

दूरभाष :
TELEPHONE :
तार : बार्क-मुंबई, चेम्बूर.
TELEGRAMS : BARC-MUMBAI, CHEMBUR.
फेक्स संख्या : ९१-२२-२५५० ५१५१
FAX NUMBER : 91-22-2550 5151



ट्रॉम्बे,
मुंबई-४००-०८५.
TROMBAY,
MUMBAI-400 085.

भारत सरकार
GOVERNMENT OF INDIA
भाभा परमाणु अनुसंधान केन्द्र
BHABHA ATOMIC RESEARCH CENTRE

Tender No. - BARC/RTD/SP/MF/ 07 /2017

Date 17/05/2017

Due date – 29/05/2017

To,

SUB: Procurement of raw materials & bought out components for fabrication of support structure, base structure and railing, erection at site, assembly of bundle handling system sub assemblies and mounting on support structure at hall-7, BARC

Dear Sirs,

Sealed Quotations are invited on behalf of President of India by Head, RTD in sealed envelopes for Procurement of raw materials & bought out components for fabrication of support structure, base structure and railing, erection at site, assembly of bundle handling system sub assemblies and mounting on support structure at hall-7, BARC

- 1. Scope of Work : As per attached specification (Technical specification No.: RTD/FBHS/01)**
- 2. Work completion and Validity period: Work should be completed within two weeks from date of release of work order.** Price should be firm through out of currency of contract. The rates quoted shall remain valid for 45 days.
- 3. Price:**
Bidder should quote for the entire job, which include the procurement of raw material manufacturing, inspection, testing, supply & erection at site as given in the “scope of work”. The quotation should clearly mention the basic cost, cost of site erection, installation & commissioning and taxes separately.

4. Payment:

- a) Payment will be made as per rules, after the completion of the work to purchaser's satisfaction against submission of original bill in triplicate and advance stamped receipt. Advance/Part payment cannot be made.
- b) 100% payment shall be made by cheque / ECS (Please furnish details) after completion of job subjected to the satisfaction of purchaser.
- c) **Deduction of Taxes: Income tax @2% and Educational cess as applicable will be deducted from the bill**
- d) A penalty @ 0.5% per week (max. 5%) shall be levied for delay in completion of work.
- e) Payment shall be made only on satisfactory completion of work and on production of bill, advance stamped receipt.

5. Confidentiality clause :

a) Confidentially:

Party shall not disclose any information to any third party concerning the matters under this contract generally. In particular, any information identified as "Property" in nature by disclosing party shall be kept strictly confidential by receiving party and shall not be disclosed to any third party without the prior consent of the original disclosing party.

This clause shall apply to sub-contractors, consultants, advisors or the employees engaged by the party with equal force.

b) Restricted information:

Categories under section 18 of the Atomic Energy Act, 1962 and "Official Secrets" under section 5 of the official Secret Act, 1923 - Any contravention of the above-mentioned provisions by any contractor, sub-contractor, consultant, adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation.

c) Prohibition against use of BARC'S name without permission for publicity purpose:

The contractor or sub-contractor, consultant, adviser or the employees engaged by the contractor shall not use BARC'S name for any publicity purpose through any public media like press, Radio, T.V. or Internet without the prior written approval of BARC.

6. General:

- a) Work extension if any required the request letter for the extension shall be forwarded to the Engineer-in-charge indicating the current progress and reasons for extension.
- b) Supplier should write clearly their TIN No., VAT No., CSTRC No. & PAN No. in their quotation, otherwise the quotation will not be considered.
- c) Sealed envelope containing quotation must reach on or **before 15.00 hrs., 29/05/2017**

To:

**Head, Refuelling Technology Division,
Engg. Hall No. 7, BARC, Trombay,
Mumbai -400 085**

- d) The envelope **must be sent by "speed post" only** to reach within above mentioned period. Any other mode of delivery is not acceptable.
- e) Following information shall be clearly written on the envelope containing the quotation


Attention: Shri. S Pandey, SO/E, RTD

Ref. no. BARC/RTD/SP/MF/ 07 /2017, Due date: 29/05/2017

- f) The Bids will be opened on 30/05/2017 at 14.00 hrs
- g) The bidder shall furnish the detailed information regarding whether an ex-employee of BARC is working in their organisation or whether any of their relative is working in DAE/BARC or whether he/she is an ex-employee of DAE/BARC. In case of absence of such information, or wrong information the quotation or contract is likely to be rejected or cancelled.
- h) Proof of ability: A brief list of similar jobs executed, if any, and name of the organization to be furnished
- i) Bidder may clarify any doubt about the work by contacting Sh. S. Pandey **Ph.02225596910**.

