

S527

Smiths Advanced Metals

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Soft Annealed Stainless Sheet & Strips

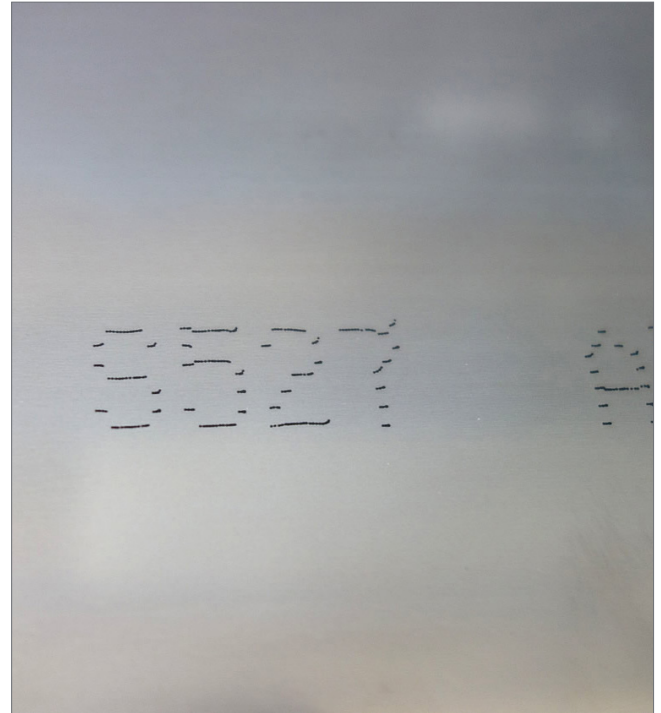
Sheet and strips stabilised with niobium.

S527 is the aerospace British Standard equivalent of 347 stainless steel. The alloy is often supplied dual certified with the US aerospace specification AMS 5512.

S527 is classed as an austenitic chromium-nickel stainless steel. The alloy is stabilised with niobium which strengthens the material and reduces the risk of intergranular corrosion. The alloy offers suitability for producing low strength components, particularly in aerospace applications. Examples include aerospace body parts and panels, grease and soap production parts and food processing components.

S527 offers good cold workability, good corrosion resistance and good workability. The tensile strength of the alloy is 540 N/mm².

We supply the material in soft annealed sheets and strips, which we also process for you in-house, courtesy of our dedicated guillotine operations. Our stock of [S527 stainless steel sheets](#) are available in various sizes.



Grades / Specifications

- BS S527
- BS S500

Benefits

- Good weldability
- Good resistance to atmospheric corrosion
- Very good cold-forming properties
- For low strength components

Chemical Composition (weight %)

	C	Si	Mn	Cr	Mo	P	S	Ni	Nb
min.		0.20	0.50	17.00				9.00	10 XC
max.	0.08	1.00	2.00	19.00	1.00	0.035	0.025	11.00	1.00

* As per BS S527

Mechanical Properties

Ruling Section	Tensile Strength R _m , N/mm ²	Proof Strength R _p 0.2 N/mm ²	Elongation in 5.65 √Cross Sectional Area	Hardness
<1.5mm	540 min	210 min	30% min	179 HB max
1.5 - 3.0 mm	540 min	210 min	35% min	
> 3.0 mm	540 min	210 min	40% min	

* Properties as per BS S527

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