

**GOVERNMENT OF INDIA: MINISTRY OF RAILWAYS
RESEARCH DESIGN & STANDARD ORGANISATION
MANAK NAGAR, LUCKNOW - 226011**

EXPRESSION OF INTEREST

EOI No: CARR/VDG/01/2024

Date: 06.09.2024

Ministry of Railways, Research, Designs & Standards Organization (RDSO), Lucknow, India is interested in developing specification for the item, detailed as below:

S. No.	Name of work	Contact Person
1.	Development of Technical Specification & STR for 'Control Arm Top and Control Arm Lower LH & RH for Fiat Type Bogie of LHB coaches'.	S.S.Raypa Director/VDG/Carriage Carriage Directorate, Annexe-I Building, RDSO, Manak Nagar, Lucknow - 226011 Email: dirvdgcarr@gmail.com Fax No.: 0522 - 2450679

The firms, who have enough experience and capabilities in the above field, having necessary accreditation for such work and are interested in carrying out above work, are requested to see the functional requirements specification (FRS) for above work uploaded on RDSO website <http://rdso.indianrailways.gov.in> or contact concerned RDSO person on any working day. The interested firms may submit their details of the willingness for undertaking the above work in prescribed format attached herewith within one month from the date of publication of EOI. The interested firms are requested to submit details in the prescribed format available on RDSO website (www.rdso.indianrailway.gov.in → Vendor Interface → EOI).

In case of any clarification/difficulty, industry may please contact concerned Director of Carriage Directorate whose contact details are indicated above on any working day.

INDIAN RAILWAYS



**FUNCTIONAL REQUIREMENTS SPECIFICATION
FOR
CONTROL ARM TOP AND CONTROL ARM LOWER LH & RH FOR FIAT TYPE BOGIE OF
LHB COACHES of INDIAN RAILWAYS**

**ISSUED BY:
CARRIAGE DIRECTORATE
RESEARCH DESIGN AND STANDARDS ORGANIZATION
MANAK NAGAR, LUCKNOW - 226011**

FUNCTIONAL REQUIREMENTS SPECIFICATION FOR CONTROL ARM TOP AND CONTROL ARM LOWER LH & RH FOR FIAT TYPE BOGIE OF LHB COACHES of INDIAN RAILWAYS

1. FOREWORD

Indian Railway is intended to develop a Technical Specification & STR for '**Control Arm Top and Control Arm Lower LH & RH for Fiat Type Bogie**'.

2. SCOPE

This document covers the functional requirements for the '**Control Arm Top and Control Arm Lower LH & RH for Fiat Type Bogie**'.

3. WORKING CONDITION

Train Type	High Speed
Operational Speed	160 km/h
Maximum Speed	200 km/h
Max. Weight (one coach)	65 t
Max. Axle Load	16.25 t
Wheel Diameter	New: Ø 915 mm Worn: Ø 845 mm
Coach body displacement under dynamic condition:	Higher than specified in IEC 61373
Coach body displacement under dynamic condition:	
i) Vertically	i) ±100 mm
ii) laterally	ii) ±55 mm
iii) longitudinally	iii) ±10 mm
iv) bogie rotation about center pivot	iv) ±4°

4. ENVIRONMENT CONDITIONS

The Metal Bonded Rubber components are likely to be exposed to the following operating conditions:

- Change in temperature from -40°C to +70°C
- Relative humidity from 30% to 100%
- Altitude upto 3000 m.
- Average annual rainfall 1750 to 6250 mm.
- Maximum wind pressure 200 kg/m².
- Both acidic and basic cleaning product
- Urine, feces, and kitchen waste (restaurant cars)
- Sand, brake and ferric oxide dust (abrasion of wheel and tracks)
- Damage from flying stones raised from the ballast track bed.
- Salty air (coastal area)

5. FUNCTIONAL REQUIREMENTS

5.1 PURPOSE OF USE:

Control Arm Top and Control Arm Lower LH & RH is integral part of Bogie suspension and play vital role in ensuring safety reliability and passenger comfort. These items transmit accelerating / braking forces and provide Passenger safety, comfort. Control Arm has the task of transmitting the braking and acceleration forces of the bogie, compensate relative movement in vertical and transverse suspension and elastically guide wheelset over the axle guide.

