

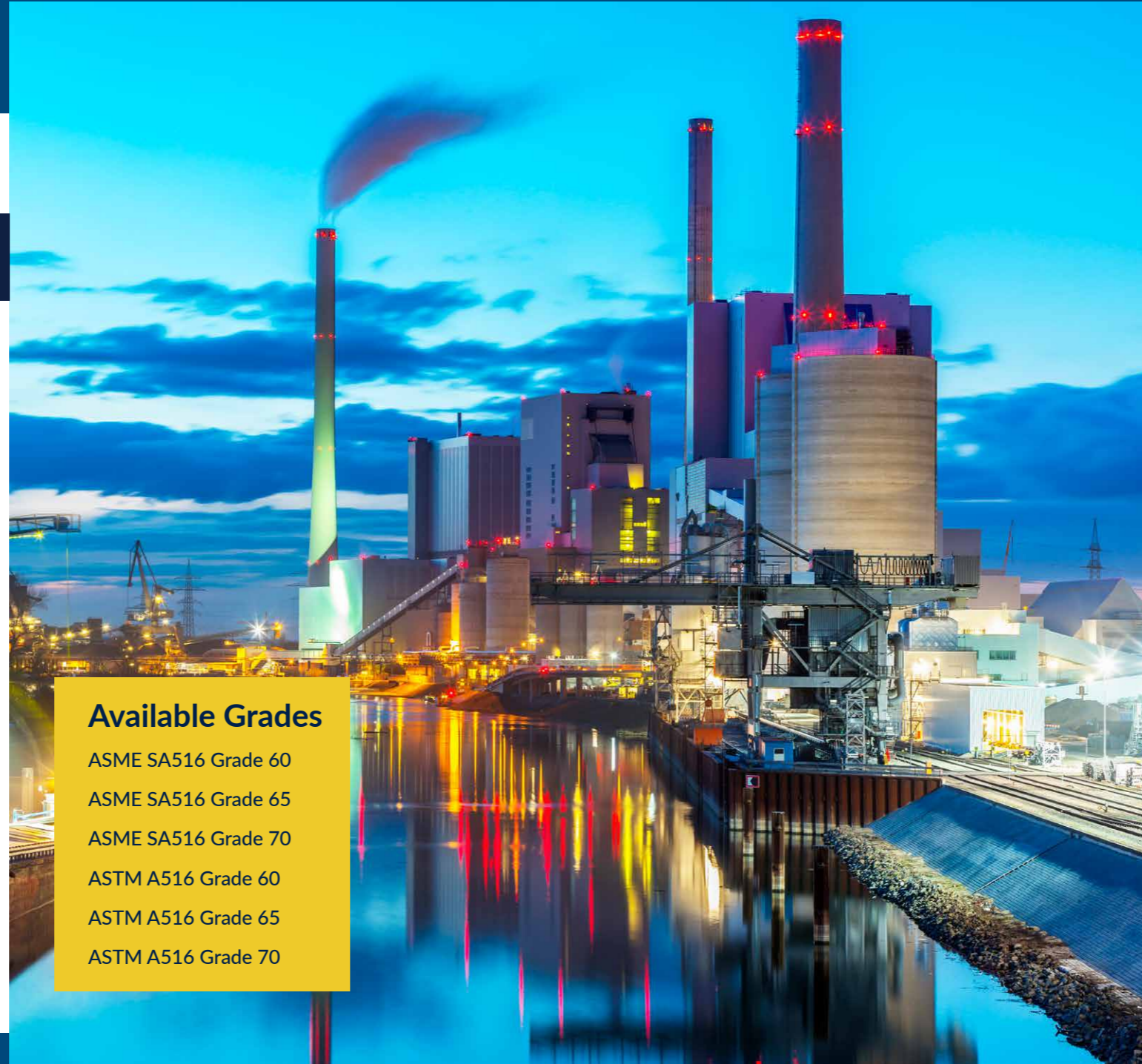
HIC & CARELSO™ PREMIUM +

Our HIC range of steel plates resists corrosive reactions between carbon steel and hydrogen sulphide and is compliant with many of the world's most stringent proprietary specifications.

Brown McFarlane provides a complete range of CarElso HIC Premium+ plate tested for its resistance to hydrogen induced cracking (HIC) in wet H₂S (sour service) environments. The plate is manufactured by Industeel (part of the Arcelor Mittal Group) and is guaranteed by them to have the following minimum properties:

- Crack Length Ratio (CLR) less than 5%
- Crack Thickness Ratio (CTR) less than 1.5%
- Crack Sensitivity Ratio (CSR) less than 0.5%

The plate is tested to NACE TM 0284 Solution A and certified to EN 10204 3.2 (Lloyds). It is compatible with many of the world's most stringent proprietary specifications including Petrobras N1706, Saudi Aramco 01-SAMSS-016, EEMUA 179, Axens IN-43, Shell MESC 74/125, and Shell DEP 31.22.10.32.



