605M36T

Quality 605M36T cut and delivered in round bar and sawn pieces, whatever size you need.

605M36T steel stockholders and suppliers, delivering to the whole of the UK.

This grade is commonly supplied as 605M36T to the BS970 specification. It is a low alloy high tensile steel supplied with a tensile range of 850 to 1000 N/mm^2 depending on ruling section. 605M36T has a good resistance to shock with excellent ductility. It offers relief from temper brittleness. Subject to ruling section larger sizes in 605M36T can be supplied in other conditions such as R and S. 605M36 as rolled (un heat treated) is also available, usually in larger diameters. 605M36 is an alternative alloy steel grade to other chromium and nickel chromium high tensile steel specifications, offering excellent ductility, freedom from temper brittleness and is readily machinable in the supply condition.

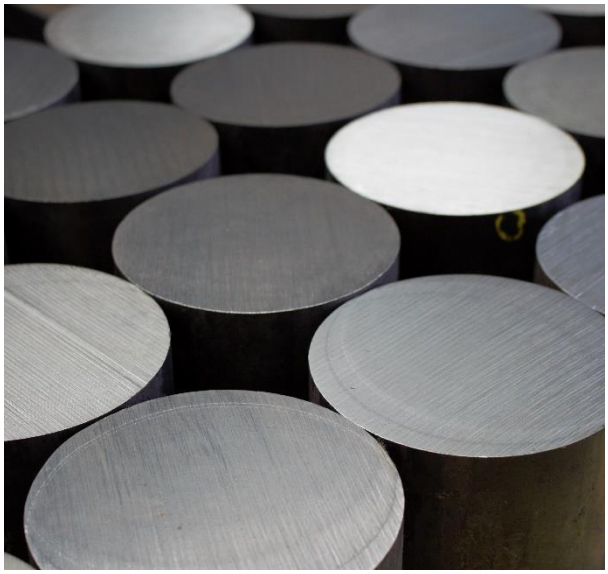
We welcome export enquiries for alloy steel. Contact our sales office and consult our shipping policy for further details.

Alternative alloy steel grades we supply

708M40 | 709M40 I 817M40 | 826M40 | 835M30
535A99 | 080A15 | 655M13 | 722M24 | 905M39

Form of Supply

West Yorkshire Steel are stockholders and suppliers of 605M36 & 605M36T in round bar. Diameters in 605M36T can be sawn to your required lengths as one offs or multiple cut pieces. Ground steel bar can be supplied, providing a high tensile engineering steel precision ground to tight tolerances. A limited stock is also available in free machining grade 606M36T.



Contact our experienced sales team who will assist you with your enquiry.

- Diameter

Applications
Commonly used for general engineering applications 605M36 is suitable for applications such as high tensile shafts, bolts and nuts, gears, pinions spindles and the like.

Analysis

Carbon	0.32-0.40%	Silicon	0.10-0.40%
Manganese	1.30-1.70%	Molybdenum	0.22-0.32%
Phosphorous	0.035% max	Sulphur	0.04% max

Annealing
Heat slowly to 640-660°C. Cool in air.

Hardening
This steel grade is commonly supplied ready heat treated. If further heat treatment is required annealed 605M36 should be heated slowly to 840-870°C and after adequate soaking at this temperature quench in oil. Temper as soon as tools reach room temperature.

Tempering
Heat carefully to a suitable temperature selected by reference to a tempering chart or table. Soak at the temperature for 2 hours per 25mm of ruling section, then allow to cool in air. Tempering between 250-375°C is not advised as tempering within this range will seriously reduce the impact value.

Typical Mechanical Properties*

Condition	Tensile N/mm^2	Yield N/mm^2	Elongation %	Izod KCV J	Hardness Brinell
R	700-850	525	17	28	201-255
S	775-925	585	15	50	223-277
T	850-1000	680	13	50	248-302

(subject to ruling section*)

Heat Treatment
Heat treatment temperatures, including rate of heating, cooling and soaking times will vary due to factors such as the shape and size of each steel component. Other considerations during the heat treatment process include the type of furnace, quenching medium and work piece transfer facilities. Please consult your heat treatment provider for full guidance on heat treatment of alloy steel.

Certification
605M36 alloy steel is available with cast and analysis certificate or a BS EN 10204 3.1 mill certificate, please request when placing any orders.

Quality Assured Supply
605M36 is supplied in accordance with our ISO 9001:2015 registration.