

Chapter XVIII - Weightages & Factor Pertaining to Schedule of Quantities					
Part A	Material Management Works				
Sr no	ITEM DESCRIPTION		QTY	UOM	Weightage (%)
Section A1					
1.1	Material Handling and Material Management for Materials received through Trucks/Trailers at Project Site		22210	MT	1.933773090
1.2	Material Handling and Material Management for Materials received at Transporters Godowns within a radius of 50 KM from Project Site		200	MT	0.03489991
1.3	Material Handling and Material Management for Structural steel and Reinforcement steel received through trucks/trailers at project Site		3500	MT	0.242269150
1.4	Material reshifting and re stacking within project premises		1500	MT	0.104418480
1.5	Despatch/Outgoing materials		500	MT	0.034697390
Section A2					-
1.6	Material Handling and Material Management for Cement received through trucks/trailers in		2500	MT	0.084625120
1.7	Material re-shifting and re-stacking for Cement within project premises		100	MT	0.002820810
1.8	Despatch/Outgoing materials for cement materials		50	MT	0.001410400
Section B					
SN	Crane description	Qty	Total months	Qty	
1.9	CRAWLER/MOBILE CRANE CAPACITY-40 MT CRANE-1		21	1	1.229882830
Subtotal of Part A=					
Part B	FGD E&C including allied works				
Part B1					
SN	Contract (Main Package)	Rate schedule Identifier	QTY	UOM	Weightage/ Factor "X"
2.1	Structure	1A	10,668.32	MT	47.98629102
2.2	Non Pressure Parts (Ducts/dampers etc)	2A	4,500.90	MT	21.62421518
2.3	Rotating Machines	3A	1,224.08	MT	4.14721250
2.4	Tanks and Silos	4A	1,088.00	MT	7.31713048
2.5	Insulation- mineral wool	5A	100.00	MT	0.39702867
2.6	Insulation- Iron Parts	5B	110.00	MT	0.55894926
2.7	Insulation- Aluminium Cladding Sheets	5C	114.00	MT	0.63236370
2.8	CS Piping	6A	534.45	MT	6.11478203
2.9	SS Piping	6B	8.00	MT	0.20484104
3.0	DG Set	7A	1.00	Lot	0.34548955
3.1	Tap-off work of duct	8A	1.00	Nos	0.25867197
Part B2					
ST					
NO.	ITEM DESCRIPTION		QTY	UOM	Weightage/ Factor "X"
A2301	Supply, Fabrication, erection and alignment of structural steel with mild steel (E250) rolled section / built up section / combination of both conforming to IS:2062, pipes conforming to IS:1161/ IS:1239, chequered plate conforming to IS: 3052, mild steel rounds, monorails, stays, safety chains, ladders, MS grating etc. in columns, beams, gantry girders, bunkers, silos, hoppers, roof trusses, portals, laced purlins, space frames, hangers, struts, monorails, galleries, stiffeners, wall beams, sheeting runners, brackets, stub columns, bracings, cleats, trestles, base plates, splice plates, chequered plate flooring, decking and seal plates, steel frame grid over false ceiling, walkway platforms, ladders, stairs, stringers, treads, landings, hand-rails etc, connection design & preparation of fabrication drgs, collection of steel from stores, fabrication, straightening, cutting, bending, rolling, grinding, machining, drilling, welding, electrodes and other consumables, alignment, erection bolts & nuts (weight of erection bolts, nuts and welds not payable. However, permanent bolts are payable separately), assembly, edge preparation, preheating (min) preheat and interpass temperature of 20o C for welding over 20 mm and upto 40 mm & 66o C for welding over 40 mm and upto 63 mm & 110o C for thickness over 63 mm & use of low hydrogen/ radiogenic electrodes), post heating, testing of welders, inspection of welds, visual inspection, non destructive and special testing, rectification and correction of defective welding works, production test plate, inspection and testing, erection scheme, protection against damage in transit, stability of structures, installation of temporary structures, setting column bases, rectification, dismantling and removal of all temporary structures (weight of temporary structures not payable), return of surplus / waste steel materials to store etc all complete. Including appointment of a seperate agency, approved by BHEL, for review and approval of fabrication drgs, in consultation with BHEL. (Rate shall be exclusive of surface preparation and primer) Payment terms Fabrication : 65% Erection: 25% Alignment, welding/bolting: 10%		50	MT	1.13245844
2307	Supplying, fabrication, erection and alignment of factory made electroforged galvanised grating units with mild steel having minimum galvanisation conforming to IS:2062 in flooring, platforms, drain and trench covers, walk-ways, passages, staircases with edge binding strips and anti-skid nosing in treads etc. including fixing clamps, fittings, fixtures, all taxes, duties, packing, grinding, drilling, welding, edge preparation, etc. all complete. Payment terms: Supply : 70% Fabrication: 10% Erection: 10% Alignment,welding: 10%				-
a	Minimum galvanisation of 610 g/sqm		64	MT	1.58527412

2308	Supplying, fabrication, erection and alignment of factory made galvanised welded grating units with mild steel conforming to IS:2062 in flooring, platforms, drain and trench covers, walk-ways, passages, staircases with edge binding strips and anti-skid nosing in treads etc. including 2 coats of redoxide zinc-chromate primer (one coat at shop and one coat after erection), fixing clamps, fittings, fixtures, all taxes, duties, packing, grinding, drilling, welding, edge preparation, etc. all complete.	14	MT	0.38763236
