



Full Spec. Name:	SA-182 Gr. Fg	SA-182 Gr. Fg1
Alloy Designation/UNS No:	K90941	K90901
Discription:	Standard Specification for Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service	Standard Specification for Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service
Product Form:	Forgings	Forgings
P. Number:	5B	15E
G. Number:	1	1
Min. Tensile Strength (ksi.):	85	85
Min. Yield Strength (ksi):	55	60
Nominal Composition:	9Cr-1Mo	9Cr-1Mo-V
Chemical Composition:		
Carbon (C)	0.15	0.08-0.12
Manganese (Mn)	0.30-0.60	0.30-0.60
Silicon (Si)	0.50-1.00	0.20-0.50
Sulfur (S)	0.030	0.010
Phosphorus (P)	0.030	0.020
Chromium (Cr)	8.0-10.0	8.0-9.5
Nickel (Ni)	0	0.40
Molybdenum (Mo)	0.90-1.10	0.85-1.05
Niobium / Columbium (Cb/Nb)	0	0.06-0.10
Others		N 0.03-0.07, Al 0.04, V 0.18-0.25