

TECHNICAL CONDITIONS OF CONTRACT (TCC)
CHAPTER XI-2671
BILL OF QUANTITY AND % WEIGHTAGES FOR ITEM RATES W.R.T TOTAL LUMP SUM PRICE

Scope of Work: BHE/PW/PUR/BWT6-BALSTR-CHP-AHP/2671

Balance Work of Structural Fabrication Erection of CHP,AHP & FGD Works at 1X660MW MSPGCL Bhusawal TPS, Unit-6, Maharashtra.

Sl. NO	Item Description	Unit	Qty	Weightage %
2300	STRUCTURAL WORKS: Structural steel works including all labour, material (unless otherwise specified in BOQ/contract specification), equipments unless otherwise specified, transportation, handling etc. at all level as per specification, drawings and as directed by engineer - in - charge.			
A2301	Taking delivery of steel from BHEL stores / store yard, loading, Transportation, unloading, Fabrication,erection and alignment of structural steel with mild steel 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 including 2 coats of inorganic zinc (85% Zinc) primer (one coat at shop and one coat after erection and final alignment), 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), assembly, edge preparation, preheating (min preheat and interpass temperature of 20°C for welding over 20 mm and upto 40 mm & 66°C for welding over 40 mm and upto 63 mm & 110°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, surface preparation by means of manual or mechanical power tools as per IS:1477 part 1, touch-up painting, 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 an independent separte agency, approved by BHEL, for review and approval of fabrication drgs, in consultation with BHEL (BHEL to supply steel free of cost).			
(a)	Fabrication	MT	1,100.00	26.13206472
(b)	Erection, alignment, welding Payment Break up: a) Erection : 70% b) Alignment and Welding : 30 %	MT		-
b i	Erection : 70%	MT	1,100.00	9.85042573
b ii	Alignment and Welding : 30 %	MT	1,100.00	4.22160469
A2302	Extra over ST NO. 2301 for Shot blast cleaning of steel structures to near white metal surface(Sa 2 1/2) etc all complete.	MT	1,100.00	6.48387542
A2304	Providing and applying minimum total 150 microns DFT of polyamide epoxy paint composed of 77% solids (by volume) in three coats (each coat shall be minimum 50 micron DFT) as finishing coat of approved make and shade to achieve an even shade over steel sections already having primer coats including protection and cleaning, scaffolding etc. all complete.	MT		
a	50% against first coat	MT	1,100.00	3.83359259
b	50% against final coat	Mt	6,917.00	24.10632728
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.			
a	Minimum galvanisation of 610 g/sqm	MT		
	70% against Supply	MT	50.00	4.17032314
	30% against Erection	MT	50.00	1.78728134
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.	KG	1,695.96	0.24303377
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.			
e	60 Tons	EACH	2.00	0.05271588
2322	Supply, fabrication and fixing of GI pipe hand railing (Min. 1000 mm high, 610 gms/Sqm) of 32 mm/40 mm/50 mm dia (Medium Grade) including transportation, loading/unloading, painting etc. all complete..	MT	120.00	19.11875539
	Total Value of Work			100.00000