

Cast Heat Resistant Austenitic Stainless Steels Conforming to ASTM A 297/A 297M

Standard Specification for Steel Castings; Iron-Chromium (Fe-Cr), Iron-Chromium-Nickel (Fe-Cr-Ni) and Iron-Nickel-Chromium (Fe-Ni-Cr) Heat Resistant, for General Applications

Alloy Grade	Type	C	Mn (max)	Si (max)	P (max)	S (max)	Cr	Ni	Mo Max	Fe	Tensile Strength Ksi (min)	Tensile Strength MPa (min)	Yield Strength Ksi (min)	Yield Strength MPa (min)	Elongation 2 in 50mm %	ACME Proprietary Modified Grades
HF	19Cr-9Ni	0.20-0.40	2	2	0.04	0.04	18-23	8-12	0.50	Balance	70	485	35	240	25	
HH*	25Cr-12Ni	0.20-0.50	2	2	0.04	0.04	24-28	11-14	0.50	Balance	75	515	35	240	10	Type I Type II
HI	28Cr-15Ni	0.20-0.50	2	2	0.04	0.04	26-30	14-18	0.50	Balance	70	485	35	240	10	
HK**	25Cr-20Ni	0.20-0.60	2	2	0.04	0.04	24-28	18-22	0.50	Balance	65	450	35	240	10	HK-40 HK-40-Ti HK-40-Nb
HE	29Cr-9Ni	0.20-0.50	2	2	0.04	0.04	26-30	8-11	0.50	Balance	85	585	40	275	9	
HT**	15Cr-35Ni	0.35-0.75	2	2.5	0.04	0.04	15-19	33-37	0.50	Balance	65	450	-	-	4	HT-30 HT-40 HT-50
HU	19Cr-39Ni	0.35-0.75	2	2.5	0.04	0.04	17-21	37-41	0.50	Balance	65	450	-	-	4	
HW	12Cr-60Ni	0.35-0.75	2	2.5	0.04	0.04	10-14	58-62	0.50	Balance	60	415	-	-	-	
HX	17Cr-66Ni	0.35-0.75	2	2.5	0.04	0.04	15-19	64-68	0.50	Balance	60	415	-	-	-	
HC	28Cr	0.50 max	1	2	0.04	0.04	26-30	4 max	0.50	Balance	55	380	-	-	-	
HD	28Cr-5Ni	0.50 max	1.5	2	0.04	0.04	28-32	4-7	0.50	Balance	75	515	35	240	8	
HL	29Cr-20Ni	0.20-0.60	2	2	0.04	0.04	28-32	18-22	0.50	Balance	65	450	35	240	10	
HN	20Cr-25Ni	0.20-0.50	2	2	0.04	0.04	19-23	23-27	0.50	Balance	63	435	-	-	8	
HP	26Cr-35Ni	0.35-0.75	2	2.5	0.04	0.04	24-28	33-37	0.50	Balance	62.5	430	34	235	4.5	HP-40 HP-45 HP-50 HP-45-Nb HP-45-NbTi; HP-REM

*A447 Grade HH Type I and Type II ** A351 HK30, HT 30, HT 40 Also offered Ni-Cr Alloys ASTM A 560 Grades: 50Ni-50Cr, 40Ni-60Cr; 50Ni-50Cr-Nb/Cb