

Technical Specifications

1. **Supply, Fabrication, and Transportation of Galvanized H-Beam Sleepers**, complete with all fittings, fixtures, and fastening materials, in accordance with RDSO Drawing No. RDSO/B-1636/4/R (with latest alterations) and BBJ Drawing No. 2151/HBS/45.7M/01, including compliance with all applicable technical specifications, for BBJ's Gadag–Hotgi Doubling Project, Karnataka.

Total Requirement of H-Beam Sleepers:	203 Sets [as per RDSO Drawing No. RDSO/B-1636/4/R (with latest alterations) and BBJ Drawing No. 2151/HBS/45.7M/01]
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2. H-Beam Sleepers should be made of rolled sections IS: HB 200 conforming to IS:2062, Grade B and after fabrication H-Beam & Fittings shall be galvanized as per IS:4759.
3. The weldable raw structural steel sections to be supplied by the successful bidder for fabrication of H-Beam Sleepers shall conform to IS: 2062-2011 Grade B Fully Killed from SAIL, TISCO and Vizag Steel Plant or any other sources approved by S.W. Railway. The source to be declared citing non-availability of materials from aforesaid supplier.
4. The rate is also inclusive of all inspection and testing charges of all components of H-Beam sleepers including all fixtures and fastening galvanization and consumables etc. from the reputed laboratory/ organization.
5. Arranging necessary inspection & testing and getting the H-Beam Sleepers approved by S. W. Railway or their authorized agency at their own cost and will be responsible for furnishing all test certificates.
6. The rate is also including of transportation of H-Beam Sleepers with all fittings and fixtures with consumables from their workshop to different bridge sites/ Railway depots in Karnataka by providing their trucks including loading with all lead and lift, handling, re-handling, ascent, descent, crossing obstructions etc.
7. WPSS and QAP to be done by the contractor and getting it approved by S.W. Railway or their nominated agency.
8. The rate is inclusive of all GST.
9. The work to be executed in successful bidder's approved shaded/ covered fabrication workshop by their labour, plants & machinery, equipment, welding consumables cutting gases and their inputs for successful completion of the work.
10. Fitting items to be provided in waterproof and strong box packets to avoid damage during transportation and storing.
11. **INSPECTION, TESTING CHARGE & TEST CERTIFICATES:**
 - a) All materials for the work shall pass tests and/or analysis prescribed by the relevant IS specifications or such other equivalent specifications.
 - b) All raw materials shall be obtained from recognized manufacturers, or their authorized representatives and the successful bidder shall furnish copies of test certificates from that manufacturer including proof sheets, mill sheets etc. showing that the supplied materials have been tested in accordance with the requirements of various specifications and codal provisions and to the satisfaction of BBJ or S.W. Railway or their authorized representative.

- c) Any approval is given by the BBJ or S.W. Railway or their authorized representative in consequence of such tests or analysis shall in no way limit or interfere with the absolute right of the BBJ to reject the whole or part of such materials supplied, which in the judgment of the inspecting authority/Engineer does not comply with the conditions of the contract. The decision of the Engineer in this regard shall be final, binding and conclusive for all purposes.
- d) **The inspection shall be in three stages. (i) Raw Material (ii) Before galvanizing** (to check up the quality of fabrication) **(iii) After Galvanizing** (to check up the quality of Galvanizing). Materials shall be dispatched to site of work by the successful bidder in full sets i.e. H-Beam Sleepers with all matching fittings components complete. The matching fittings components will be supplied duly inspected and passed by BBJ and/or S.W. Railway and/or RDSO and/or RITES and/or their Authorized Representative in sealed gunny bags. The successful bidder will have to arrange for inspection at his/their own cost and will be responsible for furnishing all test certificates during the dispatch of fittings.
- e) **All expenses involved for Inspection and/or testing shall be borne by the H-Beam Sleeper manufacturer.**
- f) The H-Beam Sleeper manufacturer has to provide assistance, instruments, machine, labour and any material which are required for examining, measuring and testing of any materials and workmanship as may be selected and required by BBJ and/or S.W. Railway and/or RDSO and/or RITES and/or their Authorized Representative, without any extra cost to BBJ.
- g) **All fittings and fixtures such as Bolts, Nuts, Tapered Washers, Single Coil Spring, Split Pin, Hook Bolts etc. including rubber items are to be inspected by BBJ and/or S.W. Railway and/or RITES and/or their Authorized Representative, without any extra cost to BBJ.**
- h) All Zero Toe Load Fixtures including Steel Bare Plate, Cast Liner (inner), Cast Liner (Outer), rubber items are to be procured from RDSO approved sources only.
- i) INSPECTION CALL LETTER along with related documents of raw steel materials etc. should be sent by the H-Beam Sleeper Manufacturer minimum 7 (seven) days in advance at BBJ's registered office at 27, R. N. Mukherjee Road, Kolkata - 700 001.
- j) All Test Certificates for raw materials (both physical and chemical), Mechanical, Bend, UT etc. and finished materials are to be provided and submitted by the H-Beam Sleeper Manufacturer at the time of Inspection and along with supply, without any extra cost to BBJ.
- k) Prior to the manufacture of H-Beam Sleepers, QAP & WPSS prepared by the Agency has to be approved & inspected by BBJ and/or S.W. Railway and/or RDSO and/or RITES and/or their Authorized Representative.

