

R526.70

EN: 18 8 SiMn
AWS ER 307 LSi



R526.70 is a grade used as a welding wire for joining and surfacing applications on heat resistant Cr-steel and austenitic steels and for joining unalloyed/low-alloyed or Cr-steel to austenitic steel. This grade renders weld metal with high mechanical strength and excellent crack resistance even when welding steel with poor weldability. Can also be used as a buffer layer prior to hard surfacing. Corrosion resistance is similar to Type 304 material.

CHEMICAL COMPOSITION (Nominal) %

C	Si	Mn	Cr	Ni	Mo	N
0.07	0.90	7.0	18.3	8.0	<0.20	0.050

PHYSICAL PROPERTIES

Condition: Annealed

Density	7.9 g / cm ³
Modulus of elasticity, E	200 GPa
Specific heat 0-100°C	470 J / kg°C

TYPICAL MECHANICAL PROPERTIES

Condition: Annealed

Proof strength	Rp0.2	260 N / mm ²
Tensile strength	Rm	610 N / mm ²
Elongation	A10	60 %

THERMAL TREATMENT

Annealing temperature	1100 °C
	2000 °F

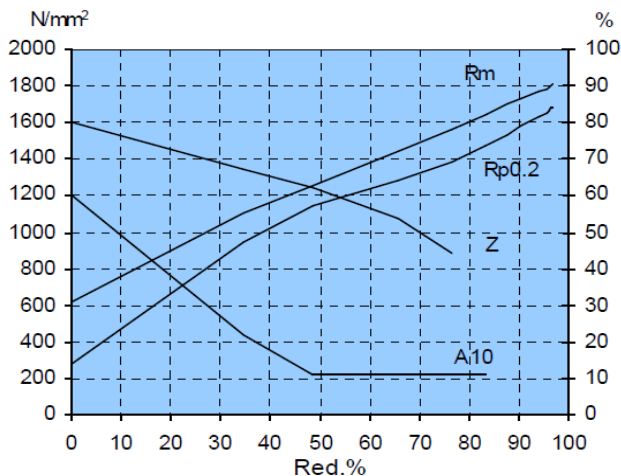
MAX. OPERATING TEMPERATURE

Operating temp. in air	°C
	°F
Scaling temp. in air	850 °C
	1560 °F

THERMAL CONDUCTIVITY

20 °C	15.0 W / mK
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DEFORMATION GRAPH



THERMAL EXPANSION

Thermal expansion per °C x 10⁻⁶ from 30°C to:

100 °C	14.6
200 °C	18.3
300 °C	19.3

RESISTIVITY

20 °C	750 μΩmm
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