



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



TEST CERTIFICATE

| | | |
|----------------------------------|----------------------------|--|
| TEST CERTIFICATE NO. : 905038658 | DESPATCH DATE: 10.01.2024 | TEST CERTIFICATE TO: |
| DO NO. : 95174S3913 | CUSTOMER CODE: 854778 | MAHINDRA AUTO STEEL PVT LTD. PLOT NO C23/1 |
| INVOICE NO. : 3149023836 | VEHICLE NO.: MH14GDS582(L) | MIDC CHAKAN, PH-II VILLAGE |
| MATERIAL NO. : 3175279 | PRODUCT: CRCA SHEET | PUNE 410501 |

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 are as indicated against each section (Please refer to IS 513 CR4/COLD 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 | | | | | C | Mn | Si | S | P | N | | | | | | | | | | | | |
| Section (TxWxL): 1.200x890.000x1705.00mm | | | | | % | % | % | % | % | PPM | | | | | | | | | | | | |
| Specification Requirements as per TDC No YA09 | | | | | Min | | | | | | | | | | | | | | | | | |
| | | | | | Max | 0.0500 | 0.200 | 0.030 | 0.012 | 0.020 | 50 | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| Item | Batch No. | Mother Coil | Cast No. | Tonnage | Pcs. | Test Results | | | | | | | | | | | | | | | | |
| 01 | ST09124T16 | W03579100/ | V19393 | 2.130 | 148 ✓ | 0.0018 | 0.072 | 0.006 | 0.006 | 0.015 | 29 | | | | | | | | | | | |
| 02 | ST09124T17 | W03579100/ | V19393 | 2.130 | 148 ✓ | 0.0018 | 0.072 | 0.006 | 0.006 | 0.015 | 29 | | | | | | | | | | | |
| 03 | ST09124T18 | W03579100/ | V19393 | 2.135 | 148 ✓ | 0.0018 | 0.072 | 0.006 | 0.006 | 0.015 | 29 | | | | | | | | | | | |
| TDC No: YA09 | | | | | Mechanical Analysis, Specifications and Other Information | | | | | | | | | | | | | | | | | |
| Section (TxWxL): 1.200x890.000x1705.00mm | | | | | HRB | YS | UTS | EL | r BAR | RA | ER | n | | | | | | | | | | |
| | | | | | | MPa | MPa | % | | | | | | | | | | | | | | |
| | | | | | Min | | | 45 | 1.60 | 0.80 | | 0.19 | | | | | | | | | | |
| Specification Requirements as per TDC No. YA09 | | | | | Max | 40 | 180 | 300 | | 1.20 | | 0.30 | | | | | | | | | | |
| Item | Batch No. | Mother Coil | Cast No. | Tonnage | | Test Results | | | | | | | | | | | | | | | | |
| 01 | ST09124T16 | W03579100/ | V19393 | 2.130 | 148 ✓ | 26 | 142 | 286 | 50 | 1.70 | 1.13 | 12.0 | 0.24 | | | | | | | | | |
| 02 | ST09124T17 | W03579100/ | V19393 | 2.130 | 148 ✓ | 26 | 142 | 286 | 50 | 1.70 | 1.13 | 12.0 | 0.24 | | | | | | | | | |
| 03 | ST09124T18 | W03579100/ | V19393 | 2.135 | 148 ✓ | 26 | 142 | 286 | 50 | 1.70 | 1.13 | 12.0 | 0.24 | | | | | | | | | |

Route-BOF>LF>CC>HSM

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

Material is ROHS Compliant

Tensile Sample testing transverse to rolling direction

1 MPa = 1 N/mm2

YS = Yield Strength

UTS = Ultimate Tensile Strength

El= % elongation on standard gauge length

TxWxL = Thickness x Width X Length

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

Document certified by VINOD VISHWANATH
Rd-1 Tarapur, Palghar, Maharashtra
Digitally signed by VINOD VISHWANATH
Date: 2024.01.30 01:36:21 IST
Location: Tarapur, Mumbai

Head Quality Assurance
TATA STEEL LIMITED