



भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड Railway Board)



No. 2024/CEDO/SR/03/BOSM-22.9t-IR-DFCCIL

New Delhi, dated 29.02.2024

The Director General
Research Designs & Standards
Organisation
Manak Nagar,
Lucknow-226011

The General Manager,
All Indian Railways

Managing Director,
DFCCIL,
5th Floor, Supreme Court,
Metro Station Building Complex,
New Delhi - 110001

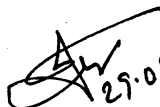
Sub : Introduction of Broad Gauge Bogie Open Steel Wagon 'BOSM' [Max. Axle Load: 22.9t] to RDSO's Drg. No. WD-22081-S-02 , up to a maximum speed of **85 kmph in empty and 75 kmph in loaded condition** over Indian Railways, by Zonal Railways and up to a maximum speed of **85 kmph in empty and 100 kmph in loaded conditions** over routes of **Eastern & Western Dedicated Freight Corridor** of DFCs by DFCCIL

Ref : (i) CCRS letter no. Q.12011/18/2023-24-T.W., dated 01.02.2024
(ii) RDSO letter no. MW/BOSM, dated 11.12.2023
(iii) RDSO Final Speed Certificate (FSC) no. MW/BOSM, dated 07.12.2023

With reference to RDSO above application, sent through Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board is hereby communicated for introduction of Broad Gauge Bogie Open Steel Wagon 'BOSM' [Max. Axle Load: 22.9t] to RDSO's Drg. No. WD-22081-S-02 , up to a maximum speed of **85 kmph in empty and 75 kmph in loaded condition** over Indian Railways, by Zonal Railways and up to a maximum speed of **85 kmph in empty and 100 kmph in loaded conditions** over routes of **Eastern & Western Dedicated Freight Corridor** of DFCs by DFCCIL with the following stipulations :

A:

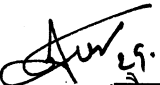
- Observance of all conditions laid down in RDSO Final Speed Certificate (FSC) no. MW/BOSM, dated 07.12.2023 for operation up to a maximum speed of 85 kmph in empty and 75 kmph in loaded condition over Indian Railways, by Zonal Railways and up to a maximum speed of 85 kmph in empty and 100 kmph in loaded conditions over routes of Eastern & Western Dedicated Freight Corridor of DFCs by DFCCI, shall be ensured on the Railway/DFCs while seeking the sanction of General Manager/MD-DFCCIL, as the case may be, for introduction of rolling stock on the Railway/DFCs. All the documents required for the sanction of General Manager/MD-DFCCIL as per CE (G) Directorate/Railway Board Policy Circular No. 6, dated 01.05.2023, along with sanction letter, shall be submitted to the Commission before the start of actual operation of rolling stock, as per extant procedure.
- Observance of all the permanent and temporary speed restrictions already in force and/or those that may be imposed from time to time on various accounts.
- Zonal Railways/DFCCIL in turn shall specify the responsibilities/duties of various departments viz. Commercial, C&W etc. including private parties during loading & unloading operation.


29.02.24

- iv. Hand Brakes of the wagons are to be in applied condition during loading/unloading operation.
- v. List of routes identified for 22.9t axle load shall be submitted to the Commission before the start of actual operation of rolling stock.
- vi. The compliance of all the stipulations mentioned in Railway Board letter No. 2020/CE-II/TS/22.82 dt 20.08.2020 shall be ensured by the Railways.
- vii. Periodic rail grinding at stipulated frequency should be carried out on routes by ensuring the availability of traffic blocks.
- viii. DFCCIL should ensure installation of way side lubricators as per provision of IR P. Way manual in a time bound manner.
- ix. **For Indian Railways, the WILD shall mandatorily be provided** before introduction of wagon at speed above 60 Kmph. For speed up to 60 Kmph the WILD may be progressively installed. 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- x. **For DFCCIL, adequate number of WILD and 'Weigh Bridges' shall be progressively installed and their working closely monitored.** 100% weighment of loaded wagons (except consignment exempted from weighment) shall be ensured at the loading points to avoid running of overloaded wagons on track.
- xi. No overdue in track/rolling stock maintenance shall be permitted.
- xii. Right powering of loaded trains running with 22.9t axle load wagons shall be ensured.
- xiii. Only wagons with functional twin-pipe brake system shall be permitted to run at 75 kmph and above.

