

Everything you need to know about steel.

Mild steel is the most common metal used for components fabricated at Grenville. A ferrous metal made from iron and carbon, and has exceptional tensile and high-impact strength. The higher melting temperature means that mild steel is more ductile when heated, making it suitable for forging, cutting, drilling, and welding and easy to fabricate.

STEEL GRADES

S235JR is a popular steel, all angles, RHS, channels etc., comes as 235JR as standard. This steel is classed as a structural grade and is used for numerous items seen in daily life.

S275JR is the lowest grade of sheet/plate steel we stock; it bends easily, is the most common, and accounts for 70% of our stock. This grade is also classed as structural steel and used for all manner of items.

Cold-reduced DC01 is a brighter, more malleable steel with a much better surface finish. This grade is commonly used for parts where strength is less of an issue and paint finish is essential.

S355JR is a higher, harder grade. This more robust steel is used for parts where increased hardness is required – such parts manufactured by Grenville include safety struts, lift parts and parts for the automotive industry.

420MC is a harder steel, but the MC indicates that it's been rolled with properties that allow bending into tighter radiuses. Using this rigid but bendable grade, companies can use lighter gauge steel for applications where durable steel is necessary—allowing a good weight/strength ratio which is essential for products like trailers.

RQT701 and Domex700 are the highest and hardest grades of mild steel we use. We manufacture many parts for the construction industry, such as safety struts and safety-critical items.

Corten is known as weathering steel; commonly used for garden furniture and products which require a rustic finish. The weathered finish protects the surface of the steel so that once it gains its “rusty appearance,” it does not continue to decline.

Most steel purchased is in three sizes as standard and dictated by the size of the parts and the best sheet utilisation at the nesting stage. For more significant batch parts, we can purchase sheets decoiled to length to get the practical layout of components on the sheets, which allows us to provide more competitive prices for customers.

- 2000mm x 1000mm
- 2500mm x 1250mm
- 3000mm x 1500mm

While every product is unique, most begin life at Grenville as a flat sheet of mild steel. The metal is laser cut using one of our rapid Bystronic fiber laser machines or, depending on requirements, punched with our CNC Trupunch 3000. Once cut, we form the part into the desired shape using one of our six press brake machines. It can then be assembled and welded by one of our highly skilled welding team.

All components are subjected to rigorous deburring, grinding and dressing procedures to ensure the highest quality finish.

Mild steel isn't rust-proof. We, therefore, offer metal finishing services working to customer specifications, from shot blasting, painting, powder coating, and galvanising to zinc plating. We carefully select premium suppliers to finish parts to a high standard, including BS EN ISO 1461, ISO 9001 and AS9100 delivering the highest quality finish.

Spanning more than four decades of experience and dedication, we produce the highest quality products from mild steel, stainless steel, and aluminium to all specifications supported through the latest Enterprise Resource Planning (ERP) system.

Why choose Grenville? We are committed to providing outstanding quality components, customer service, and technical expertise to an ever-growing diverse range of customers from concept to delivery.