



British Steel is constantly working to develop new grades of steel with enhanced properties to meet the most stringent quality requirements.

We produce high-strength steel to meet the demands of the global tyre industry striving to manufacture lighter and more durable tyres and improve fuel economy and vehicle performance.

Our focus on customer specifications

Our tyre reinforcement cord is manufactured to meet individual customer specifications. Tensile strength is altered by adapting the steel microstructure, while scale characteristics can be tailored to suit each customer's preferred descaling method. This ensures we deliver a steel solution that meets your exact needs, drawing on our application knowledge and material development expertise.

Rigorous testing for quality assurance

The quality of our products is assured by rigorous testing procedures conducted in well-equipped laboratories to verify stringent criteria such as segregation, steel cleanliness, scale, surface quality, decarburisation, chemical composition, size, shape and tensile strength properties. Our products meet the required standards for the most challenging and safety-critical applications.

British Steel is accredited to both ISO 9001:2015 for our quality management system and ISO 14001:2004 for our environmental management system.

Delivering quality

Despatch of wire rod coils through our purpose-built wire rod service centre or Automated Coil Warehouse allows British Steel to offer an efficient delivery service. These streamlined despatch facilities are equipped with bespoke handling equipment which, combined with minimal handling and an anti-abrasive flooring system, minimises storage and handling damage.

Technical support from our specialists

Our team of experienced metallurgists provide dedicated technical support to our customers, including selection of the most appropriate steel grade and size, detailed metallurgical analysis to solve specific processing problems, and the development of new and more advanced grades of steel for increasingly demanding applications.

Wire rod dimensions

Rod diameter	5.5 mm
Coil weight	1800 - 2200kg
Coil length	1350 - 1700mm
Coil dimensions	Outside diameter: 1250mm max Inside diameter: 850mm min

Note: Standard tyre reinforcement wire rod dimensional tolerances:
Gauge +/-0.20mm, ovality 0.30mm max

Tyre reinforcement steel grades

The table below indicates the typical chemical analysis limits for British Steel's tyre reinforcement grades. Other grades and analysis limits can be considered upon request. Typical tensile strengths and reduction of area are displayed, however these can be tailored through process route optimisation.

Steel grade

Grade	C	Si	Mn	P	S	N	Cr	Tensile (MPa)	Reduction of area (%)
62C	0.62 – 0.65	0.19 – 0.22	0.48 – 0.53	≤0.011	≤0.011	≤0.006	–	920	≥46
72C	0.71 – 0.75	0.19 – 0.22	0.48 – 0.52	≤0.014	≤0.009	≤0.006	–	1030	≥40
84C	0.81 – 0.84	0.19 – 0.22	0.48 – 0.51	≤0.013	≤0.012	≤0.006	–	1120	≥37
95C+Cr	0.90 – 0.95	0.19 – 0.22	0.33 – 0.37	≤0.014	≤0.009	≤0.006	0.20 – 0.24	1260	≥37

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