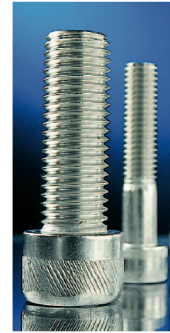


R840.77

EN: 1.4529
UNS: N08926/N08367
SAN26MO



R840.77 (1.4529) is a super austenitic stainless steel alloyed with approximately 6% molybdenum, high nickel, and nitrogen. It offers outstanding resistance to both uniform and localized corrosion, particularly in harsh environments such as chlorinated seawater and flue gas cleaning systems. Designed for demanding industrial applications, including offshore, oil and gas, and chemical processing, R840.77 combines excellent corrosion resistance with high strength and relatively good cold formability. It is commonly used in the manufacture of bolts and fasteners for tunnel construction, swimming pools, and other corrosive service conditions.

CHEMICAL COMPOSITION (Nominal) %

C*	Si	Mn	Cr	Ni	Mo	N	Cu	
0.018	0.35	0.85	20.5	25.0	6.3	0.19	0.85	

PRE: 45 (PRE = Cr + 3.1x Mo + 25 x N) * Max

THERMAL TREATMENT

Annealing temperature	1120-1180 °C 2048-2156 °F

PHYSICAL PROPERTIES

Condition: Annealed

Density	8,1 g/cm ³
Modulus of elasticity, E	195 GPa
Specific heat 0-100°C	450 J/kg°C

MAX. OPERATING TEMPERATURE

Operating temp. in air	400 °C 752 °F
Scaling temp. in air	approx 1100 °C approx 2012 °F

TYPICAL MECHANICAL PROPERTIES

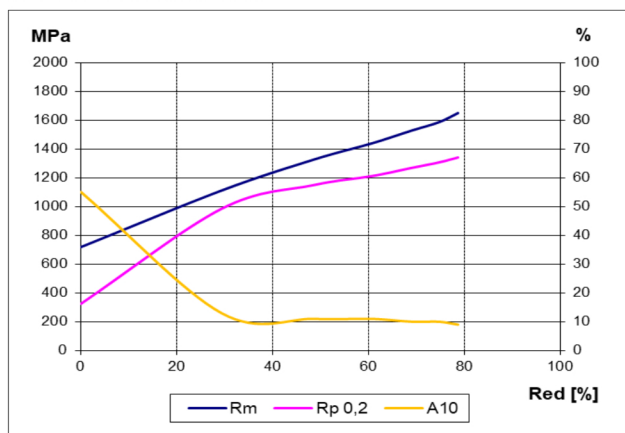
Condition: Annealed

Proof strength	Rp0.2	< 360 N/mm ²
Tensile strength	Rm	650-750 N/mm ²
Elongation	A10	> 40 %

THERMAL CONDUCTIVITY

20 °C	12,0 W/m°C
100 °C	12,9 W/m°C
200 °C	14,4 W/m°C
300 °C	16,5 W/m°C
400 °C	18,5 W/m°C
500 °C	20,1 W/m°C

DEFORMATION GRAPH



THERMAL EXPANSION

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

100 °C	15,8
200 °C	16,1
300 °C	16,5
400 °C	16,9
500 °C	17,3

RESISTIVITY

20 °C	850 μΩmm
100 °C	900 μΩmm
200 °C	950 μΩmm
400 °C	1100 μΩmm