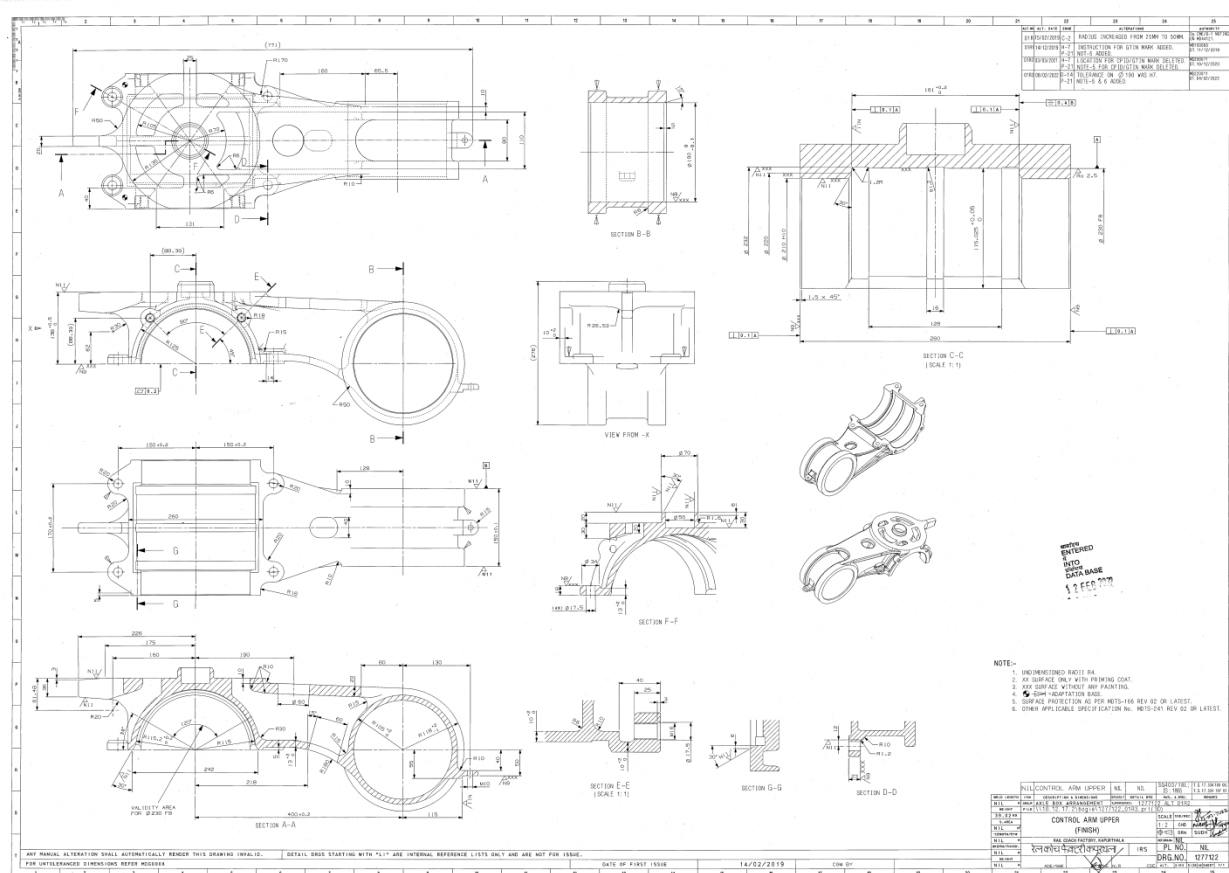
5.2 CHARACTERISTICS

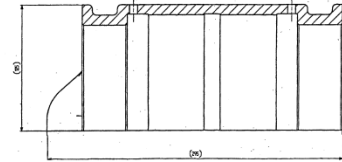
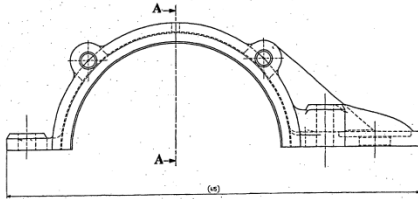
Characteristics and dimensions of various Control Arm of Fiat bogies of LHB coaches should be as under:

S. No.	Item	Characteristic and dimensional details
1.	Control Arm Top and Control Arm Lower LH & RH	As per Annexure – 1

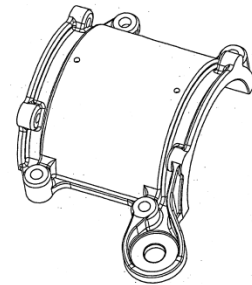
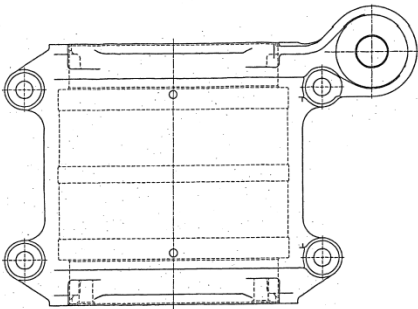
Note: Above functional requirements are indicative and not exhaustive.

Control Arm Top and Control Arm Lower LH & RH for Fiat Type Bogie





A-A



ENTRUSTED
BY TO
DATA BASE
5 JUL 2023

NOTE:-
REFER DRAWING NO. 1267716 (LATEST REVISION) FOR OTHER DETAILS.