B:

RDSO letter no.MW/BOSM dated 16.02.2024 for "*Loading diagrams with lashing/locking arrangement for steel coils, plates and Billets of BOSM wagons*" is enclosed herewith for further necessary action.

 29.02.24
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]

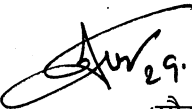
e-mail address: dceg@rb.railnet.gov.in

No. 2024/CEDO/SR/03/BOSM-22.9t-IR-DFCCIL

New Delhi, dated 29.02.2024


Copy forwarded for information to :

1. The Chief Commissioner of Railway Safety, Office Compound of DRM/NER, Ashok Marg, Lucknow, w.r.t. his endorsement No. Q.12011/18/2023-24-T.W., dated 01.02.2024
2. The Commissioner of Railway Safety, All Circles
3. Executive Director (Standards) Motive Power, RDSO, Lucknow
4. Executive Director (Standards) Track-I, RDSO, Lucknow
5. EDME(Fr.), Railway Board

 29.02.24
(गौरव)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

Issued through mail

 29.2.24
A DECCNVL)



फैक्स / Fax : 91-0522-2452494

टेलीफोन / Tele: 0522- 2462638



भारत सरकार —रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन
लखनऊ — 226011

Government of India - Ministry of Railways
Research Designs & Standards Organisation
Lucknow – 226011

पत्र सं० एम डब्ल्यू/बीओएसएम

दिनांक: 16-02-2024

निदेशक सिविल इंजीनियरिंग(जी),
रेलवे बोर्ड, रेल भवन,
नई दिल्ली—110 001

Sub: Loading diagrams with lashing/locking arrangement for steel coils, plates and Billets of BOSM wagon.

Ref: RB letter no. 2024/CEDO/SR/03/BOSM-22.9t-IR-DFCCIL dated 07.02.24

Reference above, RDSO has prepared loading diagrams for lashing /locking arrangement of steel coils, plates and billets for BOSM wagon which are as under:

1. Loading diagram for 2/3 steel coils- Drg. No. WD-24014-S-01
2. Loading diagram for 4/5 steel coils - Drg. No. WD-24014-S-02
3. Loading diagram for steel plates - Drg. No. WD-24014-S-03
4. Loading diagram for Billets - Drg. No.WD-24014-S-04

The loading and unloading of finished steel products to be carried out by crane and fastening/locking arrangement to be done as per respective product loading diagram. In addition to above, all instruction given in 'WD-CS-01 - Load securing check sheet' shall also be followed.

This is for your kind information and necessary action please.

