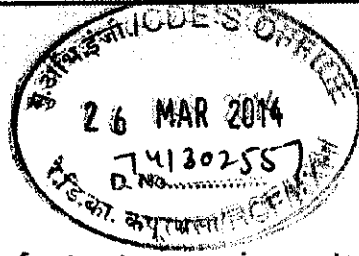


Rail Coach Factory, Kapurthala

MD35131



Date: 26.03.2014

Sub: Submission of Schedule of infrastructure requirements of control arm and front part.

Please find enclosed a copy of new technical specifications as mentioned below:

1. MDTS-238 Rev-Nil- Technical Specification for supply of Machined Control Arm Top, Control Arm Lower LH & RH for FIAT type bogie.
2. MDTS-239 Rev-Nil- Schedule of Infrastructural Requirements For SGCI Casting of Control Arm Top and Control Arm Lower LH & RH fiat type bogie.
3. MDTS-241 Rev-Nil- Schedule of Infrastructural Requirements For SGCI Casting and Machining of Control Arm Top and Control Arm Lower LH & RH for FIAT type bogie.
4. MDTS21261 Rev-Nil- Schedule Of Infrastructural Requirements for Underframe Front Part assembly of LHB coaches.

Records to be updated accordingly.

✓
SSE/Record
SSE/ Design Lib.

Copy for kind information to:



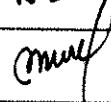

DY.CME/D1
DY.CME/D3
CDE

Technical Specification for supply of Machined Control Arm Top, Control Arm Lower LH & RH for FIAT type bogie

SPEC. No.: MDTS- 238 Rev-NII

Date 20.03.2014

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Name	Designation	Signature	Date	Level
Aman Bhardwaj	SSE/BD		20.03.2014	Prepared
Joginder Singh	SME/BD		20.03.2014	Agreed
Lalit Kishore	Dy CME/D-3		20.03.2014	Reviewed
Parmanand Singh	CDE	 24/3	20.03.2014 22	Approved

Issue/REV.	Detail of changes	Date


PREPARED BY


AGREED BY

Technical Specification for supply of Machined Control Arm Top, Control Arm Lower LH & RH for FIAT type bogie

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1 General:

This specification covers the technical requirements to be complied by the tenderer for machining of control arm top, control arm lower LH & RH of FIAT bogie. Casted control arms shall be supplied by RCF/purchaser.

2 Scope of supply:

- 2.1 The machined control arms are to be supplied conforming in all respects to the relevant drawings & specification of tender.
- 2.2 This is a general specification required for machining of all types of control arms for FIAT type bogies used in mainline coaching stock.

3 Eligibility Criteria:

- 3.1 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.
- 3.2 Since control arms have complexity in machining and requires development time for setting-up in-house infrastructure/Jigs and fixtures, bulk or regular procurement orders should only be given to the firms who have successfully supplied machined Control arm top, LH & RH to RCF/ICF/IR in past and have the infrastructure as mentioned in para # 3.4 of this specification.
- 3.3 Developmental order can be placed on those tenderer having in-house infrastructure as mentioned in para # 3.4.
- 3.4 **The manufacturer shall have following minimum infrastructure facility at their works for machining of control arm FIAT type bogie.**
 - 3.4.1 Minimum 4 axis (X,Y,Z & B axis) CNC Horizontal Machining Centers with probing facility (for reference and inspection), axis movements/traverse of X=800mm, Y=700mm & Z=800mm and with rotary index table (B axis) having 1°x360 indexing positions (indexing


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accuracy ± 3 sec). for the required machining of control arm top, lower LH & RH bores and facing etc. from every angle.

3.4.2 Fixtures for machining of control arms of different types.

3.4.3 Level surface table of minimum size 2MX1M.

3.4.4 The manufacturer shall be an ISO-9001-2008 certified company.

4 Inspection:

The inspection shall be carried out by inspecting agency as indicating below:

4.1 Inspection of control arms complete after machining.

4.2 Dimensional control charts shall be supplied along with the control arms to the purchaser.

5 Dimensions and Tolerances:

5.1 All dimension/tolerances shall be as per details given in the drawings.

5.2 Detailed dimension control charts/sheets shall be prepared for each control arm in which measurements of critical dimensions shall be recorded and kept for evaluation and verification by the inspecting agency.

5.3 All the un- toleranced dimensions shall be in accordance with IS: 2102 (Medium).

5.4 Gauges, fixtures and templates and accurate measuring instruments shall be used to ensure the correctness of the dimensions.

6 Pilot sample approval: Manufacturer should get pilot samples approved from CDE/RCF, Kapurthala before start of series machining and bulk supply.


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7 Code of Practice for Quality Control and Inspection:

- 7.1 Regular inspection will be done by inspecting agency as per tendered drawings/specification
- 7.2 RCF may carry out in-process inspection of manufacturing of control arms at the firm premises.

8 Identification Marking:

- 8.1 Each control arm shall be stamped with an easily visible identification indicating the control arm serial number, year of manufacturing and manufacturer's name to facilitate identification/correlation with the inspection/test results.

9 Packing:

- 9.1 All machined surfaces shall be applied with suitable rust preventive which shall prevent it from corrosion & oxidation for a minimum period of one year of storage.
- 9.2 The packing shall be such that all the machined surfaces shall be properly protected against rubbing/impact/scratches with other control arms or with mode of transportation i.e. wagon/truck/trailers etc.

10 Warranty:

The manufacturer shall warrant the control arm for conformance to quality for a period of 30 months from date of supply or 24 months from date of installation which ever shall be sooner, as per IRS conditions.

---X---


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