TECHNICAL SPECIFICATIONS OF STRUCTURAL STEEL ITEMS

1. **Scope:**

   This specification covers the manufacturing and testing at works and supply of structural steel items.

2. **Applicable standard:**

   As per IS: 2062 / 1992 for steel for general structure purpose and other relevant standard mentioned therein with latest amendment up to date of tender.

3. **General Requirement:**

   Material (not re-rolled) of grade 'A' (Fe-410WA) shown in Schedule -"A" above should be supplied confirming to IS 2062/92 with latest amendment if any.

4. **Dimension:**
   The material dimension shall be in accordance with the relevant Indian standard mentioned in table 3 of IS: 2062/92. The rolling tolerance shall be as per IS: 1852/85.

5. **The samples and acceptance criteria:**
   The Nos. of sample randomly selected from the lot shall be in accordance with and acceptance criteria shall as per IS: 2062/1992.

6. **Acceptance test:**
   The acceptance test as per following are to be carried out on randomly selected sample.
   a. Verification of dimension.
   b. Yield strength test.
   c. Elongation test.
   d. Bend test.
   e. Chemical composition.

7. **ISI License:**

   The Bidder should submit notarized copy of BIS license of 2062/92 along with schedule I clearly showing the size of tender / offer item valid at least up to the date of opening of tenders. If applied for renewal of the license, copy of receipt of the fees and / as acknowledge of application from BIS. **The offer without the BIS license shall be straight way rejected.**

8. **MARKING:**

   As per IS: 2062/92 each product except M.S.Flats & M.S.Round bars shall carry a tag or be marked with the manufacturer's name or trademark. Bars and Flats shall carry a tag bearing the manufacturing's name of trademark. Designation of steel should also be similarly marked on the product or tag. Each end of rolled product shall be painted with green color as per specified for grade A in IS 2062/92.

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Signature of Tenderer		
Date:	Place	Company's Round Seal

S C H E D U L E - "I"

Schedule of Technical Particulars of the Tenderer required for ascertaining technical acceptability of offer. (This Schedule – I, duly filled and signed should be submitted along with tender)

Sr No	Description	For items of Steel offered (To be filled up by Tenderer)
1.	Name of the Manufacturer	
2.	Standard applicable. Whether the Tenderer or / principal re-roller has valid BIS license to use IS Mark?	
3.	Whether materials will be supplied under BIS Certification Mark Scheme?	
4.	Give details of BIS license held. Attested copy of BIS license along with latest extension showing validity should be submitted (This is a must)	
5.	Whether the materials will be rolled from tested billets conforming to IS: 2830 / IS: 6914? (Specify quality).	
6.	Whether manufacturer possesses the facility to rolls billets / ingots / bloom slab, as may be required for rolling the Section?	
7.	Whether manufacturing unit possesses well equipped laboratory for testing mechanical and chemical properties of raw and finished steel?	
8.	Details of Quality assurances plan at the works of manufacturers for in house or bought out items	
9.	List of machineries installed / available at the manufacturers' works.	

Signature of Tenderer

Date: Place Company's Round Seal

S C H E D U L E – "II"

(Submit along with Tender Technical Bid.)
Technical details of rolling mills furnace and other equipments.

(A) Details of Remelting Furnace:

Sr.No.	Particulars	
1.	Type of furnace	Electric Arc Furnace / Oil Fired / Coal Fired.
2.	Capacity of the furnace.	
3.	Inside hearth width of furnace.	
4.	Length of hearth at the entry of furnace.	
5.	Maximum weight of one piece of raw materials that can be entered into furnace.	
6.	Temperature of heated piece of raw materials at the exit of furnace.	
7.	Facilities available at the exit of the furnace to remove scale formed during heating. Details thereof.	
8.	Arrangements made for transfer of hot metal from furnace to rolling mill stand. Details thereof.	

