

CROSS WORLD POWER LIMITED BOQ OF 2X300kVA GENERATOR INSTALLATION

Client Name: SMART PROPERTIES LTD

Address: SHAWRAPARA, HIRPUR

Date: 12.05.16

Gen Model:

Engine Model:

Alternator Model:

Sl. No	Job Description	Technical Details/ Brand	Scope Of Supply	Unit	Quantity	Remarks
1	Electrical System for DG 01 & DG 02:					
1.1	Generator Power Cable (35 °C Ambient on air)	4XIC-240 mm NYY DG TO ATS (For DG 01 & 02) 8XIC-240 mm NYY MAINS (LT) TO ATS 8XIC-240 mm NYY ATS TO LOAD (LT)		Mefer	118	Cable laying will be go through as per layout. Quantity may vary upon to cable laying route as well as asset location. = 13150
1.2	Power Cable Lugs	240 mm Material -Copper, Surface-Electro Tinned	✓ 263	Pcs	50	
1.3	Control cable For Sensing	4 X 12 mm (40/0.19 mm) Flexible Cable		Mefer	50	
1.4	Communication Shield Cable	2 X 12 mm DG-1 To DG-2 (120 Ohm resistance)		Mefer	30	
1.5	Cable Ladder & Laying System	Cable Tray with cover Dim W X H - 450mm X 75mm; L-12000 mm, Capsule type made with GALVANIZED SHEET with painting, thickness 4mm. Support with threaded stick MS/GI rod, lock nut, bolt and washer.		Mefer	12	
1.6	Royal Bolt	10 no	✓ 50	Pcs	14	200
1.7	PVC Tape	Adhesive Tape 04 color (Red/Yellow/Black/Blue)	✓ 20	Pcs	12	348
1.8	PIB Tape		✓ 46	Pcs	5	2305
1.9	Cable Tie	L - 10"/12"	✓ 184	Pack	5	920
1.10	Terminal Bus Bar	800mm2 (10X80) 8 pcs; each pcs-12"	2500	Feet	8	20,000
2	Earthing System for DG 01:					
2.1	Earthing Boring	Earthing of electrical installation with 25.4 mm (1") dia GI pipe throughly (2swg earth electrode) having 6.35 mm dia holes across dia at 305 mm interval securedly bonded with washer, nuts, bolts etc. sunk upto a depth of 120 ft with GI pipe to attain earth resistance <1 ohm including blind socket for water pouring facility.		Job	N/A	Already done by client
2.2	Earthing Copper Lead	Installation of solid copper wire earthing lead 2 SWG in 25.4 mm dia GI pipe & termination of connection at both end.		Mefer	N/A	Already done by client
2.3	Earthing Block / Equipotential bar	Dimension 300mm X 25mm X 10mm with connection facility	2000	Pcs	2	4000
2.4	Earthing Cable	50m BYA(Green) from Earthing Copper bar to gen & equipment	35	Mefer	35	
2.5	Earth cable lugs	50m Material -Copper, Surface-Electro Tinned	35	Pcs	12	396
2.6	Ferrule	For earthing lead and cable connection	40	Pcs	4	160
3	Exhaust System for DG 01 & DG 02:					
3.1	Exhaust Silencer Straight Pipe For DG 01	MS Pipe bore 6", thickness 3-4mm		Feet(Appx)	34	
	Exhaust Silencer Straight Pipe For DG 02	MS Pipe bore 6", thickness 3-4mm		Feet(Appx)	24	
3.3	Exhaust Bends /Elbow with Flange	Long radius 90 deg L bow 6" dia		Pcs	6	
3.5	Exhaust Flange	Welding neck flange 6" bore		Pcs	26	
3.6	Exhaust Heat Insulation with Silencer box	Insulation Of Pipe with Rockwool/Glasswool (25.4mm min thickness) along with 26SWG Aluminium sheet cladding		Job	2	
3.7	Exhasut Fitting with Silencer box	All bracket, support must be made with MS angle 50X50X 4, 5 & 6 MM		Job	2	
4	Cooling System for DG 01 & DG 02:					
4.1	Radiator Ducting for DG 01	WXD (ft) - 6'-7"X3'-3", RFT (ft) - 24.5' As per layout with 20/22 SWG MS sheet, Angle bar, flat bar support, Canvas cloth etc		Sq-ft	400	Canvas cloths will use
4.2	Radiator Ducting for DG 02	WXD (ft) - 6'-7"X3'-3", RFT (ft) - 8' As per layout with 20/22 SWG MS sheet, Angle bar, flat bar support, Canvas cloth etc		Sq-ft	200	Canvas cloths will use
5	COMMISSIONING MATERIAL for DG 01 & DG 02:					
5.1	Radiator coolant	Havoline Premix Coolant	160	Liter	120	✓ 19200
5.2	Lube oil	SAE 15 W 40 - Delvac (Brand)	140	Liter	80	✓ 37400
5.3	Battery electrolyte	Specific gravity 1.250	80	Liter	40	✓ 2600
5.4	Fuel	For Test run	80	Liter	600	✓ 48000
6	DG DELIVERY TO SITE for DG 01 & DG 02:					
6.1	Loading /Unloading/Lifting	Generator dry weight -3600 Kg		Job	2	Already done
7	Civil works for DG 01 & DG 02:					
7.1	Generator foundation	Dim. (L X W) (mm) : (5075 X1724) Depth (mm): 200	CLIENT	Job	2	Already done by client

All necessary Civil Works will be done by CLIENT with instruction of CWPL Engineer.

Lube oil: Brand: Delvac

\$ per Hr-400/2
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