Thanking you,

Yours Sincerely,


(S. Raghunathan) 16/5/17

Head, RTD

Shyam Lal

भारत सरकार
भाभा परमाणु अनुसंधान केंद्र
पुनःईंधन भरण प्रौद्योगिकी प्रभाग
Government of India
Bhabha Atomic Research Centre
Refuelling Technology Division

Tender specification for fabrication of mounting structure and erection of
Bundle handling system.

Technical Specification No.: RTD/FBHS/01

No. of pages: 10 (including cover page)

1.0 Description:

A bundle handling system (BHS) is required to be tested at loop bay area of hall-7. The BHS is available with us in the form of five subassemblies as follows (Ref: Fig.1):

1. I beam with Y drive sub assembly
2. Main body sub assembly
3. Extension rod sub assembly
4. Gripper sub assembly
5. Trough sub assembly

These subassemblies need to be assembled and mounted on a 'support structure'. The trough sub assembly will be mounted on a base structure. The 'support structure' for mounting is required to be fabricated on the second floor (8.2 m elevation) of loop bay area. The fabricated base structure, for supporting trough sub assembly, to be placed at the ground floor.

2.0 Scope:

Based on the drawing/ sketches supplied, following jobs shall be performed by the supplier:

1. Fabrication and installation of the support structure (Approx height is 2.3 m. and width is 3.5m.) on second floor of loop bay area.
2. Fabrication and installation of base structure (1.2m (L) X 0.825m (B) X 0.79m (H)) to mount the trough sub assembly at ground floor.
3. Necessary arrangement for alignment and height adjustment between bundle handling system and trough.
4. Necessary arrangement for connecting the support structure with the existing I beam at second floor of loop bay area.
5. Removal of Dexion of first floor and second floor (Approx area of dexion to be removed from each floor is 3.5m X 1.5m).
6. Fabrication and installation of 1.2 meter high safety railing around the open dexion area at first and second floor of loop bay area.
7. Assembly of all the sub assemblies of BHS as per guidance.
8. Erection and mounting of BHS on the fabricated support structure.
9. Provision for locking of c clamps to connect the BHS and the fabricated support structure.
10. Laying of cables and pneumatic hoses from BHS mounting location to ground floor.
11. Supply of a monkey ladder (height: 3.6 m, width: 0.5m, step spacing for convenient climbing).

3.0 Notes to Bidder:

1. Entire job shall be completed within 2 weeks from the date of release of work order.

2. The supplier shall quote for the entire job, which includes the procurement of raw material, fabrication, inspection, testing, assembly of BHS & erection at site as given in the “scope of work” clause no 2.0 of technical specification. The quotation should clearly mention the basic cost, cost of site erection, installation & commissioning and taxes separately.
3. Relevant drawings/ sketches of the system & its equipments are listed under section 4.1 and enclosed with this specification.
4. The raw materials as mentioned in section 4.2 will be supplied as free issue material. The material, other than free issue material, as mentioned in the bill of material in fig.3, should be procured, fabricated and assembled by the fabricator as per specification and sketches.
5. The standard / proprietary items shall meet requirements of relevant drawings.
6. As a proof of ability the Bidder shall submit a list of similar works executed by him.
7. Any deviation from the requirements indicated in this specification, drawings, shall be brought out clearly by the Bidder in his quotation.
8. All the structure components shall be painted with red oxide prior to synthetic enamel painting.
9. During erection of system at site supplier shall arrange the electric welding machine, all tools and necessary gadgets for erection. Only free water and electric supply will be provided. Supplier shall also complete the formalities like police verification certificate (PVC) for their technical staffs coming for erection work in BARC site well in advance.

