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**PRODUCT DATA  
SHEET**

**Inconel® alloy 725™**  
UNS A95052

**Nickel  
Alloys**

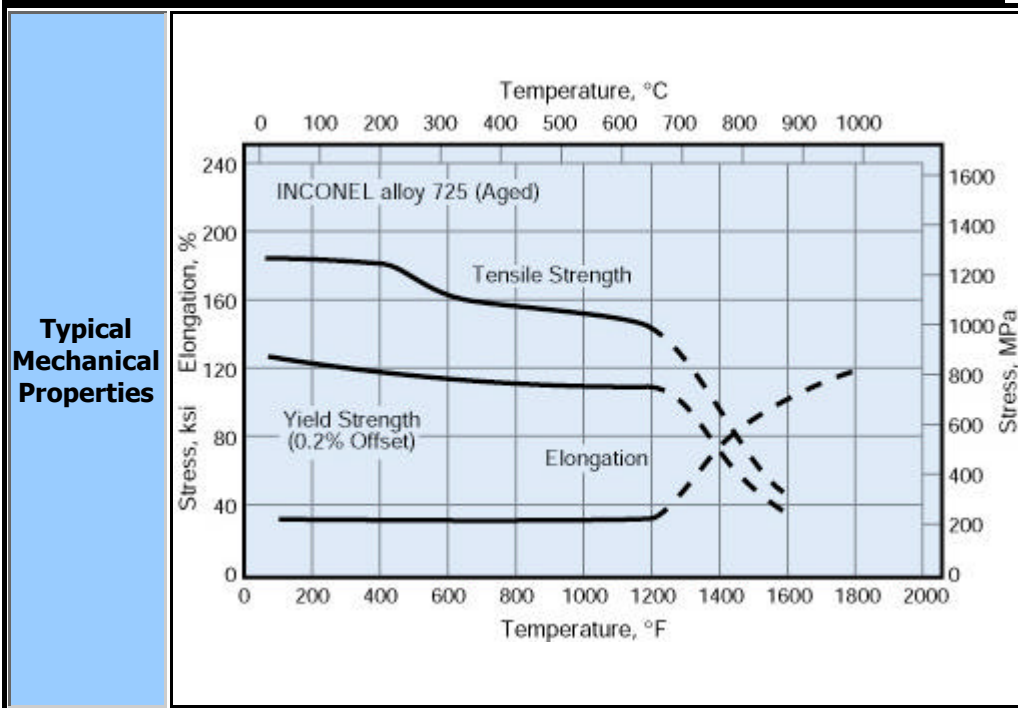


**INCONEL® alloy 725™**

A nickel-chromium-molybdenum-niobium alloy that is highly resistant to corrosion and is age hardenable for extremely high strength. The strength of this alloy is developed by heat treatment to achieve high ductility and toughness. The alloy is resistant to hydrogen embrittlement and stress-corrosion cracking. Used for hangers, landing nipples, side pocket mandrels and polished bore receptacles in sour gas service. Also used for high-strength fasteners in marine applications.

Standard Product Forms	Round Bar & Wire		
Limiting Chemical Composition, %	<b>Ni 55.0-59.0</b>	<b>Ti 1.0-1.7</b>	<b>Si 0.20 max.</b>
	<b>Cr 19.0-22.5</b>	<b>Al 0.35 max.</b>	<b>P 0.015 max.</b>
	<b>Mo 7.0-9.5</b>	<b>C 0.03 max.</b>	<b>S 0.010 max.</b>
	<b>Nb 2.75-4.0</b>	<b>Mn 0.35 max.</b>	<b>Fe Remainder</b>

<b>Physical Constants and Thermal Properties</b>	<b>Density,</b>	<b>lb/in<sup>3</sup></b>	<b>0.300</b>
		<b>g/cm<sup>3</sup></b>	<b>8.31</b>
	<b>Melting Range,</b>	<b>°F</b>	<b>2320-2449</b>
		<b>°C</b>	<b>1271-1343</b>
	<b>Coefficient of Expansion,</b>	<b>70-200 °F, 10<sup>-6</sup> in/in • °F</b>	<b>7.22</b>
		<b>20-100°C, μm/m•°C</b>	<b>13.0</b>
	<b>Thermal Conductivity,</b>	<b>Btu • in/ft<sup>2</sup>•h• °F</b>	<b>73.8</b>
<b>W/m • °C</b>		<b>10.6</b>	
<b>Electrical Resistivity,</b>	<b>Ω•circ mil/ft</b>	<b>688</b>	
	<b>μΩ•m</b>	<b>1.144</b>	
<b>Permeability at 200 oersted,</b>	<b>(15.9 kA/m)</b>	<b>1.001</b>	



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