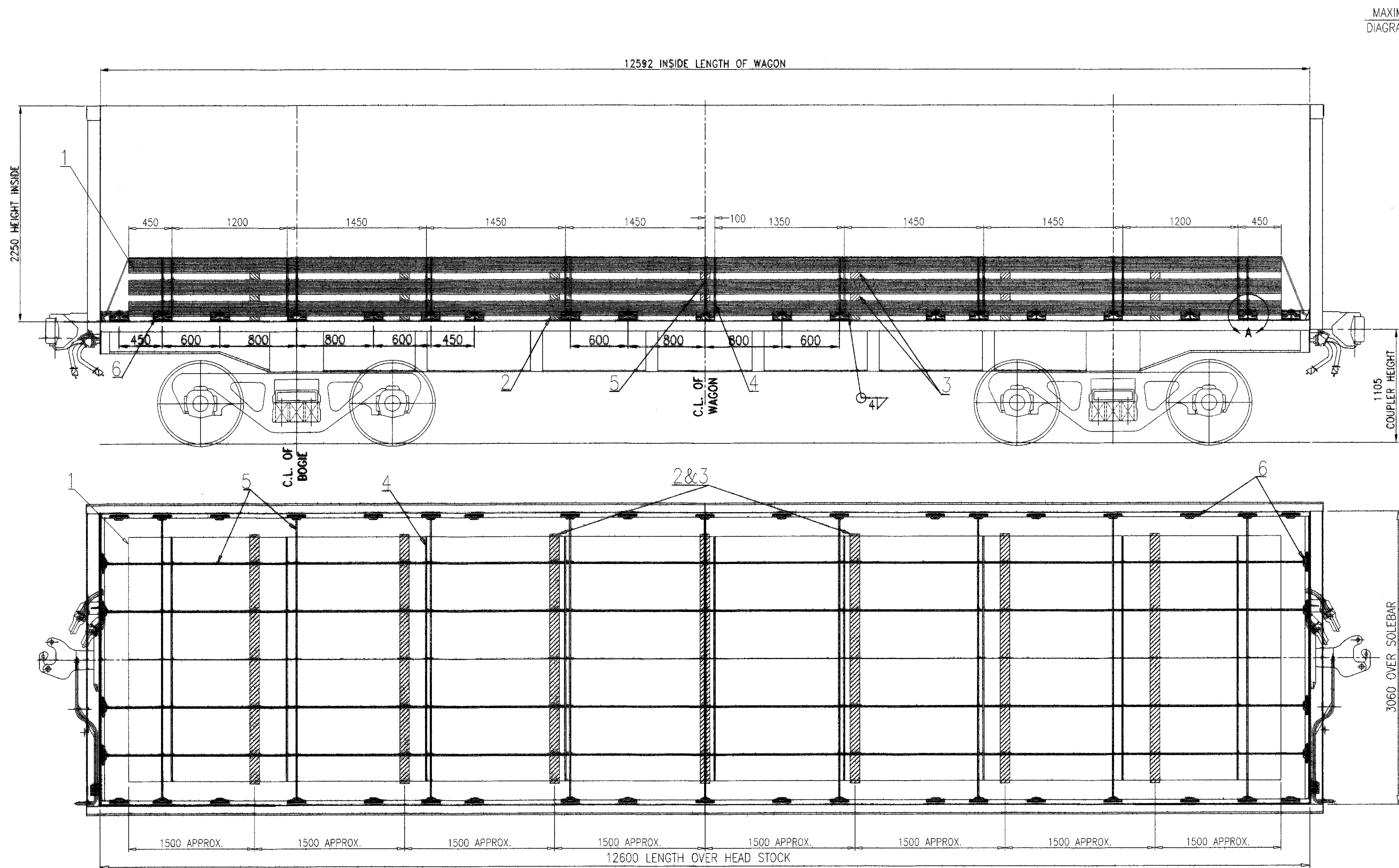
सगलंक : As above

(Ajit Kumar Singh)
Executive Director Stds. /Wagon

