



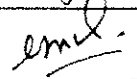
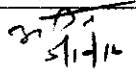
**Schedule of Infrastructure Requirements For manufacturing and Testing
of Lower Spring Seat for Axle Box Guide Arrangement**

Specification No. MDST-151, Rev-'00'

Date: 05.10.16

Page 1 OF 3

**Schedule of Infrastructure
Requirements for manufacturing and
Testing of Lower Spring Seat for Axle
Box Guide Arrangement**

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AGREED BY

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Page 2 OF 3

1. General:

This specification defines the schedule of infrastructure requirement for manufacturing and testing of Lower Spring Seat for axle box guide arrangement.

2. Eligibility Criteria:

- 2.1. The tenderer must submit detailed clause-wise comments on the specification. In absence of above, offers shall be deemed as incomplete and may not be considered.
- 2.2. Firm will develop Jig & Fixture for assembling of Tube & Spring Seat before starting the production.
- 2.3. The manufacturer shall have following infrastructure facilities in-house for manufacture of Lower Spring Seat for axle box guide arrangement for Conventional Bogie:
 - 2.3.1. Forging Facility (at least 2 Ton hammer & Heating Furnace)
 - 2.3.2. Heat treatment Furnace
 - 2.3.3. Power Hack-Saw machine
 - 2.3.4. Machining center
 - 2.3.5. Shot/Garnet blasting facility
 - 2.3.6. Primer / Painting facility
 - 2.3.7. Minimum two MAG welding sets (400A or more) & suitable shielding media
 - 2.3.8. Level surface table of size 500mmX500mm (minimum)
 - 2.3.9. Honing Machine
 - 2.3.10. Vernier caliper of suitable size
 - 2.3.11. Vernier Height Gauge
 - 2.3.12. Dial Bore Gauge
 - 2.3.13. Surface Roughness Tester
 - 2.3.14. Welding Gauge
 - 2.3.15. DFT meter

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Schedule of Infrastructure Requirements For manufacturing and Testing of Lower Spring Seat for Axle Box Guide Arrangement		
Specification No. MDST-151, Rev-'00'	Date: 05.10.16	Page 3 OF 3

2.4. The manufacturer shall have in house or tie-up arrangement for following tests with NABL certified labs:

2.4.1. The firm shall be ready for carrying out chemical, mechanical test and microstructure of the Lower spring seat, from NABL certified Lab at their own expense as and when required.

2.5. The manufacturer shall be an ISO-9001-2000 certified company.

3. Raw material:

3.1. Chemical composition and mechanical properties of raw material to be used shall conform to specification mentioned in the drawings.

3.2. Firm may procure seamless tube from reputed vendors. Record of chemical and mechanical properties of raw material should be kept and made available to Inspecting Agency if required.

4. Welding:

4.1. Firm should have certified welder from accredited labs/ RDSO for precision & heavy fabrication.

4.2. The firm shall comply with IS: 822 regarding selection of weld wire, storage of consumables, calibration of welding equipment, testing of welding and remedies for welding defects.

5. Shot Blasting:

After proper masking of machined surface, the complete Lower Spring seat for Axle Guide arrangement shall be subjected to shot blasting for cleaning of rust, scales, spatters etc. before painting of component.

6. Primer / Painting:

Firm shall have separate painting booth with suitable exhaust for application of Red-Oxide primer to IS: 2074 and black enamel paint to IS: 2932.

7. Identification Marking:

Each item shall be stamped with an easily visible firm's identification mark, serial number, date of manufacture to facilitate identification/correlation with the inspection/ test results.

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