

## **GENERAL DESCRIPTION**

Hot Rolled HA300 steel is a structural steel with a guaranteed minimum yield strength of 300MPa with good ductility.

## **APPLICATIONS**

Structural members

## **STANDARDS**

- AS/NZS 1594:2002
- AS/NZS 1365:1996

|                      | 3.1 – 4.9mm    | 4.9 – 13.0mm | 3.1 – 4.9mm                            | 4.9 – 13.0mm |
|----------------------|----------------|--------------|--|--------------|
| CHEMICAL COMPOSITION | TYPICAL (wt %) |              | EXPECTED MAXIMUM (wt %) <sup>[1]</sup> |              |
| Carbon (C)           | 0.17           | 0.17         | 0.20                                   | 0.20         |
| Silicon (Si)         | 0.007          | 0.01         | 0.03                                   | 0.03         |
| Manganese (Mn)       | 0.60           | 1.60         | 1.00                                   | 1.60         |
| Sulphur (S)          | 0.017          | 0.017        | 0.030                                  | 0.030        |
| Phosphorus (P)       | 0.016          | 0.014        | 0.040                                  | 0.040        |

<sup>&</sup>lt;sup>[1]</sup> Values shown refer to relevant Australian/ New Zealand standard unless tighter internal limits are applied.

|   | 3.1 – 4.9mm | 4.9 – 13.0mm | 3.1 – 4.9mm      | 4.9 – 13.0mm |
|---|-------------|--------------|------------------|--------------|
| MECHANICAL PROPERTIES                   | TYPICAL     |              | EXPECTED MINIMUM |              |
| Yield strength, MPa                     | 340         | 350          | 300              | 300          |
| Tensile strength, MPa                   | 480         | 490          | 400              | 400          |
| Elongation, % on L <sub>o</sub> = 200mm | 28          | 25           | 16               | 16           |

Material should be used promptly (within 6 months) to avoid the possibility of storage related corrosion and degradation.

Mechanical properties are guaranteed at ambient/room temperatures. Please consult technical representatives at New Zealand Steel for high/low temperature use.

| DIMENSION CAPABILITIES |            |  |  |  |
|------------------------|------------|--|--|--|
| THICKNESS (mm)         | WIDTH (mm) |  |  |  |
| 3.10 – 3.23            | 730 – 1000 |  |  |  |
| 3.24 - 3.99            | 730 – 1260 |  |  |  |
| 4.00 - 4.90            | 730 – 1540 |  |  |  |
| 4.91 – 13.00           | 730 – 1540 |  |  |  |

These dimensions are a reflection of technical capability to produce. Supply conditions may be subject to dimensional restrictions and is subject to New Zealand Steel Marketing confirmation. Other dimensional combinations may be available by enquiry. Not all sizes available for coil plate

| FABRICATING PERFORMANCE  1 = Limited 5 = Excellent |        |  |
|--|--------|--|
| METHOD   | RATING |  |
| Drawing  | 2      |  |
| Pressing   | 2      |  |
| Bending  | 4      |  |
| Roll-forming                                       | 4      |  |
| Welding  | 5      |  |

| AVAILABLE FORMS |                 |  |  |  |
|-----------------|-----------------|--|--|--|
| DRY             | PICKLED & OILED |  |  |  |
| Mill edge coil  | N A             |  |  |  |
| Coil-Plate      | N.A             |  |  |  |

| STANDARD PLATE SIZES |  |
|----------------------|--|
| 1220 x 2400          |  |
| 1520 x 3600          |  |

## **New Zealand Steel Limited**