4.0 Technical Specification:

4.1 Applicable Drawings/ sketches:

List of drawings/ sketches for fabrication and erection are given below. Requirements specified on these drawings/ sketches shall govern manufacture and supply of the equipment.

1. Bundle handling system (Fig.1)
2. Bundle handling system with support structure and bottom structure (Fig.2)
3. Support structure (General assembly) (Fig.3)
4. Top beam (Fig.4)
5. Column (Fig.5)
6. Base structure (Fig.6)

4.2 Raw material:

Following raw materials will be given as free issue material for fabrication of support structure and base structure:

1. I beam (ISMB 150, required length as per drawing)
2. Plate (10 mm thick, required size as per drawing)
3. Channel section (ISMC 150, required length as per drawing)

4. Channel section (ISMC 75X40, required length as per drawing)
The material (railing pipe, hex nuts, bolts, studs etc.), other than free issue material, as mentioned in the bill of material in fig.3, should be procured, fabricated and assembled by the fabricator as per specification and sketches.

4.2 Process & Workmanship:

The manufacturing process and workmanship shall be consistent with standard engineering practice.

4.3 Inspection and Tests:

Dimensional inspection of all the fabricated components will be performed. Following test needs to be done after erection of the system at site.

1. Liquid penetrant (LP) test: All the weld joints shall be tested by LP.

4.3.1 Acceptance for liquid penetrant test:

- a) Only imperfections producing indications with major dimensions greater than 1.5 mm shall be considered relevant imperfections.
- b) Imperfections producing the following indications are unacceptable:
 1. Any cracks or linear indications;
 2. Rounded indications with dimensions greater than 4.5 mm;
 3. Four or more rounded indications in a line separated by 1.5 mm or less edge to edge.
 4. Ten or more rounded indications in any 3800 sq. mm of surface with the major dimension of this area not exceeding 150 mm. with the area taken in the most unfavorable location relative to the indications being evaluated.

4.4 Fabrication and installation

The entire system should be fabricated, erected and installed at HALL-7 within 2 weeks from the date of placement of work order.

