



# 826M40 (1.6747)

LOW ALLOY ENGINEERING STEEL

We are a division of the Smiths Metal Centres Limited Group

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**826M40** is a low-alloy steel that contains chromium, molybdenum, and nickel.

It is also known as 1.6747 steel and falls under the British Standard BS 970-1955. This steel grade offers high strength, toughness, and good hardenability, making it suitable for various applications, particularly in the aerospace and oil and gas industries.

### Chemical Composition (weight, %)

	C	Si	Mn	P	S	Cr	Mo	Ni
Min.	0.36	0.10	0.45			0.50	0.45	2.30
Max.	0.44	0.40	0.70	0.035	0.040	0.80	0.65	2.80

\* Properties as per BS 970

### Hardenability:

**826M40** steel can be heat-treated to achieve high hardness and strength, which makes it useful in applications that require components to have excellent wear resistance. The alloying elements form carbides and promote martensite formation during quenching, which contributes to the steel's hardness.

### Impact Resistance:

The product has good impact resistance due to its excellent toughness qualities, which means it can absorb impact and shock without cracking or breaking. This property makes it suitable for use in applications where durability is essential, such as in the aerospace, defence and oil and gas industries.

### Corrosion Resistance:

The grade contains chromium and nickel, making it highly corrosion-resistant. The material is useful in applications where components may be exposed to corrosive environments, such as offshore oil and gas drilling.

### Benefits:

- Good hardenability
- Impact resistant
- Good corrosion resistance
- Suitable for high-stress applications

### Versatility:

**826M40** steel can be used in various applications due to its excellent mechanical properties. **826M40** steel has excellent strength properties, making it ideal for high-stress applications. Possessing the ability to withstand heavy loads and pressure makes it a preferred choice for use in components such as gears, shafts, axles, and connecting rods.

### Availability:

We stock **826M40** in round and square bars.



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