An ISO 9001
Company

Bharat Heavy Electricals Limited
(High Pressure Boiler Plant**)**
Tiruchirappalli – 620014, TAMIL NADU, INDIA
MATERIALS MANAGEMENT

TITLE **NEW VENDORS NEEDED FOR ROUND CORNERS (FOR BELLOWS) FABRICATION WITH VENDORS MATERIAL**	Phone:+91 431 2574252 Fax :+91 431 2520517 Email : suma@bheltry.co.in

	Reference Number: Enquiry OS/ACF/BE/003	**Enquiry Date: 19.12.2011**	**Due date for submission of quotation: 18.1.2012**
You are requested to quote the Enquiry number date and due date in all your correspondences. This is only a request for quotation and not an order			

BHEL/Trichy is looking for empanelment of new vendors for supply of "ROUND CORNERS (FOR BELLOWS) FABRICATION WITH VENDORS MATERIAL"

BHEL commercial terms & conditions with Price Bid formats and all annexure can be downloaded from BHEL web site http://www.bhel.com or from the Government tender website http://tenders.gov.in (public sector units) Bharath Heavy Electricals Limited) under enquiry reference "**OS/ACF/BE/003** "	
Tenders should reach us before 14:00 hours on the due date Technical bid will be opened at 14:30 hours on the due date Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present.	Yours faithfully, For **Bharat Heavy Electricals Limited** Subramani.P DGM / ACF/OS

BHARAT HEAVY ELECTRICAL LIMITED

TIRUCHIRAPPALLI

NEW VENDORS REQUIRED

ROUND CORNERS (BELLOW) FABRICATION WITH VENDORS MATERIAL

During the year 2012-13, BHEL Tiruchirappalli requires approx 15,000Nos of Fabricated Round Corners required for Bellows of various projects. For qualification criteria, technical requirements and other details and for online registration with BHEL's Tiruchirappalli unit, visit **http://www.bheltry.co.in** (*Online Vendor Registration – Outsourcing* page), or refer **NIT XXXX** on BHEL's website **http://www.bhel.com** (*Tender Notifications* page) or the Govt. Tenders website **http://tenders.gov.in** (*Public Sector Units > Bharat Heavy Electricals Limited* page). Expression of Interest along with Registration forms and relevant documents should reach us within 30 days from today.

For clarifications, if any, contact:

DGM/ACF, Outsourcing, BHEL, Tiruchirappalli-620 014, Tamil Nadu

Ph: (0431) 2574252; Fax: 2520517; email: suma@bheltry.co.in

TECHNICAL DETAILS OF ROUND CORNERS (FOR BELLOWS)

Bellows are required in Duct systems to absorb thermal Movements. They are subject to a combination of stress and chemical corrosion. At higher temperature stress corrosion occurs, while at lower temperature chemical corrosion prevails. Expansion Bellows are placed in between zero points, to take up wind load & thermal movements; and Entry & Exit of the Equipments like Fan, Chimney, ESP. Bellows are rectangular/square in shape with four corners rounded for strength and providing for expansion.

Qualification Criteria

Facilities

1) Shearing Machine to process minimum 12 mm thick and 2.5 metre width plates.

2) Press brake to handle minimum 12 mm thick and 2.5 metre wide plates

Appropriate tooling to handle varieties as specified in the drawings.

3) The Vendor should have the following experience in Round corner manufacture:

- Forming of Corners using suitable forming Dies.
- Horizontal forming or Vertical pressing using Heavy Duty Hydraulic Press.
- Good knowledge in design of Forming tools/Dies.

4) Cold or Hot forming to be adopted have to be explained in detail.

5) Horizontal Bending facility using formers or Hydraulic Press as per point 3

6) Power: Minimum 100HP.

7) Covered shed: Minimum 12metres x 14 metres.

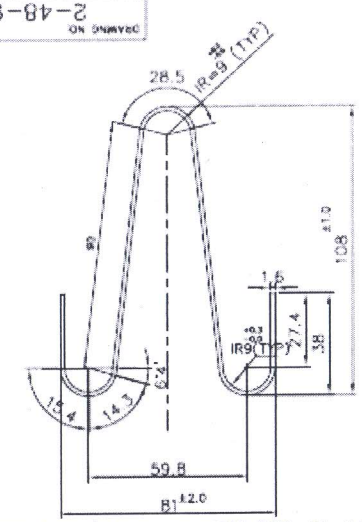
8) EOT crane to handle toolings /and Jobs (Minimum 10 tons)

A- Frame or Hydra Crane for loading and unloading outside the shed.

9) Open area excluding shed: Minimum 1 acre.

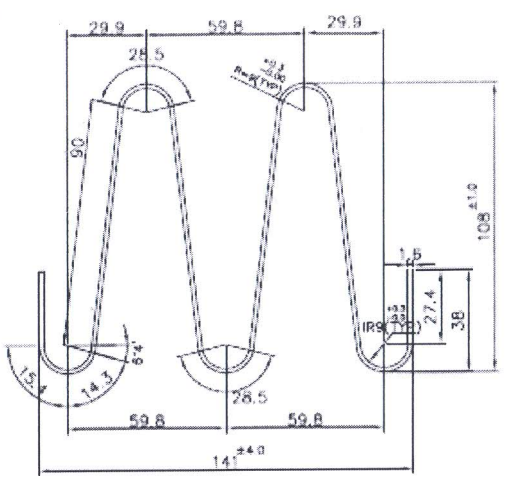
2-48-999-47612 ON DRAWING

FOR TOLERANCES OF UNTOLERANCED DIMENSIONS DURING MANUFACTURE REFER PLANT STD. NO "P 023 0299"



