

Chrome Molybdenum Steel Plate



Applications

- Flanges
- Heat Exchangers
- High temperature ducting
- Pipe Clamps
- Pressure Vessels
- Valves

Key Benefits

- Cut to size.
- Extensive thickness range 6mm-100mm, sourced from Western European mills.
- Full technical support, with fast & efficient cutting and profiling service.
- Fully accredited quality systems to ISO 9001, 14001 and 18001.
- Wide area plates from stock
- Delivered worldwide by our international logistics organisation.

Brown McFarlane offers the widest range of chrome molybdenum steel plate, available ex-stock.

Recognising the growing worldwide demand for plate with elevated temperature properties, we are pleased to offer an extensive stock range to allow you to fast track process plant projects.

Specifications/Grades

ASME/ASTM SA/A 387	Gr. 5 Cl. 2 Gr.11 Cl. 2 Gr.12 Cl.2 Gr.22 Cl.2
BS 1501 Part 2	620, 621 and 622
BS EN 10028-2	16Mo3 13 CrMo Si5-5 13 CrMo 4-5 13 CrMo 9-10

Weldability for all Grades:

Due to the carbon content and additional alloying elements this grade of steel when welded may be susceptible to hardening, resulting in brittle weld areas. Where the mechanical properties have been obtained by heat treatment, welding may result in a reduction of these properties and post weld heat treatment may be required to restore them.



Available Sizes

Thickness: 6/8/10/12.5/13/15/16/20/25/30/35/40mm Length: 12000mm Width: 2000/2500mm
 Thickness: 50/60mm Length: 10000mm Width: 2500mm
 Thickness: 80mm Length: 8000mm Width: 2500mm
 Thickness: 90mm Length: 6000mm Width: 2500mm
 Thickness: 100mm Length: 6000mm Width: 2500mm

BS 1501 Pt 2 621 (modified), ASME SA 387 Grade 11 Cl 2, EN 10028-2 13 CrMo Si 5-5

Chemical Composition

	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al (Modified)
Ladle	0.09	0.50	Max	Max	0.50	Max	Max	1.00	0.45	
analysis	0.17	0.65	0.015	0.005	0.80	0.30	0.30	1.50	0.60	0.040

Impact and Mechanical Properties (Based on 20mm thick plate)

Impacts transverse at 0°C, 27J / 19J

Yield Strength Tensile Strength Elongation

	N/mm ²	N/mm ²	%
	340	515-690	22

BS 1501 Pt 2 620B(modified), ASME SA 387 Grade 12 CL2, EN 10028-2 13 CrMo 4-5

Chemical Composition

	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al (Modified)
Ladle	0.09	0.40			0.15			0.8	0.45	
analysis	0.17	0.65	0.025	0.010	0.35	0.30	0.30	1.15	0.60	0.040

Impact and Mechanical Properties (Based on 20mm thick plate)

Impacts transverse at 0°C, 27J / 19J

Yield Strength Tensile Strength Elongation

	N/mm ²	N/mm ²	%
	340	450-585	22

BS 1501 Pt 2 622, 1515 (Modified) ASME SA 387 Grade 22 Cl 2, EN 10028-2 10 CrMo 9-10

Chemical Composition

	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al (Modified)
Ladle	0.08	0.40						2.00	0.90	
analysis	0.14	0.60	0.020	0.010	0.50	0.30	0.30	2.50	1.10	0.010

Impact and Mechanical Properties (Based on 20mm thick plate)

Impacts transverse at 0°C, 27J / 19J

Yield Strength Tensile Strength Elongation

Typical Values	N/mm ²	N/mm ²	%
	310	515-630	18

SALES & DISTRIBUTION (UK)

P. +44 (0) 1782 289 909
 F. +44 (0) 1782 289 804
 E. sales@brownmac.co.uk
 Brown McFarlane Ltd
 Ladywell Works
 New Century Street
Stoke-on-Trent
 ST1 5QH
 United Kingdom

SALES OFFICE (UK)

P. +44 (0) 845 470 1651
 F. +44 (0) 845 409 4531
 E. glasgow@brownmac.co.uk
 Brown McFarlane Ltd
 Unit 7, Lonmay Place
 Panorama Business Village
Glasgow
 G33 4ER
 United Kingdom

EXPORT SALES (UK)

P. +44 (0) 1922 471 810
 F. +44 (0) 1922 624 778
 E. exportsales@brownmac.co.uk
 Brown McFarlane Ltd
 The Old Foundry
 Bath Street
Walsall
 WS1 3BZ
 United Kingdom

SALES & DISTRIBUTION (UAE)

P. +971 4 887 2575
 F. +971 4 887 2577
 E. brownmc@brownmc.ae
 Brown McFarlane
 International FZE
 Oryx Works
 PO Box 17679
Jebel Ali
 Dubai
 United Arab Emirates

SALES & DISTRIBUTION (RSA)

P. +27(0) 35 797 3034
 F. +27(0) 35 797 3685
 E. sales@brownmac.co.za
 Brown McFarlane Africa
 (Pty) Ltd
 PO Box 16
Richards Bay 3900
 KwaZulu Natal
 South Africa
 Also Johannesburg and Durban

SALES OFFICE (SINGAPORE)

P. +65 6899 1708
 F. +65 6899 1710
 E. salesfareast@brownmac.com
 Brown McFarlane Far East
 (Pte) Ltd
 1 Bukit Batok Crescent
 #04-48 WCEGA Plaza
Singapore 658064



Quality steel plate suppliers to the world