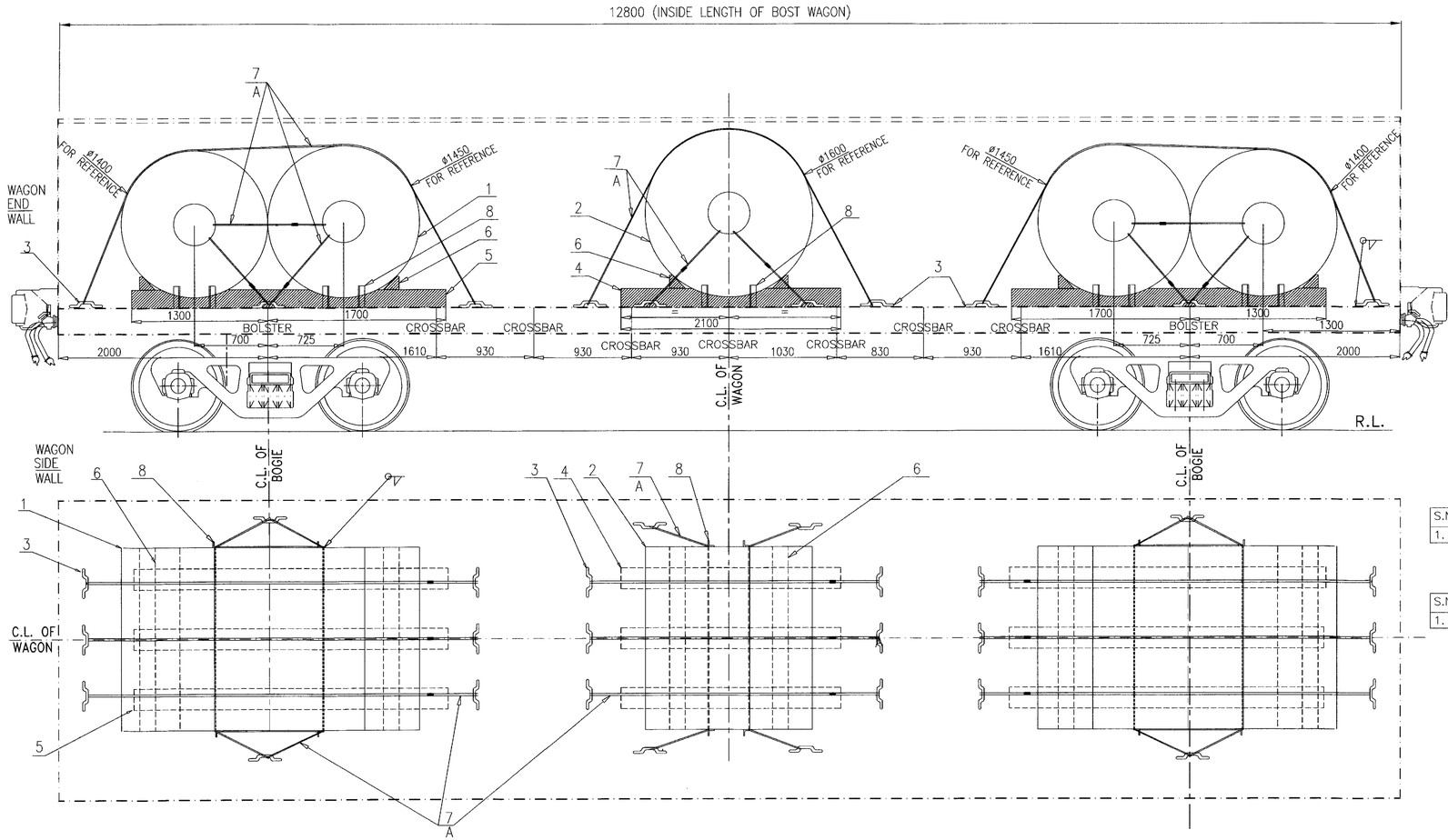
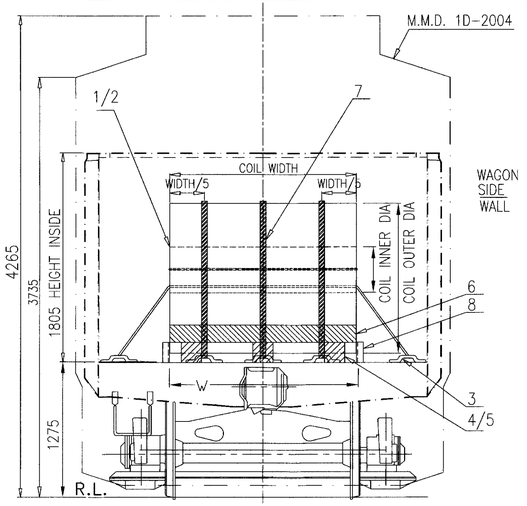


