

25-6MO (UNS NO8926)

chemical composition

Ni	Cr	Mo	Cu	N	C	Mn	S	P	Si	Fe
24.0 - 26.0	19.0 - 21.0	6.0 - 7.0	0.5 - 1.5	0.15 - 0.25	0.02 max	2.00 max	0.005 max.	0.030 max.	0.5 max.	remainder

25-6MO (UNS NO8926) is a "super austenitic" stainless steel, a chemically well-balanced material containing 6% molybdenum, and especially

The 25 per cent nickel content and 0.20 percent nitrogen content give it excellent corrosion resistance, more so than 316 in resisting chloride ion stress cracking corrosion cracking,

Lower nickel content alloys such as 2205 are even better in terms of corrosion resistance.

Physical properties at room temperature

Density

0.290 [lb/in³] /
8.03 [g/cm³]

Melting range

2,410 - 2,550 [°F] /
1,320 - 1,400 [°C]

Specific heat

0.12 [Btu/lb·°F] /
500 [J/kg · °C]

Electrical resistivity

480 [ohm·circ mil/ft] /
0.80 [μΩ · m]

Permeability at 200 oersted (15.9 kA/m)

< 1.01 [annealed] /
< 1.01 [50% cold worked]

Young ´s modulus at 70 °F (21 °C)

27.27 [10³ksi] /
188.0 [GPa]

Thermal Expansion at 200 °F (100 °C)

8.42 [in/in/°F · 10⁻⁶] /
15.18 [cm/cm/°C · 10⁻⁶]

The mechanical properties of 25-6MO wire are better than

316 Higher, by cold drawing up to approx.

210/250000 PSI tensile strength. At

this level of strength, the wire has

good ductility and successfully passes the

winding test both in the cold drawn

condition and when exposed

to temperatures above 400F

after cold drawing. (No surface

cracks or breaks in winding test).

Finished product indicators

external diameter (including thickness of the wall)	2.8mm	3.2mm	3.8mm	4.0mm
weights				
Breaking tension	>9.7kN	>12.7kN	>17.9kN	>19.7kN

caveat

1. All steel wires must pass the eddy current test.
2. All steel wires must pass the aging winding test to ensure the ductility of the wires.
- 3, all steel wire production process must have complete traceability from the raw materials.
4. All steel wires need to be produced from defect-free precision whole rods.

Winding test

