



CRM Complex West, Plot No S-76 Tarapur Industrial Area, PO No 22, Dist.-Palghar, Maharashtra 401506, India.

TATA STEEL



TEST CERTIFICATE

TEST CERTIFICATE NO.: 905038643

DESPATCH DATE: 10.01.2024

TEST CERTIFICATE TO:

DO NO.: 9517460472

CUSTOMER CODE: 854778

MAHINDRA AUTO STEEL PVT LTD. PLOT NO C23/1

INVOICE NO.: 3148023835

VEHICLE NO.: MH14GD5852(L)

MDC CHAKAN, PH-II VILLAGE

MATERIAL NO.: 3175276

PRODUCT: CRCA SHEET

PUNE 410501

2536662,6869

We hereby certify that the above mentioned material is tested in accordance with scheme of testing and inspection contained in BIS certification marks License no. CML-7198486 as are indicated against each section (Please refer to IS 513 CR4COLD REDUCED CARBON STEEL SHEET AND STRIP, 2016)* for details of specification requirements). Legal sanction can be imposed on forging. Improper use of product can cause safety issues. To validate test certificate, Scan QR Code.

TDC No.: YA09

Chemical Analysis, Specifications and Other Information

Grade: MM22 EDD

Section (T x W x L): 1.000x825.000x1335.00mm

Specification Requirements as per TDC No YA09

Item	Batch No.	Mother Coil	Cast No.	Tonnage	Pcs.	Test Results									
						C	Mn	Si	S	P	N				
01	ST09124T08	W03310900/	A270616	2.150	250	0.0380	0.158	0.005	0.010	0.013	30				
02	ST09124T09	W03310900/	A270616	2.150	250	0.0380	0.158	0.005	0.010	0.013	30				
03	ST09124T10	W03310900/	A270616	2.150	250	0.0380	0.158	0.005	0.010	0.013	30				

Mechanical Analysis, Specifications and Other Information

Section (T x W x L): 1.000x825.000x1335.00mm						Test Results									
Specification Requirements as per TDC No. YA09						HRB	YS	UTS	EL	r BAR	RA	ER	n		
							MPa	MPa	%		µm	MM			
						Min									
						Max									
01	ST09124T08	W03310900/	A270616	2.150	250	37	178	287	46	1.62	0.80	11.5	0.21		
02	ST09124T09	W03310900/	A270616	2.150	250	37	178	287	46	1.62	0.80	11.5	0.21		
03	ST09124T10	W03310900/	A270616	2.150	250	37	178	287	46	1.62	0.80	11.5	0.21		

Route-BOF>CASOB>CC>HSM

*For further details please visit www.bis.gov.in

Micro alloying elements (M/A): Nb+V+Ti
Material clearance date

1 MPa = 1 N/mm2

YS = Yield Strength

UTS = Ultimate Tensile Strength

El = % elongation on standard gauge length

T x W x L = Thickness x Width x Length

CE (Carbon Equivalent) = (C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15)

Material is ROHS Compliant
Tensile Sample testing transverse to rolling direction

Document certified by VINOD VISHWANATH
RAUT ~vishnu@tatasteel.com
Digitally signed by VINOD VISHWANATH
Date: 2024.01.01 01:32:55 IST
Location: Tarapur, Mumbai

Head Quality Assurance
TATA STEEL LIMITED