

17 Chrome

17 Chrome is a quenched and tempered martensitic-ferritic stainless steel intended for high pressure, high temperature (HPHT) wells where high strength OCTG is required. In addition to extending the temperature range, 17 Chrome provides improved performance compared to the 13 Chrome Alloys in chloride and sweet (CO₂) environments. 17Cr-125 is not recommended for sour service.

NOMINAL COMPOSITION

Chromium 17% Nickel 4.7% Molybdenum 2.5% Copper 2.5% Iron Balance

SPECIFIED MECHANICAL PROPERTIES

Yield Strength min. (ksi)	Yield Strength max. (ksi)	Tensile Strength min. (ksi)	Hardness max (HRC)
125	145	130	38

TYPICAL PHYSICAL PROPERTIES

		70°F	300°F	400°F
Density	lbs/in ³ .	0.28	0.28	0.28
Thermal Expansion	X10 ⁻⁶ /deg F	6.1	6.1	6.1
Elastic Modulus	psi x 10 ⁶	28.1	27.3	26.7
Poisson Ratio		0.32	0.32	0.29
Yield Strength De-Rating	%	100	88	85