TECHNICAL DATASHEET

LOW CARBON STEEL



150M19 (EN14A)

LOW CARBON ENGINEERING STEEL

We are a division of the Smiths Metal Centres Limited Group

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#### Strength:

**150M19** steel has a minimum tensile strength of approximately 1500 MPa, which makes it suitable for applications that require high strength. The numerical designation **150M19** indicates the composition of the steel. "150" refers to the minimum tensile strength in megapascals (MPa), approximately 1500 MPa for this steel. "M" indicates that it is a molybdenum steel, and "19" refers to the carbon content in hundredths of a percent (0.19% carbon).

# **Cost-effective:**

Our product makes a good choice for applications where cost is a consideration. **150M19** is low carbon, making it less expensive in comparison to high carbon or alloy steel. Making this a more economical choice where strength is required, but the added benefits of more costly alloys are not.

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We stock **150M19** in round and square bars.

# **150M19** is a low-carbon medium tensile manganese-molybdenum steel with high strength and toughness.

**150M19 steel** is readily weldable and maintains good impact resistance. It is generally used to manufacture components such as gears, shafts and axels that require good strength, toughness and wear resistance. This class of manganese steel is easily machined and possesses great weldable qualities.

#### Chemical Composition (weight, %)

	С	Si	Mn	Р	S
Min.	0.15	0.10	1.30		
Max.	0.23	0.40	1.70	0.05	0.05

\* Properties as per BS 970

#### **Benefits:**

- Good wear resistance
- Cost-effective
- High strength
- Good toughness

## Toughness:

**150M19** steel has good toughness properties, which means it can withstand high-impact loads without fracturing or breaking. Due to the manganese & molybdenum in the steel, hardenability and toughness are increased.

## Wear Resistance:

Due to its composition, the steel has good wear resistance properties, making it suitable for use in components subjected to abrasive wear. Manganese and molybdenum increase hardenability, meaning this steel grade can be heat treated to achieve improved wear resistance.



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