Available Grades

- ASME SA516 Grade 60
- ASME SA516 Grade 65
- ASME SA516 Grade 70
- ASTM A516 Grade 60
- ASTM A516 Grade 65
- ASTM A516 Grade 70

APPLICATIONS CAN INCLUDE:



**Pipelines
Flanges and Fittings
Valves**



**Heat Exchangers
Pressure Vessels**

BENEFITS



All Grades Available

All European, American & British grades available



Cut to Size

Custom cut sizes up to 14,000mm in length



Low Sulphur & Phosphorus

Vacuum de-gassed, calcium treated plates



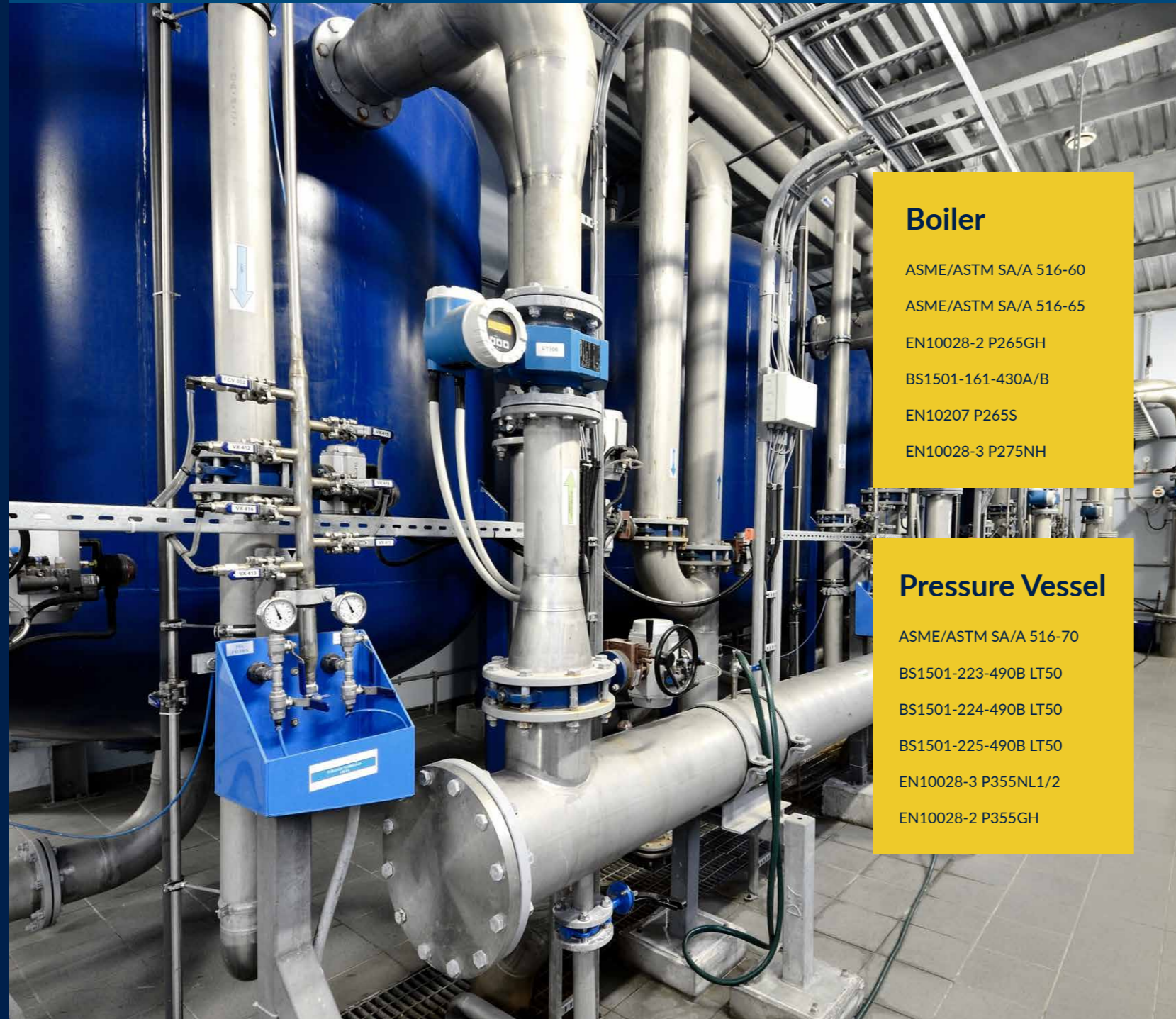
Fully accredited

Quality systems to ISO 9001, 14001 and 18001



Delivered Worldwide

Delivery by our international logistics organisation



Boiler

ASME/ASTM SA/A 516-60

ASME/ASTM SA/A 516-65

EN10028-2 P265GH

BS1501-161-430A/B

EN10207 P265S

EN10028-3 P275NH

Pressure Vessel

ASME/ASTM SA/A 516-70

BS1501-223-490B LT50

BS1501-224-490B LT50

BS1501-225-490B LT50

EN10028-3 P355NL1/2

EN10028-2 P355GH

BOILER &

PRESSURE

VESSEL PLATE

At Brown McFarlane, we make a distinction between boiler plates and pressure vessel plates.

Our Boiler & Pressure Vessel steel plates are certified to all leading European, British and American grades and sourced from first tier Western European mills. Plates have a low Sulphur and Phosphorus content, are vacuum degassed and Calcium treated.

As well as being available from stock all plates can be cut to size and shape according to your fabrication and design requirements and all work is governed by our independently accredited and regularly audited quality systems to ISO 9001.

Brown McFarlane's supply partnerships with many of Europe's leading steel plate manufacturers offer the opportunity for us to supply non-stock items or non-standard sizes directly from the steel mill to our customers. Using this form of supply it is often possible to deliver much faster than "standard" mill lead times.

QUENCHED & TEMPERED STEEL PLATE

Quenched and tempered structural steel plate has been developed for industrial uses where a combination of strength and outstanding toughness are necessary.

Quenched and tempered steel plate has the considerable advantage of providing high strength while offering weight reductions which improves the efficiency of plant and equipment. It is used in the manufacture of cranes, forklift trucks, bridges, mooring equipment, vehicle chassis, to name but a few applications.

High strength quenched and tempered steel plate can be easily welded and fabricated, in line with manufacturers guidelines.



Quend 700

S690QL

Quend 900

S890QL



QUARD 400

QUARD 450

QUARD 500

ABRASION RESISTANT STEEL PLATE

This range of steel plate products has been developed specifically for long service life in abrasive conditions.

