BS S510

Technical Datasheet



Carbon Steel Sheet

Service. Quality. Value.

Typical Applications

- · Low stressed applications
- General aerospace use
- General engineering applications
- Machinery components
- · Flanges, spacers, bushes

Product Description

An unalloyed heat treatable carbon steel available in sheet and strip. Suitable for low strength components. Requires protection from corrosion if it is to be exposed to the atmosphere. Easily welded. Annealed tensile strength (Rm) 430-540 N/mm². Usually supplied softened.

Related Specifications

- EN3A
- 1.1151

Key Features:

- Suitable for low strength components
- Easily welded
- Heat treatable
- Improved tensile strength once annealed
- Supplied softened

Corrosion Resistance

Protection required if exposed to the atmosphere

Weldability

Easily welded

Availability

Sheet, strip

Chemical Composition (weight %)											
Weight (%)	С	Si	Mn	Р	S	Ni	Cr	Мо			
Min	0.17	0.10	0.40								
Max	0.25	0.35	0.80	0.040	0.040	0.30	0.25	0.10			

Mechanical Properties (solution annealed)									
Size	Tensile Strength Rm	Proof Stress Rp 0.2	Elongation in 5.65 √Cross	Hardness					
	N/mm2	N/mm2	Sectional Area (%)	HB					
<1.6mm	430 - 540	255	18	121 - 163					
>1.6mm	430 - 540	255	20	121 - 163					

Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

UK Service Centres:

02895 908 897 0113 307 5167 Smiths Belfast Smiths Leeds Smiths Biggleswade 01767 604 704 Smiths Manchester 0161 794 8650 Smiths Birmingham **0121 728 4940** Smiths Norwich 01603 789 878 Smiths Bristol 0117 971 2800 Smiths Nottingham 0115 925 4801 Smiths Chelmsford 01245 466 664 Smiths Redruth 01209 315 512 Smiths Gateshead 0191 469 5428 Smiths Verwood 01202 824 347 Main Office Smiths Horsham 01403 261 981 0845 527 3331

Quality & Testing:





www.smithmetal.com info@smithmetal.com