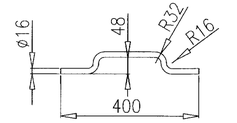


S.NO.	ONE COIL WEIGHT AT CENTRE OF WAGON	UNITED COILS WEIGHT AT EACH BOGIE CENTRE
1.	UP TO 16 TON MAXIMUM	(TOTAL PAY LOAD-16 TON)/2 (SEE NOTE-3)

TABLE-A (LOADING SCHEME FOR 05 NO. STEEL COIL)

S.NO.	COIL WEIGHT AT CENTRE OF WAGON	UNITED COILS WEIGHT AT EACH BOGIE CENTRE
1.	NIL (NO COIL AT CENTRE)	TOTAL PAY LOAD/2 (SEE NOTE-3)

TABLE-B (LOADING SCHEME FOR 04 NO. STEEL COIL)



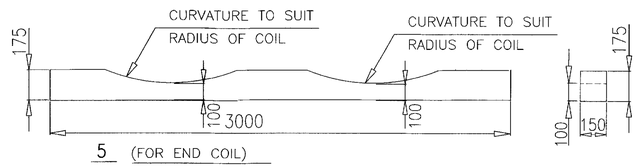
3

NOTE:-

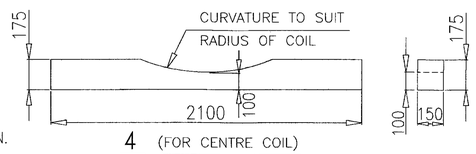
1. ALL INDIVIDUAL COILS ARE TO BE UNITIZED BY USING HEAVY DUTY STRAPS AS INDICATED BY 'A' AS PER SECURING PATTERN SHOWN IN THIS DRAWING.
2. THE COILS LOADING ACROSS THE WAGON LENGTH, SHOULD BE SYMMETRICALLY ABOUT THE LONGITUDINAL CENTRE LINE AS WELL AS TRANSVERSE AXIS OF THE WAGON.
3. TWO COIL LOADING COMPOSITION DEPENDING UPON THE COIL WEIGHT, CAN BE USED AS PER TABLE A AND B :-
   3.1 IF FIVE COIL LOADED AS PER TABLE-A, 02 NO. COIL AT BOTH SIDE ON EACH BOGIE/ BOLSTER CENTRE AND 01 COIL AT MIDDLE OF WAGON, THEN MAXIMUM COIL WEIGHT AT CENTER SHOULD NOT EXCEED 16 TON IN ANY CONDITION.
   3.2 IF FOUR COIL LOADED AS PER TABLE-B, 02 NO. UNITE COILS AT EACH BOGIE CENTRE AND NO COIL LOADING DONE ON AT MIDDLE OF WAGON.
4. LOADING OF COILS SHOULD BE SUCH THAT :-
   4.1 THE LOAD ON ANY BOGIE SHOULD NOT EXCEED WAGON'S PAY LOAD/2 .
   4.2 THE COILS WEIGHT IMPOSED ON BOTH BOGIES SHOULD BE IDENTICAL.
   4.3 MAXIMUM DIFFERENCE IN COILS WEIGHT LOADED ON BOTH BOGIE/ BOLSTER CENTRE OF WAGON, SHOULD NOT BE MORE THAN 2 (TWO) TON.
   4.4 TOTAL WEIGHT OF LOADED COILS ON WAGON SHOULD NOT EXCEED THE CARRYING CAPACITY (PAY LOAD) OF THE WAGON.
5. BEFORE LOADING, ENSURE THAT WOODEN CRADLES ARE PLACED AT CORRECT POSITION AS SHOWN IN DRAWING. PROPER QUALITY HARD WOOD OF ADEQUATE STRENGTH, WHICH SUSTAIN THE LOAD IMPARTED ON IT, SHAL BE USED. IT IS THE RESPONSIBILITY OF LOADING PARTY. TRIANGULAR WOODEN WEDGE USED ALONG THE WIDTH OF COILS.
6. AFTER PLACING THE COIL ON WOODEN CRADLE, WOODEN WEDGE PLACED AND FIXED ON BOTH SIDE OF COIL ON WOODEN CRADLE. THEN USE THREE STRAPS ON EACH COIL FOR TIGHTENED WITH ISOLATION HOOK AS SHOWN IN DRAWING, FOR SAFE OPERATION. LASHING OF EACH COIL SHOULD BE STRICTLY DONE AS PER LASHING INSTRUCTION.
7. AFTER TIGHTENING BY THREE STRAP, UNITED COILS/COIL SHALL BE TIGHTENED ADEQUATELY BY 3/2 NOs. LASHING CHAIN/STEEL STRAP WITH ISOLATION HOOK AS PER POSITION.
8. 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.	NOMINALTHICKNEES	1.45
3.	MINIMUM BRAKING STRENGTH	49KN (5 TON)

