

Quality	F1
According to Standard	ASTM A 182/A 182M - 10a
Number	-



Comparable Standards	EN	W.N.	BS						
	-	-	-						
Chemical Analysis	C % max	Mn %	Si %	P% max	Cr %	Ni %	Mo %	S% max	Other Elements
		0.28	0.60 - 0.90	0.15 - 0.35	0.045	—	—	0.44 - 0.65	0.045

#### Hot Work and Heat Treatment Temperatures

Grade	Heat Treat Type	Austenitizing/Solutioning Temperature, Minimum or Range, °F [°C] <sup>A</sup>	Cooling Media	Quenching Cool Below °F [°C]	Tempering Temperature, Minimum or Range, °F [°C]
		Low Alloy Steels			
F 1	anneal	1650 [900]	furnace cool	-	-
	normalize and temper	1650 [900]	air cool	-	1150 [620]

#### Mechanical Properties at Room Temperature

Grade Symbol	Tensile Strength, min, ksi [Mpa]	Yield Strength, min, ksi [Mpa]	Elongation in 2 in, [50 mm] of 4D, min, %	Reduction of Area, min, %	Brinell Hardness Number, HBW
F 1	70 [485]	40 [275]	20	30	143 - 192