



Bharat Heavy Electricals Ltd
Boiler Auxiliaries Plant
Ranipet-632 406

EDC/FGD

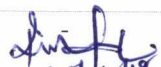
TECHNICAL SPECIFICATION

SPECIFICATION NO: FGD001

REV NO:00

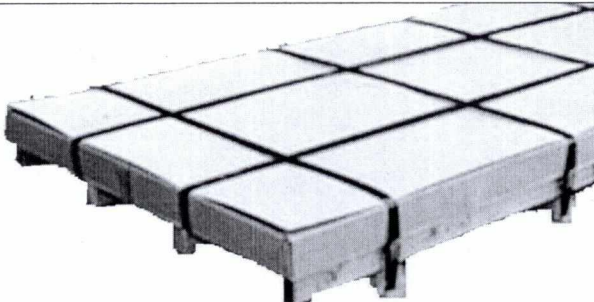
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Sl no	Item	Hastelloy C276 (UNS N10276) Plate	Vendor Acceptance/Comments
01	Scope of supply	Supply of hot or cold rolled , Annealed & descaled Hastelloy plate.	
02	Size	Thickness: 6mm Width: 1200mm (minimum) Length: 4000-5000mm (Vendor to specify maximum available length & width)	
03	Application	Wet-dry interface zone in Absorber	
04	Material specification	Alloy N10276 of ASTM B575 as per table 1 or DIN17750 (2.4819)	
05	Density	Density as per ASTM B575 Sl.no. 8.1 (Vendor to specify)	
06	Manufacturing process	Cold or hot rolling to achieve desired thickness, sheet to be solution annealed and descaled after rolling.	
07	Finish	Finish as per ASTM B906 11.1.1 no. 1 finish. (vendor to specify the finish)	
08	Dimensional tolerance	a) Thickness tolerance-As per ASTM B906 Table A2.1 (+ 0.61mm/- 0.15mm) b) Width & Length tolerance-As per ASTM B906 table A2.3 based on method used to cut the sheet. c)Straightness as per ASTM B575 clause 8.5 (edgewise curvature-depth of chord-of sheet shall not exceed 0.04mm multiplied by the length in cm) d)Squareness as per ASTM B575 clause 8.6 (Angle between adjacent sides shall be 90 +/- 0.15°) e) flatness as per ASTM B575 clause 8.7 (Commercially flat)	

00/ 28.08.18	Fresh Release	 K.B.PADHI	 ARBIND KUMAR	 R.K.MADHU	 R.S.BALAJI
REV/DATE	DESCRIPTION	PREPARED / AQCS	CHECKED / MM	CHECKED/ QA	APPROVED / FGD

Sl. No.	Particulars	Description	Vendor Acceptance/Comments
09	Testing	a)Chemical analysis as per ASTM E1473. (Vendor to specify factory standard) b)Tension test method E8 & acceptance norms are as per B575 table 2, (i)Tensile strength 690MPa min . (ii) Yield 283MPa min. (iii) Elongation 40%min c) Hardness on finished plate as per ASTM E18, its value shall be 100 HRB (Max). Vendor to specify. d)Grain size test as per ASTM E112, its value shall be as per Table 3 of ASTM per B575	
10	Freedom from defects	a) All plates shall be free from harmful defects like cracks, lamination. The edges of plates shall be slit without fish tails and kinks. The plates should not contain any weld seam. The surface shall be free from scales, rust, pitting, wrinkles b) Repair on finished plate is prohibited	
11	Marking on the face of plate	Marking on the plate lengthwise on one face as per ASTM B906 clause 22. (Vendor to specify his marking method for review) a) size of sheet b) material standard c) heat no. d) supplier name.	
12	Marking over the plate	Each sheet shall be identified by Tag & also permanent marking on each bundle of sheet on the packed crate, a) Bundle number b) Specification c) Size (thickness x width x length) d) Heat number e) Weight of bundle in Kgs f) PO number g) Manufacturers Identification	



Sl.no.	Item	Description	Vendor Acceptance/Comments
13	Export worthy Packing & Dispatch	a) The bundle/crate shall be rigid enough to withstand the packed weight.	
		b) Each bundle shall weigh approximately 2MT. Vendor to specify.	
		 	
14	Inspection & Certification	i) <i>Inspection by buyer or their authorized agency</i>	
		ii) All tests shall be complied as per the specification for each heat and the same shall be submitted along with supply	
		iii) The test certificates shall furnish the following details legibly in English language only, a) BHEL Purchase Order number b) Test certificate number c) Specification & grade with applicable year of code d) PO quantity & size e) Melt number f) Chemistry (melt wise) g) Mechanical test Results-I) UTS & II) Hardness h) Bundle number & weight i) Process of manufacturing with amount of cold reduction	

W. K. K. K.