Cold Rolled CR Structural S CA250T-G steel

Revision 3, November 2003 This literature supersedes all previous issues

GENERAL DESCRIPTION

CA250T-G cold rolled and temper-rolled structural steel with a guaranteed minimum yield strength of 250MPa suitable for general fabrication and welding.

TYPICAL USES

Guard rails, structural sections.

AUSTRALIAN STANDARD

AS/NZS 1365

GUARANTEED PROPERTIES OF STEEL BASE

| MECHANICAL PROPERTIES | GUARANTEED % | TYPICAL* (Basis: 1.0 mm thick) |
|--|-----------------|--------------------------------------|
| Longitudinal tensile Yield strength, MPa Tensile strength, MPa | 250 min – | 250 - 350 370 - 440 |
| Elong on 80 mm, % | 25 min | 30 - 36 |
| Hardness, HRB | 75 max | 60 - 75 |
| 180° transverse bend (L axis) | 2t | 1t |

^{*} Typical mechanical properties are based on aggregation of X and 2SD performance.

| CHEMICAL PROPERTIES | GUARANTEED MAXIMUM % | TYPICAL % |
|------------------------|-------------------------|---------------|
| Carbon (C) | 0.20 | 0.14 - 0.16 |
| Phosphorus (P) | 0.04 | 0.01 - 0.02 |
| Manganese (Mn) | 0.90 | 0.70 - 0.80 |
| Silicon (Si) | 0.04 | 0.005 - 0.010 |
| Sulphur (S) | 0.04 | 0.007 - 0.020 |
| Aluminium (Al) | 0.10 | 0.02 - 0.06 |

DIMENSIONAL CAPABILITIES

| Preferred thickness mm | Width range mm Strip | Sheet length mm Sheet |
|--|----------------------------|-----------------------------|
| 0.7, 0.8, 0.9, 1.0, 1.2, 1.5, 1.6, 1.7, 1.8, 1.9 | 900 - 1550 | - |
| 2.0, 2.2, 2.5, 2.8, 3.0 | 900 - 1550 | _ |

NOTE: Where maximum widths are less than 1200 mm, any width between half maximum and 610 mm is available by negotiation only. Availability applies only to product supplied direct from Western Port and may change if supplied from BlueScope Steel Service Centres.

Slitting and shearing available on request from BlueScope Steel sales offices.

These dimensions are a reflection of technical capability to produce. Supply conditions may be subject to dimensional restrictions and is subject to BlueScope Steel Sales and Marketing confirmation.

NORMAL/OPTIONAL SUPPLY CONDITIONS

| | Normal | $\mathbf{Optional}^{\#}$ | |
|---|-------------|--------------------------|--|
| Surface finish | Matt | _ | |
| Tolerance class | | | |
| Thickness | AT | BT | |
| Width | AW | BW, ME | |
| Length AL | AL | BL | |
| Flatness | AF | _ | |
| Oiling | Oiled | Not Oiled | |
| Branding | Not Branded | _ | |
| #Optional supply conditions may be subject to dimensional | | | |

#Optional supply conditions may be subject to dimensional restrictions.

FABRICATING PERFORMANCE

NR = not recommended

| Method | Rating |
|--|--------|
| Bending | 4 |
| Drawing | 2 |
| Pressing | 2 |
| Roll-forming | 5 |
| Welding | 5 |
| Painting (pretreatment) | 5 |
| where $1 = $ limited to $5 = $ excellent, or | |

Note: It is recommended that customers use product promptly to avoid the possibility of rusting during storage. Oiling improves corrosion resistance but oiled product should be used within three months.

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Please ensure you have the current data sheet for this product as displayed at www.bluescopesteel.com.au

BlueScope Steel Limited

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