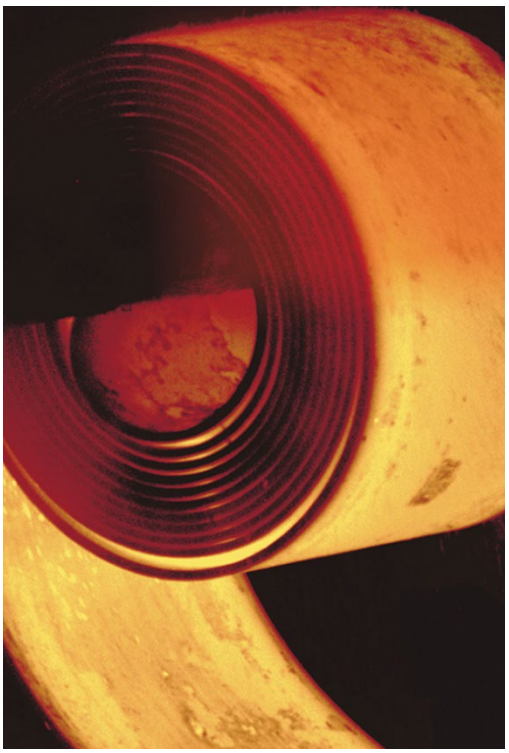
Uncoated Steel
Data Sheet

November 2022 - This literature supersedes all previous issues

XTRAFORM® steel 400

General description

Hot rolled extra formable structural steel for severe forming and bending with a guaranteed minimum yield strength of 380 MPa.



Typical uses

Automotive components

Gas cylinders

Roll forming applications

Press brake forming applications

General fabrications

Features & benefits

Excellent weldability

Excellent formability for its strength

Excellent for galvanising applications

Warnings

This material should be used in conjunction with the appropriate design and welding standards.

An untrimmed edge (Mill Edge) may contain minor surface discontinuities as a result of the rolling process. It is recommended that customers satisfy themselves that the edge is suitable for the application.

Australian and International Standards

AS/NZS 1594:2002 (R2016)

AS/NZS 1365:1996 (R2016)

ISO 9001:2015 Quality System Certified

Supply conditions

	Normal	Optional
Thickness Range	1.6 – 6mm *	-
Width Range	Sizes and MOQ available by enquiry	-
Surface Finish	Hot Rolled	Pickled & Oiled (1.6 to 6mm only)
Edge Condition	Untrimmed (Mill Edge)	Trimmed
Tolerance	AS/NZS 1365:1996 (R2016)	-
Certification	BlueScope	-

* Not all thickness & width combinations are available
Optional supply conditions are subject to dimensional restrictions

Chemical composition

Element	Guaranteed Maximum %
Carbon	0.11
Silicon	0.03*
Manganese	1.60
Phosphorus	0.025
Sulfur	0.010
Aluminium	0.10
Niobium + Vanadium + Titanium	0.15
CEQ (IIW)	0.39

All values shown refer to the relevant Australian Standard unless otherwise stated

$$CEQ(IIW) = C + \frac{Mn}{6} + \frac{(Cr + Mo + V)}{5} + \frac{(Cu + Ni)}{15}$$

* Value refers to the BlueScope internal standard, whereas the AS/NZS 1594 guaranteed maximum is 0.35%

Mechanical properties

Tensile Properties (Longitudinal)		Guaranteed Value
Yield Strength (MPa)	Guaranteed Minimum	380
Tensile Strength (MPa)	Guaranteed Minimum	460
Elongation 80 mm (%)	Guaranteed Minimum	23%
180° Bend (transverse)	Guaranteed Minimum	0t

t = thickness of test piece

Weldability Group

WTIA Group
3

Refer to WTIA Technical Note 1 or AS/NZS 1554.1:2014

BlueScope

Fire hazard properties

Test & Evaluation Method	Result
Combustibility test for materials (AS 1530.1-1994 (R2016))	Not deemed combustible (steel substrate) #

These test results relate only to the behaviour of the test specimens of the material under the particular conditions of the test and they are not intended to be the sole criterion for assessing the potential fire hazard of the material in use.