

EN24 Steel (817M40)

Smiths High Performance



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For fatigue resistant applications

EN24 (817M40) combines high tensile strength with toughness & fatigue resistance.

Equivalent specifications for EN24 include 817M40, AISI 4340, and 34CrNiMo6.

EN24 is a high-strength, low-alloy steel highly suitable for use in demanding operating environments. Fatigue resistance is one of the main features - the material resists the effects of cyclic loading without failure. Including molybdenum and nickel in the production process increase the alloy's ability to resist crack initiation and propagation. The alloy is suitable for motorsport applications requiring high strength, toughness and fatigue resistance but where weight saving is not considered essential.

* Chemical Composition (weight, %)

	C	Si	Mn	P	S	Cr	Mo	Ni
Min.	0.36	0.10	0.45			1.00	0.20	1.30
Max.	0.44	0.40	0.70	0.035	0.040	1.40	0.35	1.70

* Properties as per BS 970

Motorsport Applications:

EN24 is commonly called an 'aerospace grade' product but has broadened its use into other markets such as oil & gas and motorsport. Typical motorsport applications for EN24 (817M40) include:

- Clutch plates
- Fasteners & stud bolts
- Connecting rods
- Anti-roll bars

Other benefits:

The alloy is a ductile engineering material with good shock resistance and performs well at elevated temperatures.



About Smiths High Performance

Smiths High Performance is a leading stockholder and supplier of high-performance engineering materials. We are material supply chain partners supporting high-technology market sectors.


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