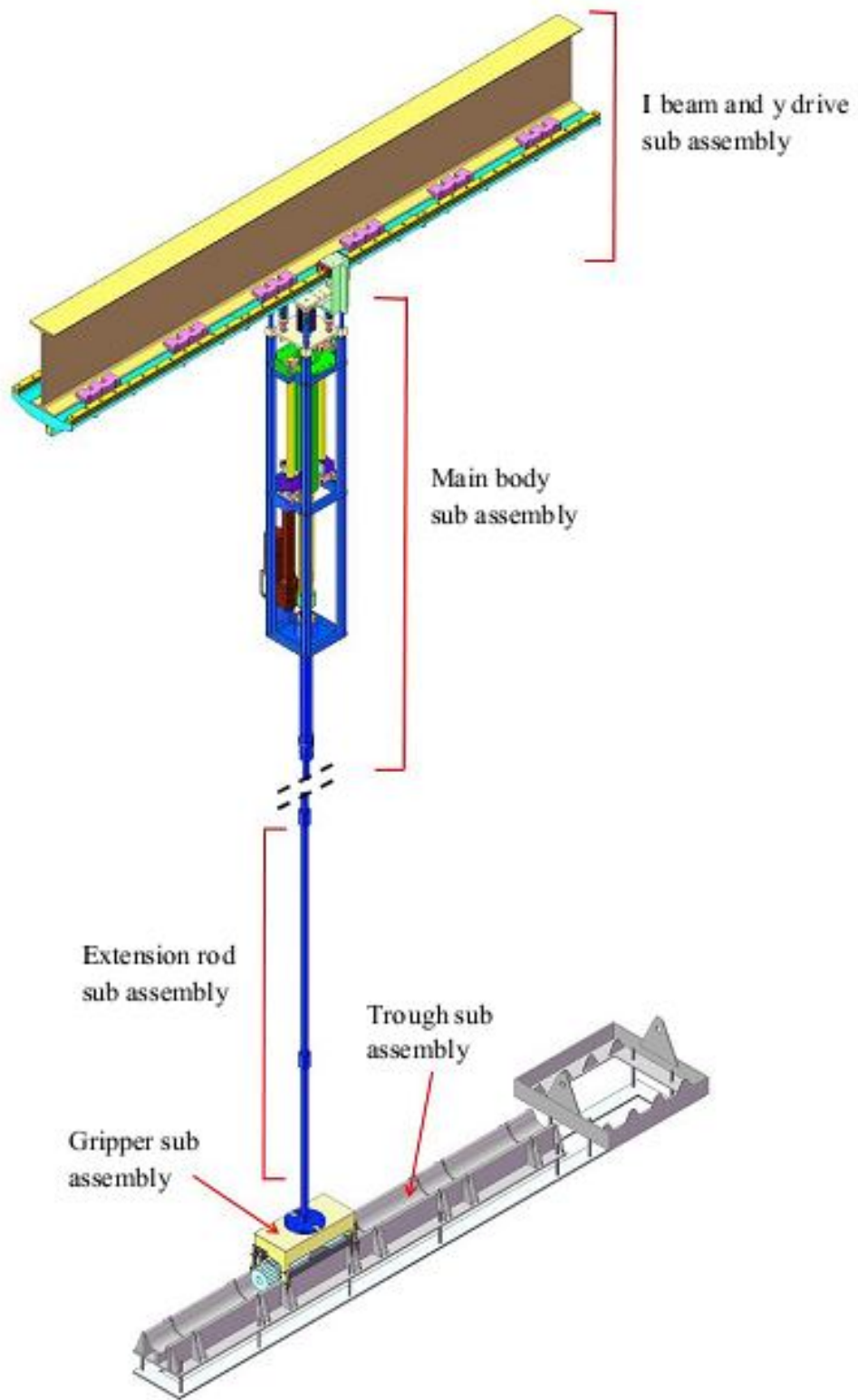


Fig.1: Bundle handling system

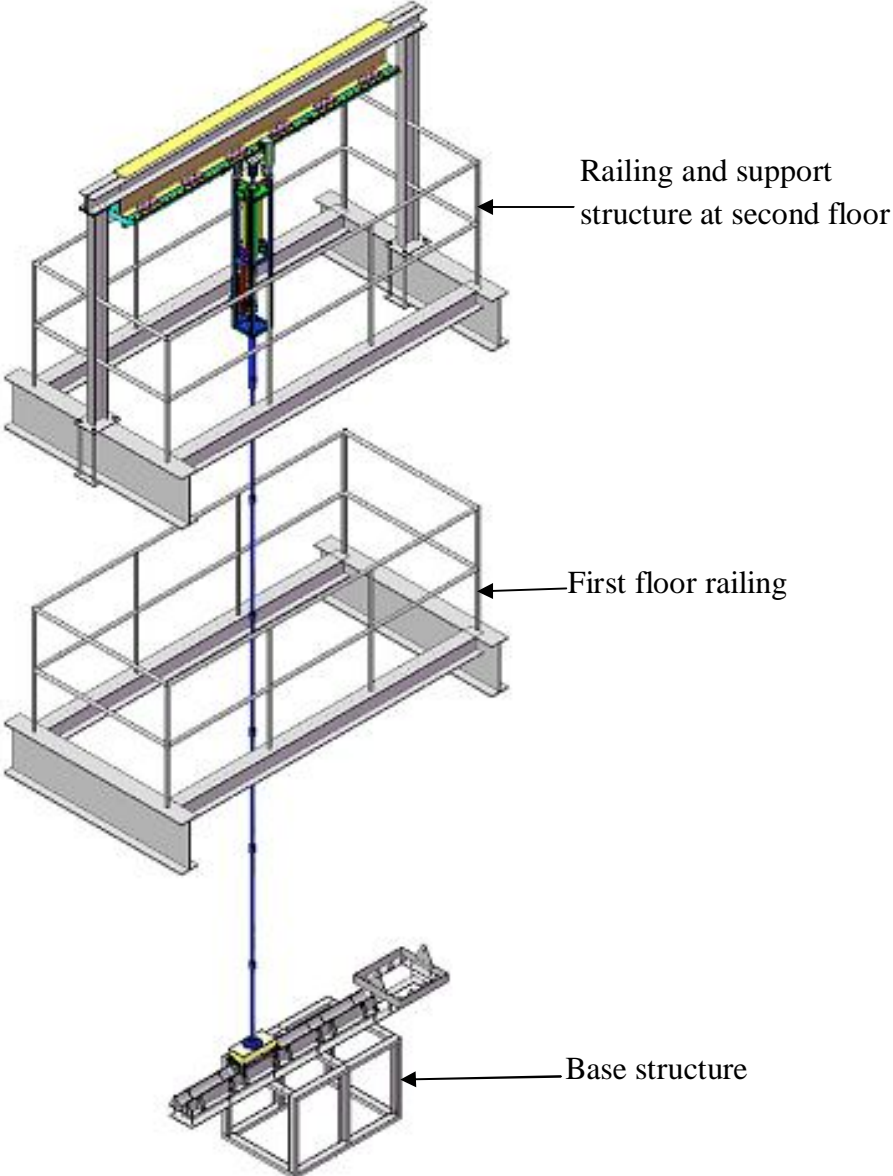


Fig. 2: Bundle handling system with support structure and bottom structure

BILL OF MATERIAL					
PART NO.	DESCRIPTION	MATERIAL	QTY.	REF. DRG. NO.	REMARKS
1	TOP BEAM (SMC. 150, L-3.75M*)	IS 2062	2	STD	FREE ISSUE MATERIAL
2	(RUDN) (SMB 150, L-2.1M*)	IS 2062	2	STD	FREE ISSUE MATERIAL
3	HEX BOLT (M10, L60)		12	STD	
4	HEX NUT (M10)		12	STD	
5	STUD (M20, L700)		8	STD	
6	HEX NUT (M20)		8	STD	
7	1.5" NB PIPE FOR RAILING				
8	HEX NUT AND BOLT (M12, L80)		20	STD	