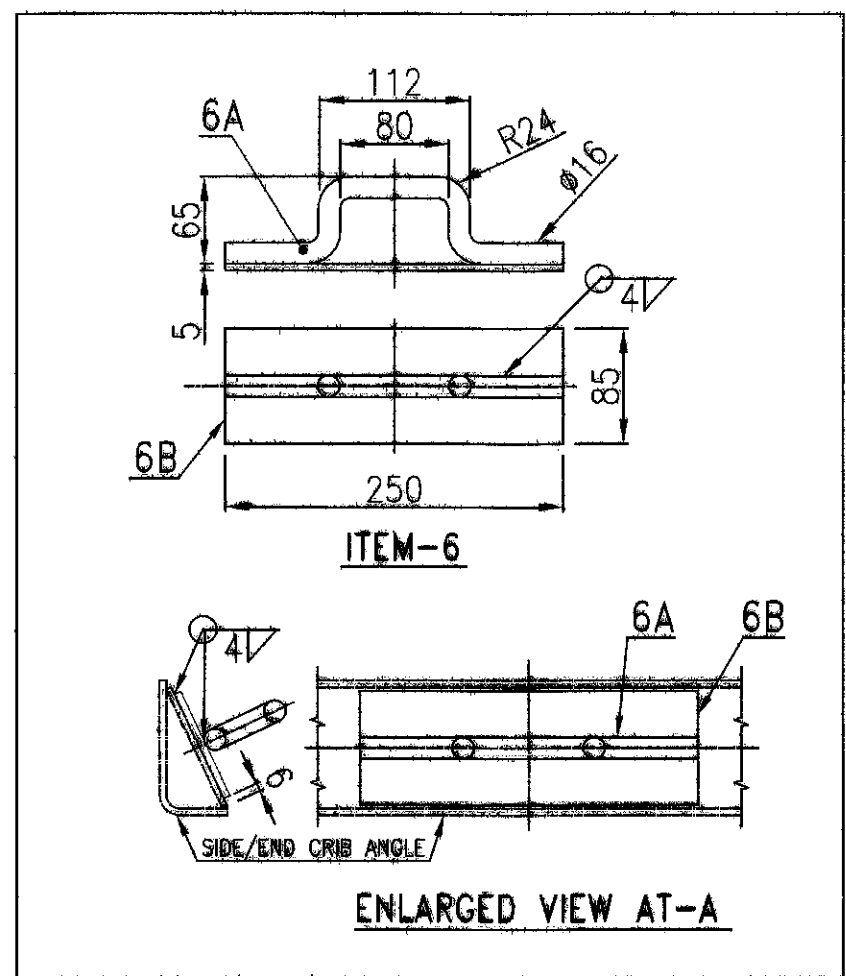
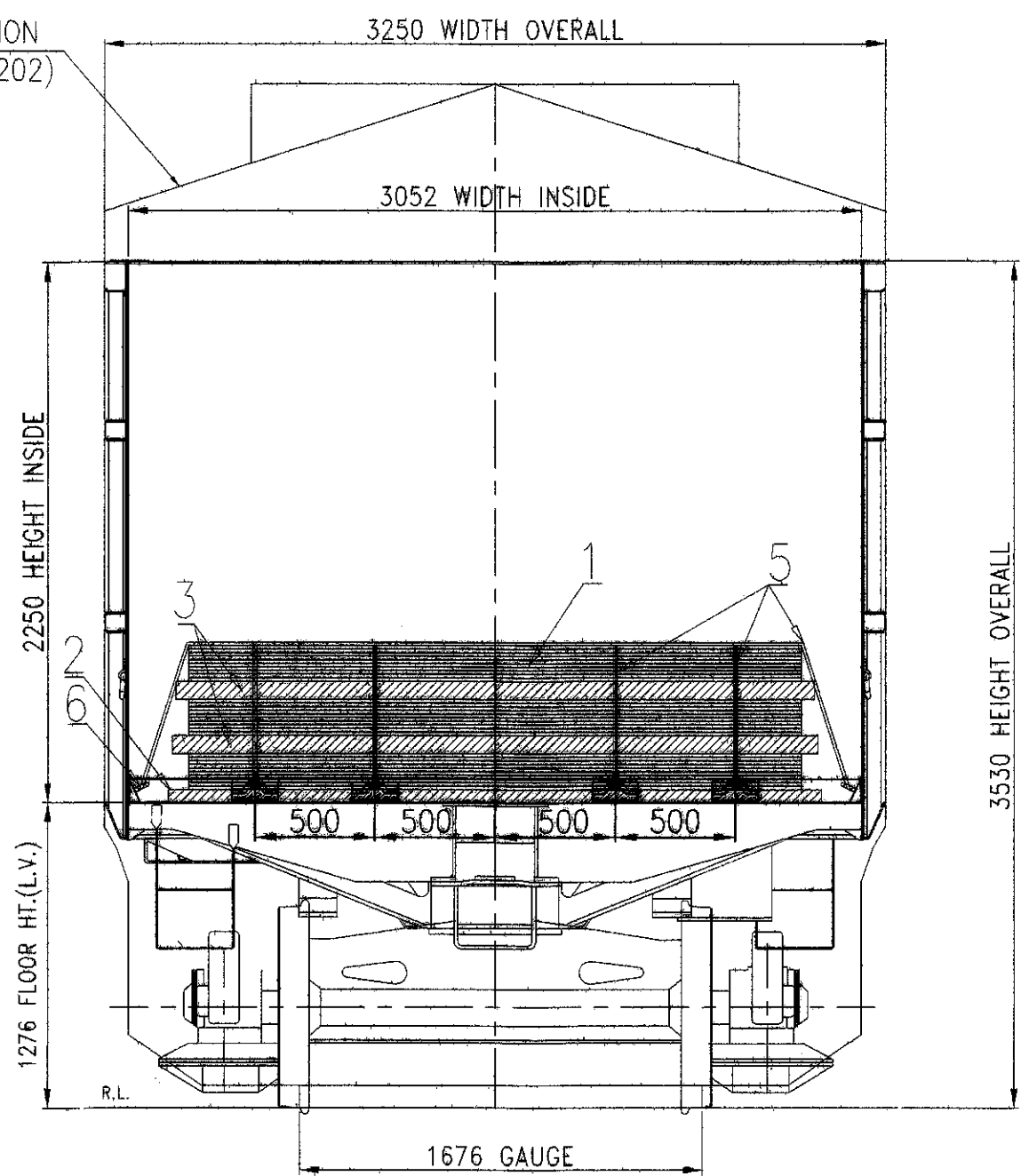
Copy to: EDME/Frt./RB for kind information please.

