Technical Datasheet



Austenitic Chromium-Nickel Stainless Steel Sheet

Service. Quality. Value.

Typical Applications

- Aerospace fabrication
- Panels
- Bodywork
- Blanking panels
- Space frames

Product Description

Austenitic chromium-nickel stainless steel stabilised with niobium. The material is available in soft annealed sheet and strip and is suitable for low strength components requiring good corrosion resistance and cold workability. Good weldability. Tensile strength (Rm) 540 N/mm2. BS S527 is the British aerospace standard for stainless steel 347, and is often supplied dual-certified to the U.S. aerospace specification AMS 5512.

Cold Working

Good cold workability

Key Features:

- Added Niobium
- Good corrosion resistance and cold workability
- Low strength applications
- Good workability
- Good weldability

Corrosion Resistance

Good corrosion resistance

Weldability

Good weldability

Availability

Sheet, strip

Chemical Composition (weight %)											
Weight (%)	С	Si	Mn	Cr	Мо	Р	S	Ni	Nb		
Min		0.2	0.5	17.0				9.0	10 XC		
Max	0.08	1.0	2.0	19.0	1.0	0.035	0.025	11.0	1.0		

Mechanical Properties (softened condition)											
Grade	Tensile Strength (Rm)	Proof Strength Rp 0.2,	Elongation in 5.65 √Cross	Hardness	Size						
	N/mm ²	N/mm ²	Sectional Area (%)	НВ							
S527	540	210	30	179 max	<1.5mm						
S527	540	210	35	179 max	1.5 - 3.0mm						
S527	540	210	40	179 max	> 3.0mm						

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 Smiths Belfast Smiths Biggleswade 01767 604 704 Smiths Birmingham **0121 728 4940** Smiths Bristol 0117 971 2800 Smiths Chelmsford 01245 466 664 Smiths Gateshead **0191 469 5428** Main Office Smiths Horsham 01403 261 981

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Smiths Verwood 01202 824 347

Quality & Testing:





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