A2309	Extra over above ST NO. A2301 for finishing the grating units/bolts/inserts with hot dipped galvanisation @ 610 gm/sqm over blast cleaned steel surfaces instead of painting with two coats of red oxide zinc-chromate primer all complete.	10	MT	0.06513136
2311	Providing and fixing in position of permanent mild steel bolts (class 4.6 as per IS : 1367 and grade 'C' as per IS: 1363) and nuts, washers etc. up to and inclusive of 39 mm diameter and upto 300mm long for structural steel work etc all complete.	1,250	KG	0.03723778
2312	Providing and fixing in positing of high strength structural bolts (of property class 8.8 and product grade 'C' as per IS: 1367) and conforming to IS: 3757 and high strength structural hardened and tempered nuts (of property class '8' as per IS:1367) conforming to IS:6623 with hardened and tempered washers as per IS:6649 etc. up to and inclusive of 39 mm diameter and upto 300 mm long for structural steel work etc all complete. Payment terms: Supply : 70% Fixation: 30%	49,090	KG	2.16110523
2313	Dismantling of steel structure, lowering of material and carriage of the dismantled material up to field fabrication shop / projects storage including temporary dismantling, cutting, re-welding, supporting, and restoring to correct position all temporarily dismantled members, re-alignment of all adjacent connected members to their correct positions (weight of such adjacent members and temporarily dismantled members not payable), scaffolding, staging, tools & tackles, gas cutting, welding, consumables etc all complete.	14	MT	0.03145119
2314	Addition to, alterations in and/or modification of "Erection Marks" including cutting of parts, gauging of welds, cutting, grinding, fabrication, welding, drilling holes, straightening, removal of bends, raising to the required level, painting, transportation, return of unutilised steel pieces to the project store, temporarily dismantling, cutting, re-welding, supporting and restoring to correct position of all the temporarily dismantled members, realignment of adjacent connected members (weight of such temporarily dismantled and adjacent members not payable) etc all complete for the following:	-	-	-
a	In erected position	10	MT	0.05201042
b	In fabrication yard	10	MT	0.04351028
2315	Re-erection of dismantled fabricated structural steel members including carriage of modified "Erection Marks" from the field fabrication shop to erection site, lifting to required position, aligning in position, tack welding, final welding and touch up painting including temporary dismantling and re-erection of temporarily dismantled members, cutting, rewelding, supporting and restoring to the correct position of all temporarily dismantled members, re-alignment of adjacent connected members(weight of such temporarily dismantled members and adjacent members not payable), scaffolding, staging, tools & tackles, gas cutting, welding, consumables etc all complete.	13	MT	0.04320675
2318	Providing and fixing in position PTFE type sliding bearings of reputed manufacturer, individual bearing suitable for required vertical loads as per the construction drawings and for maximum displacement of ± 50 mm including all taxes, duties, transportation, installation, drilling, bolting, erecting, aligning etc all complete for following vertical loads.	-	-	-
a	20 Tons	2	EACH	0.00791361
b	25 Tons	2	EACH	0.00892846
c	40 Tons	2	EACH	0.00960503
d	50 Tons	2	EACH	0.01028160
e	60 Tons	2	EACH	0.01095883
2320	Supply, fabrication and fixing of stainless steel pipe hand railing conforming to SS 409 of 32 mm/40 mm dia including transportation, loading/unloading etc. all complete.	2	MT	0.16553368
A2322	Supply, fabrication and fixing of galvanised MS pipe hand railing (1000 mm high) of 32mm/40mm/50mm dia (Medium Class) including transportation, loading/unloading, painting etc. all complete.	32	MT	0.91615130
2323	Conducting radiography test on welds wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	30	RM	0.04038561
2324	Conducting ultrasonic test on welds wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	30	RM	0.00721916
2325	Conducting ultrasonic test on steel plates as per ASTM-A435 or equivalent wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	15	SQM	0.00168315
2326	Conducting magnetic particle test on welds wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	30	RM	0.00568000
2327	Conducting dye penetration test on welds wherever specified by the engineer including provision of necessary equipments, measuring devices, gauges etc. all complete (over and above the work already specified in the specifications.)	30	RM	0.00481609
2328	Supply, fixing lightning arrester and air terminal over roof of power house building, pump house and other structures including all materials, labour, electrodes etc complete (all materials to be supplied by the contractor).	2	EACH	0.00299888
2334	Providing and fixing 20mm square MS bar balustrade with suitable MS flat and teakwood handrails etc all complete.	40	RM	0.01305409
Sub total allied works of FGD (Part B2)				6.74422742