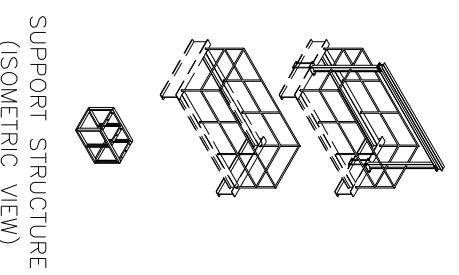
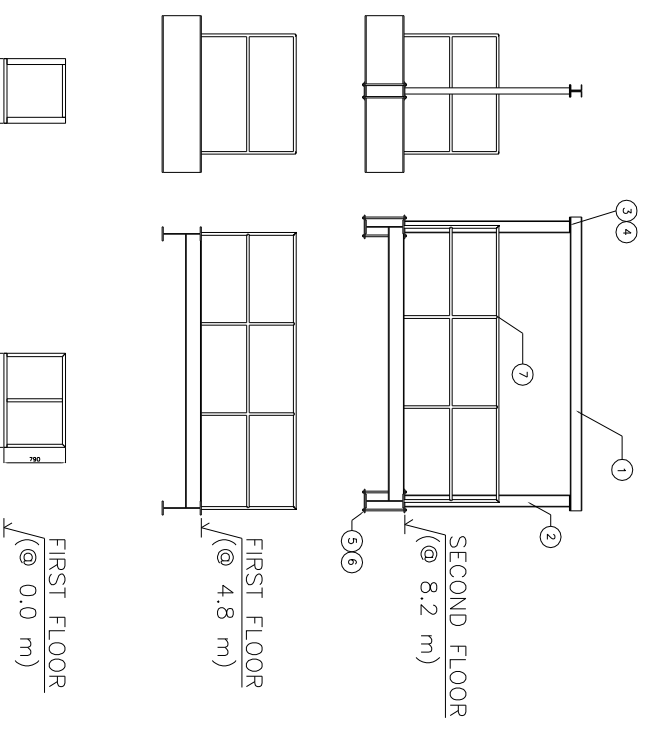
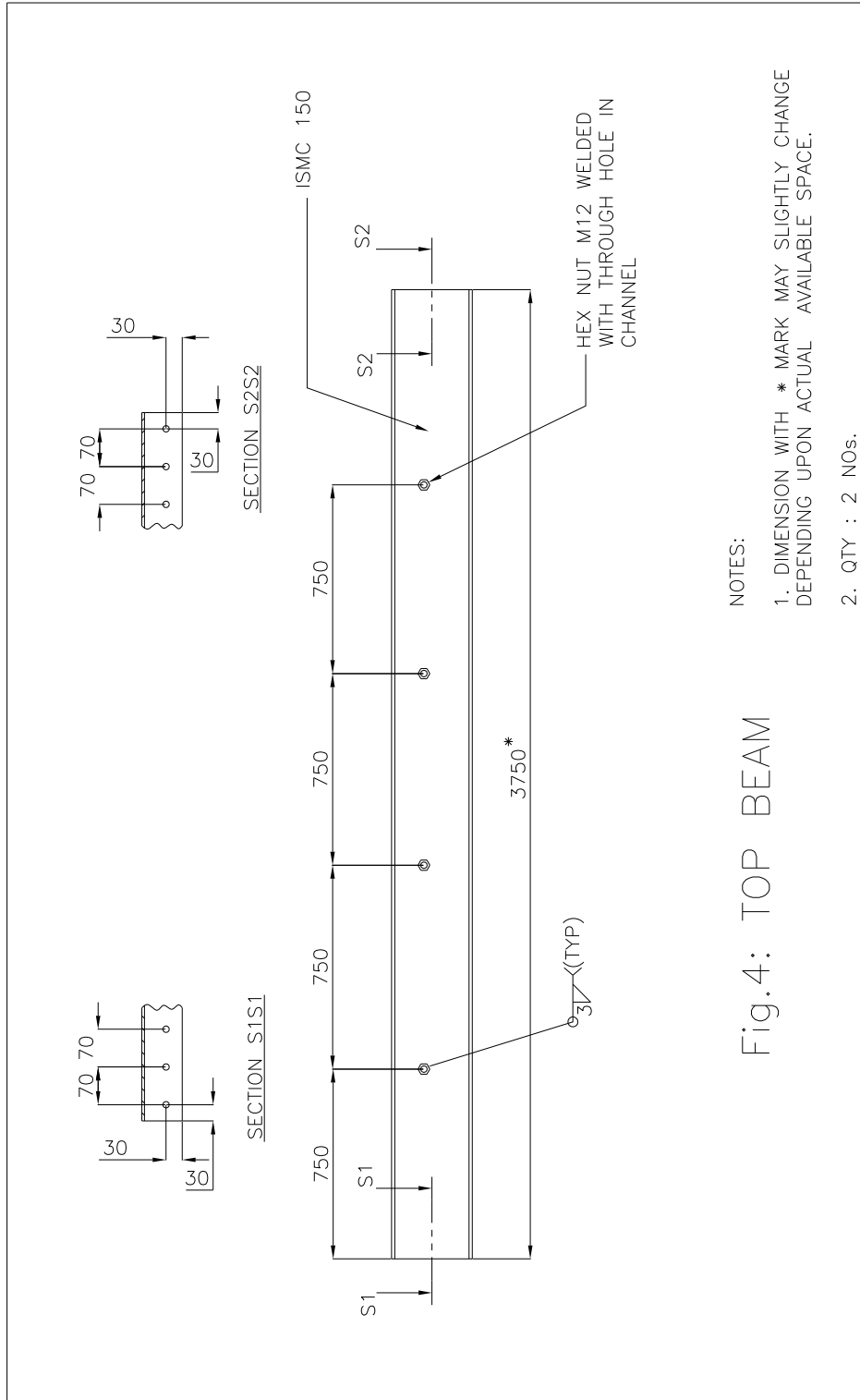


Fig.3: SUPPORT STRUCTURE (GENERAL ASSEMBLY)

- NOTES:
1. DIMENSION WITH * MARK MAY SLIGHTLY CHANGE DEPENDING UPON ACTUAL AVAILABLE SPACE.
 2. QTY : 1 NO.

