Contact: **01937 584440**
sales@westyorkssteel.com

605M36 Alloy Steel

605M36 605M36T steel suppliers and stockholders delivering to the whole of the UK. West Yorkshire Steel are suppliers of 605M36T high tensile alloy steel in round bar. This grades is commonly supplied as 605M36T to BS970 specification. As a low alloy high tensile steel 605M36T is supplied with a tensile range of 850-1000 N/mm² dependent on the ruling section. 605M36T has a good resistance to shock with excellent ductility and offers relief from temper brittleness. Subject to ruling section larger sizes in 605M36 can be supplied in other conditions such as 605M36R 605M36S and 605M36 as rolled (un heat treated). Offering good ductility it is readily machineable in the supply condition and is an alternative alloy steel grade to other chromium and nickel chromium high tensile steel specifications.

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

Alternative grades we supply

709M40T | 708M40T | 817M40T | 826M40W | 835M30 | 535A99 | 655M13 | 722M24 | 905M39

Form of Supply

West Yorkshire Steel are stockholders and suppliers of 605M36 and 605M36T in round bar. Diameters can be sawn to your required lengths as one offs or multiple cut pieces. Centreless ground steel bar can be supplied, providing a high tensile engineering steel precision ground bar to your required tolerances.

Contact our experienced sales team who will assist you with your 605M36T enquiry.

- Diameter

Applications

Commonly used for general engineering applications 605M36/605M36T is suitable for applications such as high tensile shafts, bolts and nuts, gears, pinions and spindles.

Analysis

Carbon	0.32-0.40%	Phosphorous	0.035% max
Manganese	1.30-1.70%	Sulphur	0.040% max
Silicon	0.10-0.40%		
Molybdenum	0.22-0.32%		

Annealing

Heat the steel slowly to 640-660°C, then cool in air.

Hardening

605M36 is commonly supplied ready heat treated at 'T' condition. 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 the 605M36 carefully to a suitable temperature selected by reference to a tempering chart or table, soak at the temperature for two hours per 25mm of ruling section, then all to cool in the 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/mm²	Yield N/mm²	Elongation %	Izod KCV J	Hardness Brinell
R	700-850	480	16	28	201-255
S	775-925	585	14	16	223-277
T	850-1000	650	13	35	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

605M36T 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

605M36T bar is supplied in accordance with our ISO 9001:2015 registration.