HS-RCEJ # 01 (CARBON STEEL) (MC-94-249-029)

HS-RCEJ # 01 (CORTEN STEEL) (MC-94-249-033)



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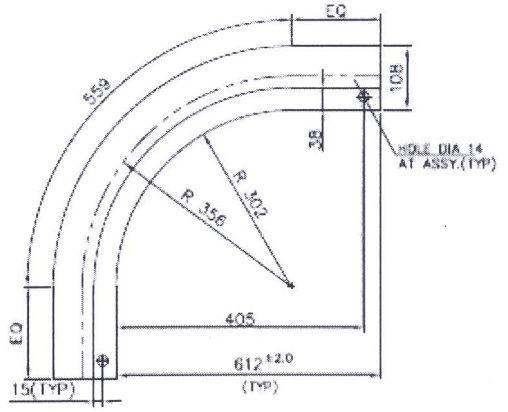
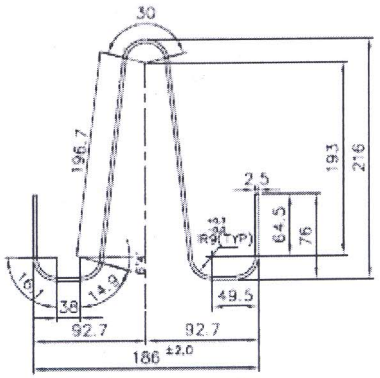
HS-RCEJ # 02 (CORTEN STEEL) (MC-94-249-034)

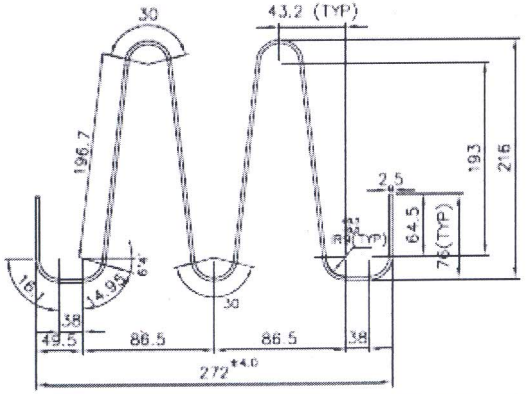


HS-RCEJ
(For all styles)



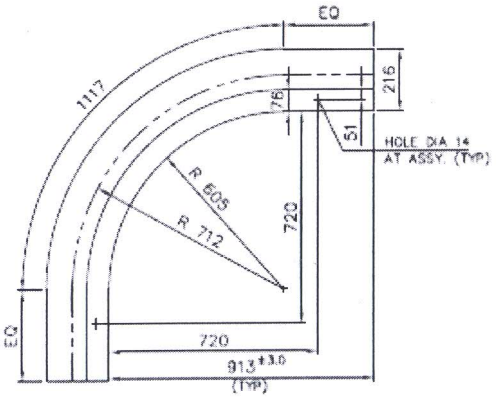
FS-RCEJ # 01 (CARBON STEEL) (MC-94-249-031)

FS-RCEJ # 01 (CORTEN STEEL) (MC-94-249-035)



FS-RCEJ # 02 (CARBON STEEL) (MC-94-249-032)

FS-RCEJ # 02 (CORTEN STEEL) (MC-94-249-036)



FS-RCEJ
(For all styles)

NOTES:

1. NO SCRIBE MARKS, DIE MARKS, SCRATCHES OR OTHER IMPERFECTIONS RUNNING IN THE LONGITUDINAL DIRECTION OF THE CONVOLUTION ARE PERMITTED. IF SUCH MARKS DO OCCUR, THEY MUST BE BLENDED INTO THE BASE MATERIAL WHEN BLENDING MARKS, THE MINIMUM THICKNESS SHALL NOT BE LESS THAN 1.1 MM FOR HS / 1.8 MM FOR FS.
2. WAVES(FLUTTER) FORMED DUE TO BENDING OF CORNER PIECES: FREQUENCIES NOT LESS THAN 25 MM AND THE AMPLITUDE NOT TO EXCEED 2.5 MM FOR HS / 4.8 MM FOR FS.
3. NO WAVES(FLUTTER) BEYOND THE NEUTRAL RADIUS OF THE BENT CORNER PIECES ARE PERMITTED.
4. MATERIAL TO BE USED :-
   HS-RCEJ (#01 & #02) : IS:513 TYPE D(CARBON) / A588GR.A (CORTEN)
   FS-RCEJ (#01 & #02) : IS:1079 ST.34.(CARBON) / A588GR.A (CORTEN)

REV	DATE	ALTERED :
01		CHD & APPD :
ZONE		

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT

Bharat Heavy Electricals Ltd
UNIT: HIGH PRESSURE BOILER PLANT
TIRUCHIRAPALLI - 620014

	NAME	SIGNATURE	DATE
DRN	BMKUMAR		04-07-06
CHD	ARUN		04-07-06
APPD	V.S.R		04-07-06

DEPT: DUCT | CODE: 124 | ALL DIMENSIONS ARE IN MM | PROJECTION | SCALE: NTS | WEIGHT (Kg) | REF TO ASSY / GLG DWG

TITLE: SPEC. FOR ROUND CORNER EXPANSION JOINTS

DRAWING NO: 2-48-999-47612 | REV