ALT.	ITEM	AUTHY.	DESCRIPTION	DATE	ASSLY.	DRG.
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MAXIMUM MOVING DIMENSION
DIAGRAM NO. 1D(EDO/T-2202)



ITEM-2&3
SECTIONAL VIEW

NOTE :-

- LOADING SHOULD BE SYMMETRICAL W.R.T. LONGITUDINAL AXIS AS WELL AS TRANSVERSE AXIS PASSING THROUGH CENTRE OF WAGON FLOOR AND ENSURING EVEN LOAD ON ALL WHEELS.
- IN CASE PLATES ARE LOADED IN LAYERS SEPARATED WITH WOODEN RUNNERS AS PER CUSTOMER'S REQUIREMENT, WOODEN RUNNERS OF SIZE 100MMX50MM ARE PROVIDED IN INTERMEDIATE LAYERS IN ADDITION TO THE BOTTOM WOODEN RUNNER OF SIZE 100MMX100 MM.
- THE LOADING PARTY SHOULD WELD ISOLATION HOOK & PLATE (ITEM NO.6A & 6B) WITH WAGON SIDE/END CRIB ANGLES AS SHOWN IN DRAWING.
- LENGTH OF WOODEN RUNNER MUST BE MORE THAN WIDTH OF LAYERS.
- STRAPPING SHOULD BE SYMMETRICAL AND THE END STRAPS SHOULD NOT MORE THAN 450 MM AWAY FROM EDGES AND MAXIMUM DISTANCE BETWEEN IMMEDIATE STRAPS IS 1450 MM.
- ALL PLATES ARE TO BE SECURED USING HEAVY DUTY STEEL STRAPS AS INDICATED.
- NO. OF WOODEN RUNNER PER UNITIZED PLATE SHALL NOT BE LESS THAN AS INDICATED.
- LOADING OF PLATES SHOULD BE SUCH THAT :-
 - THE LOAD SHOULD NOT EXCEED WAGON'S MAXIMUM PERMISSIBLE PAY LOAD.
 - THE WEIGHT IMPOSED ON BOTH THE BOGIES SHOULD BE IDENTICAL (EVEN IN CASE OF NON STANDARD STEEL PLATES).
- THE TENSIONAL STEEL STRAP USED FOR LASHING AND SECURING SHALL MEET THE SPECIFICATION EN13247:2001. PHYSICAL PROPERTIES ARE MENTIONED BELOW;

S.N.	PARAMETERS	PHYSICAL PROPERTIES (Ref.-EN13247:2001)
1.	NOMINAL WIDTH	31.75
2.	NOMINAL THICKNESSES	1.45
3.	MINIMUM BRAKING STRENGTH	49KN (5 TON)

- ELONGATION OF STEEL STRAP SHALL BE GREATER THAN 7% MEASURED USING A GAUGE LENGTH OF 100MM, WHEN TESTED IN ACCORDANCE WITH EN10002-1.
- THE MINIMUM NO. OF EACH TYPE OF LONGITUDINAL/LATERAL STRAPS SHALL BE AS INDICATED IN THE DRAWING.
- THE INITIAL TENSION IN THE STRAP SHALL BE IN THE RANGE OF 500kg TO 800kg.
- WOOD OF ADEQUATE STRENGTH WHICH CAN SUSTAIN THE LOAD IMPARTED ON IT SHALL BE USED.
- SECURING ARRANGEMENT SHALL BE CERTIFIED BY THE CONCERN RAILWAY.
- THIS RDSO DRAWING IS AN INDICATIVE DRAWING AS THE SIZE AND SHAPE OF CONSIGNMENT VARIES. THE CONSIGNEE MAY TAKE ADDITIONAL MEASURE TO SECURE THE LOAD FOR SAFE OPERATION.