(B) ROLLING MILL STANDS:

1.	Nos. of stands.	
2.	Operational details of each stand.	
3.	Nos. of passes that are being carried out.	
4.	Whether universal mill stand is provided ? If yes, details thereof.	
5.	Details of drive, power of each stand, its capacity, fly wheel and transmission between flywheel and stand. Details thereof.	
6.	The operational details of rolling mill whether. Details of operation activity of above.	a. Automatic. b. Semi Automatic. c. Manual.
7.	Operational details of transfer of rolling section from one stand to another. Details of above.	a. Automatic. b. Semi Automatic. Manual.

Signature of Tenderer		
Date:	Place	Company's Round Seal

(C)	Details of cooling bed installed adjacent to mill length of cooling bed.	
(D)	Straightening facilities available. Whether.	(i) Mechanical. (ii) Hydraulic. (iii) Pneumatic. (iv) Any other type.
	Details of above.	
(E)	Hot and cold saw facilities available. Details thereof.	
(F)	Maximum length of heavy structural section that can be rolled at your mill.	
(G)	Raw materials: (i) Size of bloom/slab required for rolling the section. (ii) Source of availability for rolling the section. (iii) Confirmation of raw materials from source to meet requirement in case order is placed may please be submitted.	

Signature of Tenderer

Date: Place Company's Round Seal

S C H E D U L E – "A-1"

Manufacture, Test and Supply of New and Un-used Prime Quality Weld able Steel as per IS: 2062 / 1992 Fe 410. (With latest amendments if any)

Sr No	Description of goods with details of specification	Sectional Weight in **Kg/ Mtr.**	Tentative Qty. in **MT.**	Offered Qty. in **MT.**	Per Annum Manufacturing Capacity. & Monthly Delivery Schedule
A	Supply of M.S.Channel confirming to IS-2062, Gr.–"A" quality,having length of 09 Mtrs (+/- 150 MM Tolerance) and under "BIS" Mark Certification Scheme.				
1	100 X 50 X 5 MM	**9.56**	**300 MT**		
B	Supply of M.S.Angles confirming to IS-2062, Gr.–"A" quality, having length of 09 to 12 Mtrs and under "BIS" Mark Certification Scheme.				
1	**65X65X6 MM**	**5.80**	**3500 MT**		
2	**50x50x6 MM**	**4.50**	**400 MT**		
C	Supply of M.S.Flats confirming to IS-2062, Gr.–"A" quality, having length of 7.5 Mtrs., and above and under "BIS" Mark Certification Scheme.				
1	50 X 6 MM	**2.39**	**1000 MT**		
D	Supply of M.S. Round Bars having length of 9 Mtrs. and above confirming to IS-2062, Gr.–"A" quality, under "BIS" Mark Certification Scheme.				
1	M.S. Round Bars 16 MM	**1.580**	**600 MT**		

Note:

1. Unloading: "DGVCL will unload all the materials." If the firms unload the materials at consignees end, then maximum Rs.50.00 per MT extra will be given.
2. Tenderer should invariably furnish a Notarized Copy of the BIS license (with Schedules I & II) held by the firm for using IS mark for the tendered items. IF THE LICENSES ARE NOT FURNISHED THEN THEIR OFFERS FOR THOSE ITEMS WILL NOT BE CONSIDERED. PROVISIONAL CERTIFICATES NOT ALLOWED. NO FURTHER CORRESPONDANCES WILL BE ENTERTAINED IN THIS MATTER.

Signature of Tenderer

Date: Place Company's Round Seal

3. Tenderer should furnish along with Technical Bid all the Tender documents and also Schedules – I & II duly filled in & signed.

4. Tenderer shall have to make his own arrangements for procurement of Raw materials such as Ingots, Billets, Blooms, Slabs, Wire Rods, etc., and DGVCL shall not entertain any requests from Tenderer to inform the raw materials suppliers for allocation of raw materials on this account.

5. <u>This paper should be signed by the Tenderer and should be submitted alongwith the Technical Bid.</u>

Signature of Tenderer		
Date:	Place	Company's Round Seal