



Bharat Heavy Electricals Ltd
Boiler Auxiliaries Plant
Ranipet - 632 406

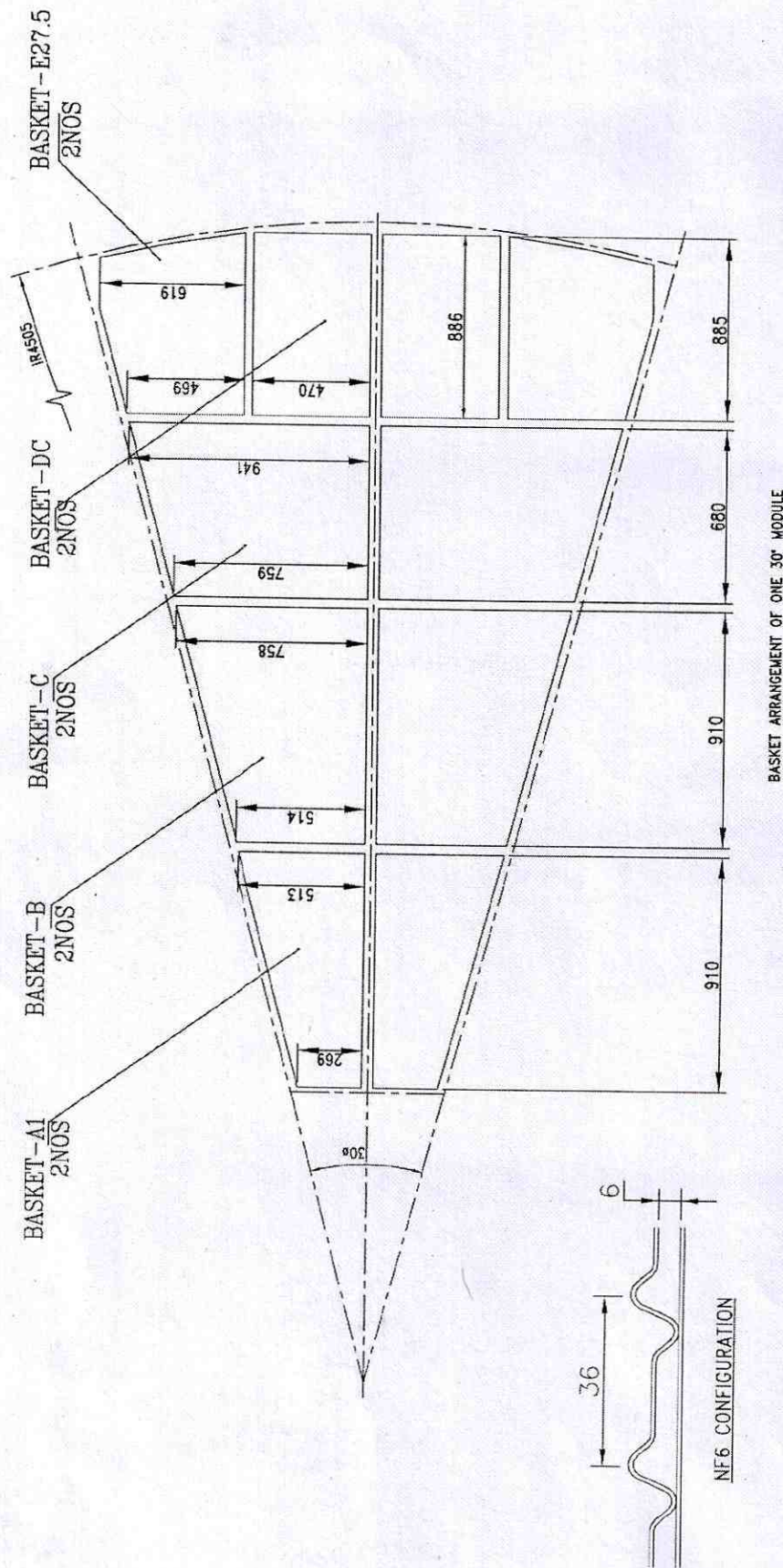
EDC / AIR PREHEATERS
TECHNICAL SPECIFICATION
Effective Date: 05.11.2016

Specification No : RAH - 504

Rev. No : 00

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01.	Item	Set of Cold end Basketed Enameled heating elements 27.5-750			
02.	Application :	Enamelled heating element Baskets are the heat transfer surfaces located at cold end of Rotary Regenerative air preheater used in coal fired Boiler. De-NOx SCR system is equipped upstream of Regenerative air preheaters. Flue gas and air will contact the enameled surface alternately.			
03.	Basket Arrangement, Dimensions & Set detail	Please refer page 02 of 02. Number of baskets per module is indicated in the sketch. 12 Modules are required for one Air preheater and it is equal to one set.			
04.	Element depth	750 mm Tolerance +0.0, -1.5			
05.	Basket height	830 mm Tolerance +0.0, -3.0			
06.	Element configuration	Notched Flat (NF6) profile as shown in page 02 of 02. Configuration dimensions are indicative only minor variations are allowed.			
07.	Element Base metal thickness & tolerance	0.75mm for Notched sheet and 0.85mm for Flat sheet. Tolerance +0.07mm, -0.0			
08.	Base metal	Enamelling iron as per EN10209 DCO4ED or ASTM A424 or Equivalent			
09.	Enamel coating material :	Enamel coating material shall be suitable for operating temperature range of 30 deg C to 250 deg C. Shall be suitable for corrosive environment of Sulphuric acid and Ammonium Bi-sulphate formation on the enamel surface. Shall be wear resistant to withstand the erosion due to dust particles in the flowing gas. Shall be shock resistant to withstand cold water washing at 200 Bar and Superheated steam cleaning at 14 Bar & 310 deg C.			
10.	Enamel coating	Porcelain Enamel 150 microns thickness on each side of the sheet.			
11.	Basket material & type	Low alloy corrosion resistance steel as per EN 10025-5 or ASTM A 588 Gr A. Basket design shall be suitable for side removal by pulling.			
12.	General :	a) The Vendor must provide data sheet with sheet thickness, enamel thickness & material standard with grade, drawing with dimensions including basket details, weight of each type of basket, total weight, expected life of enamel coating and other pertinent information along with offer. b) Vendor shall submit the Quality plan along with offer. c) QP shall include Sulphuric acid test, Adherence test, High voltage porosity test and Thermal shock test.			
13.	Inspection	a) By BHEL inspector at vendor's works. b) Necessary test & Guarantee certificate shall be submitted.			
00	05.11.16	<i>Heavy</i> <i>Sandesh</i> <i>Subh</i> FRESH ISSUE			
Rev.No	Date	Prepared	Checked	Approved	Record of Revisions.



3 mm CLEARANCE ON ALL SIDES OF ALL BASKETS.
ALL DIMENSIONS ARE IN mm.