support for hydrant piping	150	Nos		
MECHANICAL SCOPE SUPPLY TOTAL COST					
B	ELECTRICAL SCOPE				
1	Electrical LT MCC Panel (415V - Indoor) consisting 1 Incomer & 2 Nos. 45 kW DOL starter:	1	Set		
2	Squirrel Cage INDUCTION MOTOR 45KW/60 HP, 4 POLE , 3 PHASE,VERTICAL FLANGE mounted	2	Nos		
3	Local Control Panel with LED Indications and Start Stop Push Buttons for motor control	1	Set		
4	120sqmm 1core copper flexible cable	30	Meters		
5	LT Power Cable for 45 kW Motors 3Cx70 sq.mm. (1100V grade 1.1KV XLPE insulated and PVC sheathed steel Armoured, Aluminium conductor cables)	200	Meters		
6	Control Cable 12Cx2.5 sq.mm. (1.1 kV, 2.5 sq.mm. YWY, Stranded annealed bare copper conductor)	200	Meters		
7	Copper lugs for 120sqmm 1c flexible wire	10	Nos		
8	PVC Cable gland for 120sqmm 1c flexible	10	Nos		
9	Aluminium Lugs for 3Cx70 sq.mm. Cable	15	Nos		
10	300x300mm Bimetallic plate	1	Nos		
11	Copper Lugs 2.5 sqmm	100	Nos		

12	Cable Gland (Double Compression) for 3.5Cx240 sq.mm. 1100V grade 1.1KV XLPE insulated and PVC sheathed steel Armoured, Aluminium conductor cables	2	Nos		
13	Cable Gland (Double Compression) for 3Cx70 sq.mm. 1100V grade 1.1KV XLPE insulated and PVC sheathed steel Armoured, Aluminium conductor cables	4	Nos		
14	Cable Gland for Control Cable 12Cx2.5 sq.mm. (1.1 kV, 2.5 sq.mm. YWY, Stranded annealed bare copper conductor)	4	Nos		
15	Water Level Switch(Float Type) for Motor Control	1	Nos		
16	Perforated cable trays 150mmx50mmx1.6mm for both Power cable & control cable	80	Meters		
17	GI strip for Earthing (25mmx5mm)	200	Meters		
18	LED Flood Light,50W,230VAC	2	Nos		
19	3Cx2.5 sq.mm. Power Cable for Lighting	100	Meters		
ELECTRICAL SCOPE SUPPLY TOTAL COST					
C	TOTAL SUPPLY COST (A + B)				
SERVICES					
D	MECHANICAL SCOPE				
1	Erection & commissioning of motor driven vertical turbine pump	2	Nos		
2	Erection & commissioning of Sprinklers	20	Nos		
3	Erection & commissioning of valves				
3.1	150 NB	5	Nos		
3.2	upto 50NB	26	Nos		
4	Fabrication/ Erection of Piping System & support structure				
4.1	Up to 50 NB	72	mtr		
4.2	Up to 80 NB	6	mtr		
4.3	150NB	822	mtr		
4.4	Erection of piping civil support	150	Nos		
4.5	Erection of Underground Piping 150 NB with wrapping coating	50	mtr		
5	Fabrication & Erection of Steel Structure	1	MT		
6	Erection of fire accessories				
6.1	Erection & commissioning of 4 Way inlet connection - 150 mm dia (Fire brigade connection)	1	Nos		
6.2	Erection & commissioning of hydrant valves	4	Nos		
6.3	Erection of hose cabinet	2	Nos		
7	Application of Paint(Enamel)	478	Sq Mt		
8	Supply,Erection & Dismantling of scaffolding	50	sq mt		

	MECHANICAL SERVICES TOTAL COST				
E	ELECTRICAL SCOPE				
1	Erection, Testing & Commissioning of MCC Panel				
1.1	Erection of MCC Panel	1	Set		
1.2	Testing & Commissioning of MCC Panel	1	AU		
2	Erection, Testing & Commissioning of LCP				
2.1	Erection of LCP	1	Set		
2.2	Testing & Commissioning of LCP	1	AU		
3	Cable Laying & Termination				
3.1	120sqmm 1core copper flexible cable	30	Meter		
3.2	Cable End Termination of 120sqmm 1core copper flexible cable (Complete R,Y,B,N Termination)	1	Set		
3.3	Cable Laying of 3Cx70 sq.mm. (1100V grade 1.1KV XLPE insulated and PVC sheathed steel Armoured, Aluminium conductor cables)	200	Meter		
3.4	Cable End Termination of 3Cx70 sq.mm. (1100V grade 1.1KV XLPE insulated and PVC sheathed steel Armoured, Aluminium conductor cables)	2	Set		
3.5	Cable Laying of 12Cx2.5 sq.mm. (1100V grade 1.1KV XLPE insulated and PVC sheathed steel Armoured, Aluminium conductor cables)	200	Meter		
3.6	Cable End Termination of 12Cx2.5 sq.mm. (1100V grade 1.1KV XLPE insulated and PVC sheathed steel Armoured, Aluminium conductor cables)	4	Set		
3.7	Cable Laying & Terminationof 3Cx2.5 sq.mm.	100	Meter		
4	Earthing Work				
4.1	Erection of Earthing strip and Connection	200	Meter		
4	Cable Tray				
5.1	Erection of Cable Tray	80	Meter		
6	Lighting Work				
6.1	Installation of LED Fixture	2	Nos		
7	Level Switch				
7.1	Installation & Commissioning of Level Switch	1	Nos		
	ELECTRICAL SERVICES TOTAL COST				
F	TOTAL SERVICES COST (D + E)				
GRAND TOTAL- Dust suppression SYSTEM (C + F) (GST extra at actual)					