

9

Page 1 of 5	SPECIFICATION No. CLW/MS/3/077	ALT. 5
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**SPECIFICATION FOR STEEL CHEQUERED PLATES -  
USED FOR WAG-9, 3-PHASE ELECTRIC LOCOMOTIVE  
OF INDIAN RAILWAYS**

**TENDER SPECIFICATION No. CLW/MS/3/077 ALT. 5 6**  
**ISSUE DATE: 06.06.1997**

**ISSUED BY:**  
**DY. CHIEF ELECTRICAL ENGINEER/D/CONV.**  
**CHITTARANJAN LOCOMOTIVE WORKS**  
**P.O. CHITTARANJAN – 713331**  
**DIST. BARDHAMAN (WEST), WEST BENGAL (INDIA)**

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<b>ASHISH KUMAR</b> Digitally signed by ASHISH KUMAR Date: 2022.12.01 16:28:59 +05'30'	<b>MANOJ KUMAR PAUL</b> Digitally signed by MANOJ KUMAR PAUL Date: 2022.12.01 16:30:46 +05'30'	<b>SYAMA PRASAD PATRA</b> Digitally signed by SYAMA PRASAD PATRA Date: 2022.12.01 16:33:25 +05'30'
<b>SSE/DRG&amp;DGN (M)</b>	<b>SSE/DRG</b>	<b>DY. CEE/D/CONV</b>

### ALTERATION RECORD SHEET

ALT. No.	DATE	DESCRIPTION	REASON	SIGNATURE
1	19.05.1999	DRG. No. 1209-02.326-151 (TREAD PLATE) ADDED	DUE TO OMISSION	S/d- 19.05.1999
2	20.09.2000	DRG. No. 1209-01.340-028 (STEP PLATE) TO BE FOLLOWED AS PER ALT.1	QTY/LOCO 6 WAS 8, DUE TO OVERSIGHT	S/d- 20.09.2000
3	08.03.2002	CLAUSE 6.3 ADDED	AS DECIDED BY COMPETENT AUTHORITY VIDE L/No. C-D&D/TOT/ 111 DATED 18.02.2002	S/d- 15.03.2002
4	31.01.2006	ITEM 12 OF PARA 2 DELETED.	THE ITEM IS FITTED WITH PLATFORM ASSY. WHICH IS OFF-LOADED. ELDD/BODY/WAG9/WAP5/327 DATED 30.01.2006	S/d- 31.01.2006
5	21.10.2011	ITEM AT SL. NO. 8, 9, 10, 11 DELETED.	ITEMS NOT USED BY SHOP-16/CLW REC. L/No. DCME/ELA/07/DESIGN DATED 05.09.2011 BY Dy. CME/ELA.	S/d- 21.10.2011
6		Para 4-4 is modified Para 4-5 changed to 4-6 New datas are added Para 4-5. Added Para 6-4	To introduce RAL7030 for stone grey colour, inspection by RAL shed Card & measurement of DFT of Paints.	

Specification have been digitized and all alterations have been incorporated

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Page 3 of 5	SPECIFICATION No. CLW/MS/3/077	ALT. 5 <del>6</del>
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### TABLE OF CONTENTS

SL. No.	Description of contents	Page No.
1	Scope	4
2	Scope of Supply	4
3	General	4
4	Technical Requirements	4
5	Manufacture	4
6	Inspection and Testing	5
7	Supply of Documents	5
8	Quality Assurance	5
9	Labeling / Markings	5
10	Guarantee	5
11	Packing & Delivery	5

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<b>SSE/DRG&amp;DGN (M)</b>	<b>SSE/DRG</b>	<b>DY. CEE/D/CONV</b>



Page 4 of 5	SPECIFICATION No. CLW/MS/3/077	ALT. 5
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## TECHNICAL SPECIFICATION OF STEEL CHEQUERED PLATES USED FOR WAG-9, 3-PHASE ELECTRIC LOCOMOTIVE OF INDIAN RAILWAYS.

### 1. SCOPE:

This technical Specification covers the minimum requirement of design, manufacturing, testing and supply conditions of steel chequered plates used for WAG-9, 3-Phase electric locomotive of Indian railways.