Fig. 3: Support structure (General assembly)



NOTES:

1. DIMENSION WITH * MARK MAY SLIGHTLY CHANGE DEPENDING UPON ACTUAL AVAILABLE SPACE.

2. QTY : 2 Nos.

Fig.4: TOP BEAM

Fig. 4: Top beam

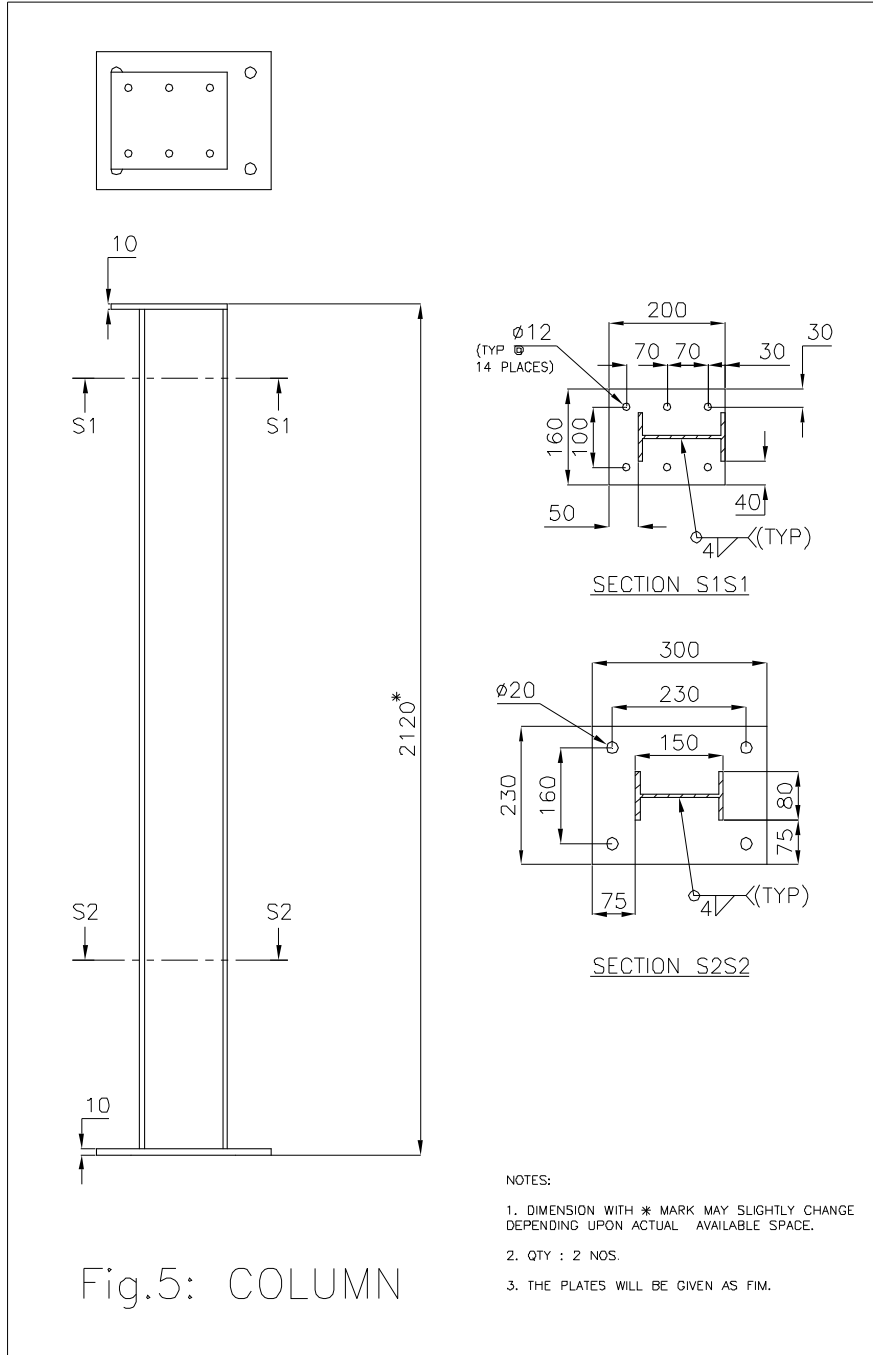


Fig. 5: Column

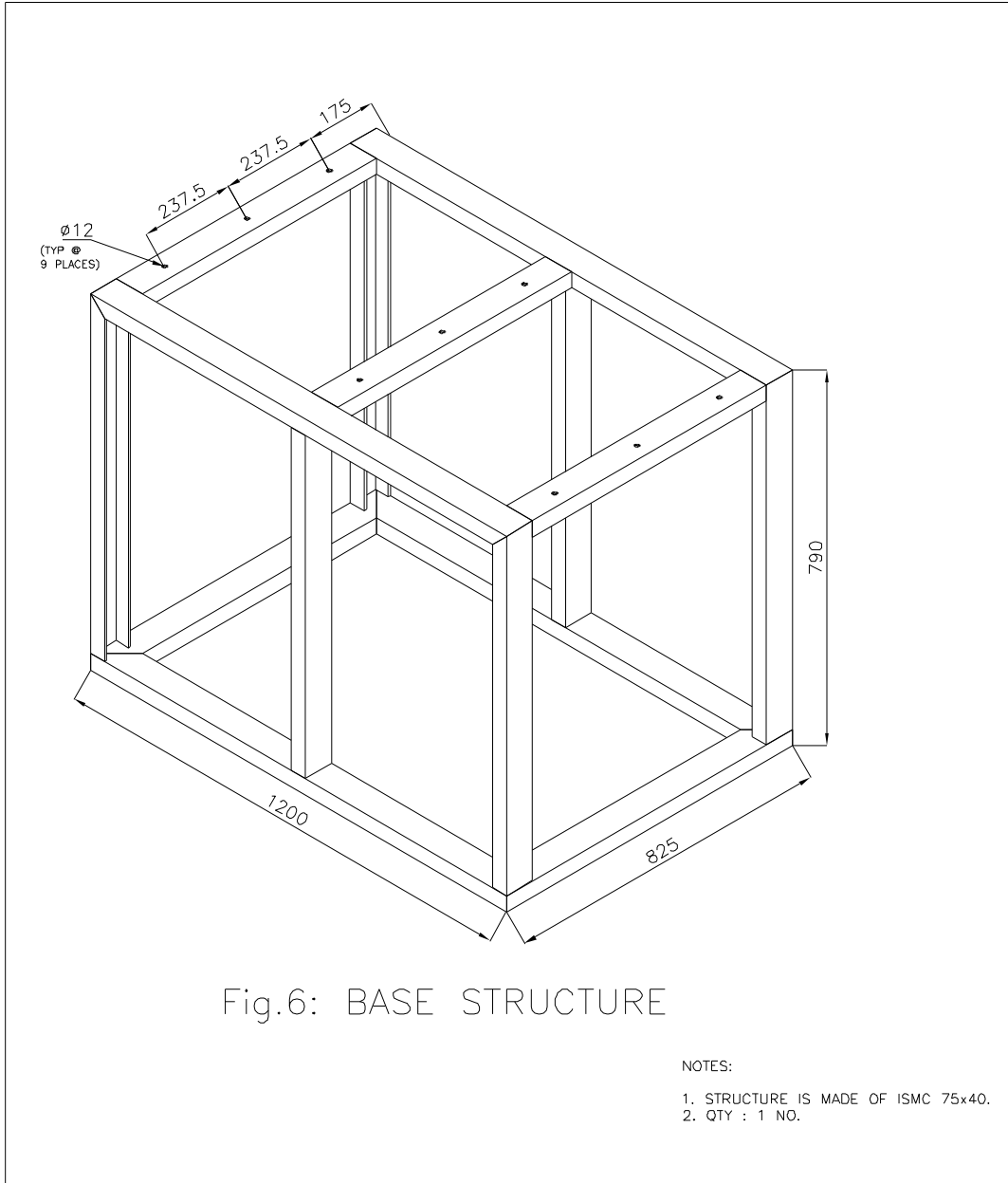


Fig. 6: Base structure