6B	ISOLATION HOOK BASE PLATE	46/WAGON	IRS.M 44	
6A	ISOLATION HOOK	46/WAGON	STEEL	
6	ISOLATION HOOK WITH PLATE	--	--	
5	HIGH TENSILE STEEL STRAP (FOR SECURING WITH WAGON BODY)	13	EN13247:2001	
4	HIGH TENSILE STEEL STRAP (FOR BUNDLING & UNITIZATION)	09	EN13247:2001	
3	INTERMEDIATE WOODEN RUNNER (100MMX50MM)	AS PER REQUIREMENT	WOOD	
2	WOODEN RUNNER (100MMX100MM)	07	WOOD	
1	PLATES	AS PER REQUIREMENT	STEEL	
ITEM	DESCRIPTION	NO.OFF	MTL&SPEC	REMARKS

SUPERSEDED BY	DATE	LOADING AND SECURING
SCALE	DATE	ARRANGEMENT OF STEEL PLATES
CHECKED	DATE	(UPTO 12MTRS) ON BISM
DRAWN	DATE	TYPE WAGON
J.S.NO.	DATE	

ALT.ITEM AUTHY. DESCRIPTION DATE ASSLY. DRGS B.G. R.D.S.O. [W] GROUP WD-24014-S-03



INDIAN RAILWAYS

CHECK SHEET FOR LOADING & SECURING OF CONSIGNMENTS ON WAGONS

S.NO.	Month/year of issue	Amendment No.	Revision No	Pages
1.	JULY- 2023	---	---	02

ISSUED BY

**RESEARCH DESIGNS AND STANDARDS ORGANISATION
MINISTRY OF RAILWAYS
MANAK NAGAR, LUCKNOW - 226 011**

JULY-2023

Check Sheet for Loading and securing the consignments on wagon

Wagon type/Code:	Wagon No:	Loading Place/ code:
Loading Commodity:	Relevant Loading Diagram no:	Date:

S. No.	Stage/ Parameters	Requirement as per Loading Diagram	Actual Parameters Found		Remark
			Consignment Loading Authority	Railways / Inspecting Authority	
1	Condition of wagon used for loading	Fit for Loading			
		Unfit for loading (reason)			
2	Pay Load of used wagon	As per relevant wagon diagram			
3	Weight of each commodity (Steel Coil/ Pipe/ Billets/ Wire Roll/ Bars etc.)	Weight details provide on loading commodities			
4	No. of commodities/ Bundles loaded	Total no. of commodities/ Bundles			
5	Total weight of loaded consignment (in ton)	Sum of S. No. 3 & 4			
6	No. off wooden block/log or steel saddle used at bottom of each consignment	As per loading diagram no. off used =			
7	Total no. wooden block/log or steel saddle used at bottom/ wagon	As per loading diagram total no. used/ wagon =			
8	Side wooden log/ other fixing arrangement for consignment with side wall (if used in relevant loading diagram)	No. off Side wooden log/ other fixing arrangement used at each side wall as per loading diagram =			
9	No. off Lashing chain/ strap used for securing of each consignment/bundle	As per loading diagram no. off used for each consignment/ bundle =			
10	Total no. off Lashing chain/ strap used for securing/ wagon	As per loading diagram total no. used/ wagon =			
11	Tension given to the lashing straps	Tension as per loading diagram =			
12	All loaded consignment found in wagon with correct stacking, securing & lashing arrangement.	Correct stacking, securing & lashing arrangements as detailed/ mentioned in relevant loading diagram found satisfactory. (YES/ NO).			

Consignment/ Loading Authority		Railway/ Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	