

### Stainless Steel Bar

#### Typical Applications

- Aerospace components
- Turbine blades
- Suspension components
- Bearings
- Automotive parts
- Fasteners

#### Product Description

S124 is a martensitic type 416 stainless steel containing 12% chromium. The alloy offers excellent free machining properties due to the addition of sulphur. However, this comes at the cost of reduced corrosion resistance, formability & weldability.

#### Key Features:

- Free machining alloy
- Suitable for automatic lathes
- Can be heat treated
- Added sulphur improves machinability
- Based on type 416 stainless steel

#### Related Specifications

- Gen 416S37

#### Availability

Bar

#### Chemical Composition (weight %)

Weight (%)	C	Si	Mn	P	S	Cr	Mo	Ni	Zr	Fe	Mo+Zr
Min	0.15				0.15	12.0				Bal	
Max	0.25	1.0	1.5	0.045	0.4	14.0	0.60	1.00	0.6	Bal	1.0

#### Mechanical Properties

Ultimate Tensile Strength (UTS)	45 to 55 tonf/sq in
0.2% Proof Stress	29 tonf/sq in
Elongation	11% (min)
Brinell Hardness	201 to 255 HB
Brinell Vickers	210 to 270 HV
Impacts	20 ft lb/min

#### 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:

Smiths Belfast	02895 908 897	Smiths Leeds	0113 307 5167
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
Smiths Horsham	01403 261 981	Main Office	0845 527 3331

#### Quality & Testing:



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