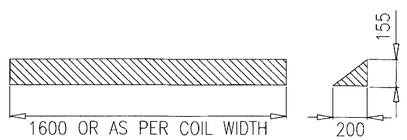
9. ELONGATION OF STEEL STRAP SHALL BE GREATER THAN 7% MEASURED USING A GAUGE LENGTH OF 100MM, WHEN TESTED IN ACCORDANCE WITH EN10002-1.
10. INITIAL TENSION IN STEEL STRAP SHALL BE IN RANGE OF 500kg TO 800 kg. ALL STEEL STRAPS SHOULD BE UNIFORMLY TIGHTENED AND MEASURED BY TENSOMETER.
11. OVERLAPPING LENGTH/ HEIGHT OF ANGLE STOPPER(IISA 50X50X6) SHALL NOT BE LESS THAN 100 MM OVER COIL.
12. THE LOADING PARTY SHOULD WELD ISOLATION HOOK (ITEM NO.3) WITH WAGON FLOOR TO ACCOMODATE COIL DIIA/ WIDTH AS SHOWN IN DRAWING.
13. SECURING ARRANGEMENT SHALL BE CERTIFIED BY CONCERN RAILWAY AS PER CHECK SHEET NO. WD-CS-01-LOAD SECURING CHECK SHEET (LATEST).
14. THIS RDSO DRAWING IS AN INDUCTIVE DRAWING AS THE SIZE AND SHAPE OF CONSIGNMENT VARIES. THE CONSIGNEE MAY TAKE ADDITIONAL MEASURE TO SECURE THE LOAD FOR SAFE OPERATION.
15. THE LOADING/UNLOADING OF COILS TO BE CARRIED OUT IN SUCH A WAY THAT IT WILL NOT DAMAGE THE WAGON & LOOSE DURING TRANSPORTATION.



5 (FOR END COIL)



4 (FOR CENTRE COIL)



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ITEM	DESCRIPTION	NO. OF PCS PER COIL	MTL&SPEC	REMAKS
8.	STOPPER (ISA 75X75X6) L=200 APPROX	4 AT MIDDLE 8 AT END	STEEL	SEE NOTE NO. 11
7.	LASHING CHAIN OR HEAVY DUTY STRAP	5 AT MIDDLE 6 AT END	STEEL	SEE NOTE NO. 7,8,9&10
6.	WOODEN WEDGE	2	WOOD	SEE NOTE NO. 5&6
5.	WOODEN CRADLE(LONG)	3	WOOD	FOR END COIL, NOTE NO.5&6
4.	WOODEN CRADLE(SHORT)	3	WOOD	FOR CENTRE COIL, NOTE NO.5&6
3.	ISOLATION HOOK	10 AT MIDDLE 8 AT END	STEEL	
2.	STEEL COIL AT CENTRE (01 NO./ WAGON)	--	STEEL	MAXIMUM COIL WEIGHT=16T SEE TABLE-A
1.	STEEL COIL AT END (02 NO./ BOGIE)	--	STEEL	SEE TABLE-A & B

ALT.	ITEM	AUTHY.	DESCRIPTION	DATE	ASSLY. DRGS.
1	-	WD-23075	DRAWING REVISED AND REDRAWN	08/23	-

SUPERSEDED BY
SUPERSEDES DATE

SCALE			
	PASSED	Sd-A. K. RAI	11/15
	CHECKED	Sd- A. P. SINGH	10/15
	DRAWN	Sd- D. KUMAR	10/15
	J.S.NO.	WD-15057	10/15

B.G. | R.D.S.O. [W]

LOADING OF STEEL COILS ON BOST AND BOXN WAGON VARIANTS

GROUP

WD-15057-S-08

Ai 09/23