

TEST CERTIFICATE



Certificate No: 462171
Created On: 15/04/2020

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| Customer: MACSTEEL INTERNATIONAL Customer Order No: 113275 EndUser Reference: 168349 | Supplier: New Zealand Steel Limited A BlueScope Company 131 Mission Bush Road, Glenbrook, South Auckland Postal: Private Bag 92121, Auckland 1142, New Zealand Telephone: (09) 375 8111 Auckland Fax: (09) 375 8959 Sales Order No : 1429917 Printed On : 15/04/2020 |
| <p>All tests reported herein have been performed in accordance with the laboratory's scope of accreditation</p> | I certify that the original records of the company show that the Item(s) referred to on this certificate conform to the specifications as stated. S. BESTER - NEW ZEALAND STEEL APPROVED SIGNATORY Mechanical LAB 965 D. GRANGER - NEW ZEALAND STEEL APPROVED KTP Chemical LAB 101 |
| Specification: ASTMA36(2019) Product : 0.1874" x 48" x Coil HOT ROLLED COIL | Inspection: Supplier Certification: Supplier |

ITEMS COVERED BY THIS CERTIFICATE

| Pack No | Heat No | Ordered Dimensions | Tested Unit |
|--|---------|----------------------|-------------|
| HNG6307901 #61021 | 975234 | 0.1874" x 48" x Coil | HNG6307901 |
| HNG6314501 #61011 | 976382 | 0.1874" x 48" x Coil | HNG6314501 |
| #61026 HNG6324501, HNG6324601 #61018 | 976382 | 0.1874" x 48" x Coil | HNG6324501 |
| #61000 HNG6324701, HNG6324901, HNG6325001 #61004 | 976350 | 0.1874" x 48" x Coil | HNG6324701 |
| #61022 HNG6325101, HNG6325301, HNG6325401 #61014 | 976348 | 0.1874" x 48" x Coil | HNG6325101 |

CHEMICAL ANALYSIS

Percentage of element by mass

(L=Cast, P=Product, S=Soluble, -T=Total, CEV = Carbon Equivalent Value)

| Heat No | L/P | x100 | | | x1000 | | | | | | | x10000 | | x100 | | | |
|---------|-----|------|----|----|-------|----|----|----|----|----|----|--------|----|------|----|----|-----|
| | | C | Si | Mn | P | S | Cu | Ni | Cr | Mo | V | Nb | Ti | Al-T | B | N | CEV |
| 975234 | L | 20 | 1 | 58 | 14 | 18 | 13 | 17 | 18 | TR | 9 | TR | 1 | 47 | TR | 70 | 30 |
| 976348 | L | 17 | 2 | 59 | 15 | 18 | 12 | 16 | 23 | TR | 14 | 5 | 2 | 39 | TR | 40 | 27 |
| 976350 | L | 18 | TR | 59 | 11 | 18 | 12 | 17 | 25 | TR | 10 | 4 | 1 | 46 | TR | 50 | 28 |
| 976382 | L | 19 | TR | 61 | 18 | 17 | 12 | 17 | 22 | TR | 6 | 6 | TR | 52 | TR | 50 | 29 |

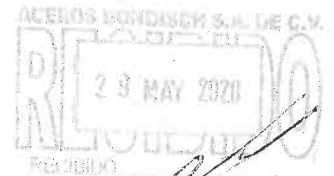
TR composition: Si (TR) < 0.01%, Mo/Nb/Ti (TR) < 0.001%, B (TR) < 0.0001%

CEV = C+Mn/6

MECHANICAL TESTING

Tensile

| Tested Unit | Heat No | ReL psi MPa | Yield point type | Rm psi | Lo | ELONG % |
|-------------|---------|----------------|---------------------|--------|----|---------|
| HNG6307901 | 975234 | 48400 | ReL | 69500 | F | 23 |
| HNG6314501 | 976382 | 46700 | ReL | 71800 | F | 25 |
| HNG6324501 | 976382 | 46800 | ReL | 70300 | F | 24 |
| HNG6324701 | 976350 | 44700 | Rp0.2 | 68300 | F | 25 |
| HNG6325101 | 976348 | 45000 | Rel. | 67300 | F | 22 |



COMMENTS

Steel produced through the basic oxygen steelmaking process by New Zealand Steel. Steel is fine grained, fully killed, continuously cast. - Heat analysed from ladle - Results relate to test on a representative sample of the items covered in this test certificate. - This certificate may not be reproduced except in full. - NZ Steel, Chemical Laboratory IANZ Accreditation Number 101, KTP Mr David Granger. - NZ Steel, Mechanical Laboratory IANZ Accreditation Number 965, Approved Signatory Mr Schalk Bester. NZ Steel Laboratories are accredited by, International Accreditation New Zealand (IANZ), a signatory to the International Laboratory Accreditation Cooperation mutual Recognition Agreement.

Test methods for chemical analysis were, ASTM E415: 2017 & JIS G1253: 2002.

New Zealand Steel operate a quality management system conforming to AS/NZS ISO 9001: 2015 as assessed by Telarc Ltd Registration Number: 82.