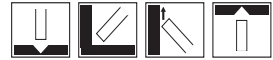


Bostrand 316LSi

AWS A/SFA 5.9-93 ER316LSi
EN 12072 G 19 12 3 LSi



Description and applications

Bostrand 316LSi is a corrosion-resisting chromium-nickel-molybdenum stainless steel solid wire for welding austenitic stainless steel alloys of the 18%Cr/8%Ni and 18%Cr/8%Ni/3%Mo types with low carbon content. The wire has a low carbon content which gives good resistance to intergranular corrosion of the weld. The silicon content is elevated in order to improve weldability. Bostrand 316LSi is also suitable for joining niobium-stabilised steels of the same type if the service temperature will not exceed 400°C. It can also be used for welding ferritic stainless steels except in sulphur-rich environments, and for lower alloyed stainless steels except when attacked by nitric acid.

The wire is suitable for joining grades such as AISI 316, 316L and 318, and Werkstoff Nr 1.4583 (X10 CrNiMoNb 18 12).

Typical all-weld mechanical properties – as welded using Ar/He or Ar/20%CO₂

Yield Stress		205 min	MPa
Tensile Strength		500-750	MPa
Elongation		40 min	%
Charpy V impact values	at +20%	120	J
	at -60°C	95	J
	at -196°C	55	J

Chemical Composition (wire)

	Min	Max
C		0.025
Si	0.65	1.00
Mn	1.5	2.0
P		0.030
S		0.025
Cr	18.0	20.0
Ni	11.0	13.0
Mo	2.5	3.0

Welding Parameters

Size (mm)	0.8	1.0	1.2
Current (amps)	50-140	80-190	180-280