REVISIONS		DATE	BY	CHKD	APPD	REASON
0002	14/07/2023					NOTE ADDED.
0001	04/09/2021					LOCATION AND NOTE FOR ENTRUSTED
0000	14/07/2023					PLACE OF OTHER MARKING AND NOTE ADDED.
ALT NO.	ALT DATE	ALTERNATION	AUTHORITY	BY	CHKD	APPD

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FORMAT FOR LETTER OF RESPONSE

Respondents Ref No.:

Date:

Executive Director (Carriage)
Room No: 2
Carriage Directorate, Annexe I Building
Research Designs & Standards Organization
Ministry of Railways
Manak Nagar
Lucknow – 226 011
Uttar Pradesh, India

Dear Sir,

Subject: RESPONSE TO – EOI FOR PARTICIPATION _____

1. We, the undersigned, offer the following information in response to the Expression of Interest sought by you vide your Notification No._____, dated _____.
2. We are duly authorized to represent and act on behalf of _____ (hereinafter the “respondent”)
3. We have examined and have no reservations to the EOI Document including Addenda No(s) _____.
4. We are attaching with this letter, the copies of original documents defining: -
 - a) the Respondent’s legal status;
 - b) its principal place of business;
 - c) its place of incorporation (if respondents are corporations); or its place of registration (if respondents are cooperative institutions, partnerships or individually owned firms);
 - d) Self certified financial statements of Last three years, clearly indicating the financial turn over and net worth.
 - e) Copies of any market research, business studies, feasibility reports and the like sponsored by the respondent, relevant to the project under consideration
5. We shall assist MoR and/or its authorized representatives to obtain further clarification from us, if needed.
 - a) RDSO and/or its authorized representatives may contact the following nodal persons for further information on any aspects of the Response:

S. No.	Contact Name	Address	Telephone	E Mail
1				
2				

6. This application is made in the full understanding that:

- a) Information furnished in response to EOI shall be used confidentially by RDSO for the purpose of development of the project.
- b) RDSO reserves the right to reject or accept any or all applications, cancel the EOI and subsequent bidding process without any obligation to inform the respondent about the grounds of same.
- c) We confirm that we are interested in participating in development of the project.

7. We certify that our turnover and net worth in the last three years is as under:

Financial Year	Turn over	Net worth

8. In response to the EOI we hereby submit the following additional details annexed to this application.

- 8.1. Details of various items being manufactured/consultancy undertaken.
- 8.2. Details of customer(s) and supplies made in the field of item under EOI.
- 8.3. Experience and expertise for the items proposed in EOI.
- 8.4. Details of man-power with their qualification and experience.
- 8.5. Detailed proposal for items proposed in EOI including alternative proposal, if any.
- 8.6. Details of Intellectual Property Rights (IPR) held, patent filed/held and MoU/agreement signed.
- 8.7. Details of ISO certification
- 8.8 Undertaking as per Annexure-A:

9. The undersigned declare that the statements made and the information provided in the duly completed application are complete, true, and correct in every detail. We also understand that in the event of any information furnished by us being found later on to be incorrect or any material information having been suppressed, RDSO may delete our name from the list of qualified Respondents. We further understand that RDSO will give first preference to the applicants considered relevant for the purpose.

10. Our response is valid till (date in figures and words): _____

Yours sincerely,

(Sign)
NAME
In the Capacity of
Duly authorized to sign the
response for and on behalf
of
Date

Annexure-A

(To be taken on non-judicial stamp paper of appropriate value as applicable in the respective state and duly notarised & witnessed)

UNDERTAKING

I, son of aged about Years resident of do hereby solemnly affirm as under –

1. That the deponent is the Authorised signatory of *(Name of the Sole Proprietorship Concern/ Partnership Firm/ Registered Company/ Joint Venture)*.
2. That the deponent declares on behalf of *(Name of the Sole Proprietorship Concern/ Partnership Firm/ Registered Company/ Joint Venture)* that:
 - a) In regard to matters relating to the security and integrity of the country, no charge sheet has been filed by an agency of the Government / conviction by a Court of Law for an offence committed by the -----*(name of the entity)* or by any sister concern of the -----*(name of the entity)* would result in disqualification.
 - b) In regard to matters other than the security and integrity of the country, -----*(name of the entity)* has not been convicted by a Court of Law or indicted / passed any adverse order by a regulatory authority against it or it's any sister concern which relates to a grave offence, or would constitute disqualification. Grave offence is defined to be of such a nature that it outrages the moral sense of the community.

DEPONENT

VERIFICATION

I declare that the contents of para 1 to 2 above are true as per my knowledge and nothing has been hidden.

DEPONENT