Abrasion resistant steel plate is also known in the engineering industry by a variety of other names which include wear resistant plate, wear plate or 400 Brinell plate.

Abrasion resistant steel plate can be easily welded and fabricated, in line with manufacturer's guidelines. The harder a steel the more difficult it is to fabricate and weld. For this reason, steel with hardness of around 400 Brinell is the most commonly specified and used. However hot rolled steel plate products for more exacting abrasive conditions are readily available in 450 and 500 Brinell hardness while even harder steel plates are also manufactured.

STRUCTURAL STEEL PLATES

At Brown McFarlane we keep a full range of structural steel plates aimed at the general engineering, construction and offshore sectors amongst others.

EN 10025 S275JR+AR, S275J0+N, S275J2+N, S355J2+N, S355JR+AR, S355J0+N and S355K2+N

Steels with guaranteed mechanical properties aimed at the general engineering and construction sectors.

EN 10025-3 S355NL and S460NL

Steels with guaranteed mechanical properties commonly used in the construction sector. In conjunction with us achieving EN 1090 Execution Class 4 approval, makes us the perfect partner for customers in this sector.

EN 10025-5 S355J0WP, S355J2W+N and S355K2W+N

Weather resistant steel plates now much used in the construction sector for both structural and aesthetic purposes. End uses such as railway bridges or outdoor sculptures – the Angel of the North being one of the best-known examples.

EN10225 S355G8+N and S355G10+N

Steel plate for offshore structures complete with Z35 through thickness test at 25mm and above. End use applications include subsea structures or oilfield fabrications.



OTHER PRODUCTS

High Yield Cold Forming Steel Plates

To EN10149-2 S700MC, with guaranteed mechanical properties and excellent cold formability – ideal for weight/sensitive applications such as truck bodies or crane booms.

High Temperature Chrome Moly Steel Plates

For use in high temperature process plant applications such as heat exchangers.

Chromium Carbide Weld Overlay Steel Plates

For use in highly abrasive environments for example in the Quarrying sector.

Armour Steel Plates

Ballistic tested steel plates for use in the defence sector, for example in safe rooms or armoured vehicles.

OTHER SERVICES

- Full Project Management Service
 - projects such as storage tanks or ship building
- Full CAD Service
- Surface Grinding
- Machining
- Shot-blasting and Painting
- Countersunk or Tapped Holes
- Comprehensive Logistical Coverage
 - for deliveries worldwide.
- Parts can be delivered in kit form to site, for your final assembly.