### 2. SCOPE OF SUPPLY:

Steel chequered plates to be supplied as a set, per loco, as per following drawings, quantity per loco indicated therein. A set consist of –

- |                                 |                                       |
|---------------------------------|---------------------------------------|
| 1) Drawing No. 1209-12.246-005; | 6) Drawing No. 1209-12.346-010;       |
| 2) Drawing No. 1209-12.246-006; | 7) Drawing No. 1209-12.346-011;       |
| 3) Drawing No. 1209-12.246-007; | 8) Drawing No. 1209-02.326-151 ALT.1. |
| 4) Drawing No. 1209-12.246-008; |                                       |
| 5) Drawing No. 1209-12.246-009; |                                       |

Quantity of each item per set shall be equal to quantity per loco indicated in the drawings.

### 3. GENERAL:

These steel chequered plates, pattern shown in the drawings, are extensively used on walking corridor of loco and fabrication of footsteps etc.

### 4. TECHNICAL REQUIREMENTS:

**4.1** Chequered plates shall be supplied to the specified pattern, its height, dimensions etc. given in the drawings.

**4.2** Sheared edges and the sharp corners shall be ground and smoothen.

**4.3** Material shall be free from harmful surface defects, cracks, flaws, imperfect edges.

**4.4** Chequered plates shall be finally painted with Stone Grey colour to make anti-corrosion.

**4.5** Material shall not be corroded under climatic and environmental conditions.

### 5. MANUFACTURE:

**5.1** Chequered plate shall be manufactured according to IS: 3502 with pattern type 1A given in the drawing.

**5.2** Material shall conform to the requirement of IS: 2062 Gr. A as given in IS: 3502.

**5.3** Pattern shall not be fabricated by welding.

**5.4** Shearing shall be done within the tolerance.

**5.5** Plates will be painted finally by Stone Grey colour.

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	Date: 2022.12.01 16:30:02 +05'30'		Date: 2022.12.01 16:32:35 +05'30'		Date: 2022.12.01 16:34:45 +05'30'
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4.5. Before final painting surfaces of chequered plates to be cleaned from dust and rust. Two coats of primers each minimum 50 microns to be implemented on both side of chequered plates.



Page 5 of 5	SPECIFICATION No. CLW/MS/3/077	ALT. 5
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**6. INSPECTION AND TESTING:**

**6.1** Nominated representative of the purchaser will carry out the inspection of prototype sample. All the necessary tests conducted during inspection shall be arranged and borne by the supplier.

**6.2** Tensile test, bend test shall be conducted according to IS: 1608 and IS: 1599 which are given in the material specification.

**6.3** Prior to prototype inspection CLW's representative will be deputed to seal the sample piece of the material specified for test in the government approved/RDSO approved on test lab. The Lab test report should be produced at the time of prototype inspection.

**7. SUPPLY OF DOCUMENTS:**

**7.1** Material Certificate indicating the specification.

**7.2** All the Test Certificates as mentioned in Para 6 to be submitted.

**8. QUALITY ASSURANCE:**

As per ISO: 9000

**9. LABELING/MARKING:**

Product shall be marked with the following:

**9.1** Name of the Product with grade.

**9.2** Steel Designation.

**9.3** Month & Year of Manufacture.

**9.4** Name of the manufacturer with Trade mark, Code No. & Batch No.

**10. GUARANTEE:**

All aspects of design, workmanship and material will be covered by the guarantee of satisfactory performance of the product from the date of application at least 15 years or 16 years from the date of supply of the material by the supplier.

**11. PACKAGING & DELIVERY:**

**11.1** Protective packaging to be done which is suitable for the transport and storage under the climatic and environmental conditions mentioned in Para 5 and which will prevent any damage to the material during handle, transit and storage. Storage period considered at least 24 months.

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<b>SSE/DRG&amp;DGN (M)</b>		<b>SSE/DRG</b>		<b>DY. CEE/D/CONV</b>	

6.4. Stone Grey colour according RAL 7030 to be inspected by matching with RAL shed card. DFT of paint should be measured by ~~DFT~~ digital DFT measuring gauge / ELCO meter.