

MATERIAL TABLE AISI(USA) STANDARD VERSUS GERMAN WERKSTOFFNUMBER

AISI	German Werkstoff number	Description	C %	Si %	Mn %	Cr %	Ni %	Mo %	P %	S %	Other	HRC Hardness Rockwell C	HV Hardness Vickers	
1010	1.0010	C10	≤0.10	≤0.30	≤0.50	-	-	-	≤0.070	≤0.060	-	60-66	700-860	low carbon steel case hardened
1015	1.0413	C15	0.13-0.18	0.10-0.30	0.30-0.60	-	-	-	≤0.040	≤0.040	-	60-66	700-860	low carbon steel case hardened
1015	1.1132	C15	0.12-0.18	0.15-0.35	0.25-0.50	-	-	-	0.035	≤0.035	-	60-66	700-860	low carbon steel case hardened
1086	1.0616	C85/C86D	0.83-0.88	0.10-0.30	0.30-0.70	-	-	-	≤0.040	≤0.040	-	60-66	700-860	high carbon steel through hardened
1213	1.0715	9SMn-2	≤0.14	≤0.05	0.90-1.30	-	-	-	≤0.100	0.27-0.33	-	60-66	700-860	low carbon steel case hardened
52100	1.3505	100 Cr6	0.90-1.05	0.15-0.35	0.25-0.45	1.35-1.65	≤0.30	-	≤0.030	≤0.025	Cu ≤0.30	60-66	700-860	high chrome through hardened
302	1.4319	X3CrNi178	≤0.15	≤1.00	≤2.00	17.0-19.0	8.0-10.0	≤1.00	≤0.045	≤0.030	-	27-39	280-380	stainless steel
304	1.4301	X5CrNi1810	≤0.07	≤1.00	≤2.00	17.0-19.0	8.50-10.5	-	≤0.045	≤0.030	-	27-39	280-380	stainless steel
305	1.4303	X4CrNi1812	≤0.07	≤1.00	≤2.00	17.0-19.0	11.0-13.0	-	≤0.045	≤0.030	-	27-39	280-380	stainless steel
316	1.4401	7122	≤0.07	≤1.00	≤2.00	16.5-18.5	10.5-13.5	2.00-2.50	≤0.045	≤0.030	-	27-39	280-380	stainless steel
430	1.4016	X6Cr17	≤0.08	≤1.00	≤1.00	15.5-17.5	-	-	≤0.045	≤0.030	-	27-39	280-380	stainless steel
316 L	1.4404	712	≤0.03	≤1.00	≤2.00	16.5-18.5	11.0-14.0	2.00-2.50	≤0.045	≤0.030	-	27-39	280-380	stainless steel
316 Ti	1.4571	i17122	≤0.08	≤1.00	≤2.00	16.5-18.5	10.5-13.5	2.00-2.50	≤0.045	≤0.030	Ti5xC≤0.80	27-39	280-380	stainless steel
420 A	1.4021	X20Cr13	0.17-0.25	≤1.00	≤1.00	12.0-14.0	-	-	≤0.045	≤0.030	-	43-48	420-480	hardened stainless steel
420 C	1.3541	X45Cr13	0.42-0.50	≤1.00	≤1.00	12.5-14.5	≤1.00	-	≤0.040	≤0.030	Cu ≤0.30	52-55	540-600	hardened stainless steel
420 C	1.4034	X46Cr13	0.42-0.50	≤1.00	≤1.00	12.5-14.5	-	-	≤0.045	≤0.030	-	52-55	540-600	hardened stainless steel
430 F	1.4104	7	0.10-0.17	≤1.00	≤1.50	15.5-17.5	-	0.20-0.60	≤0.060	0.15-0.35	-	27-39	280-380	stainless steel
440 B	1.4112	8	0.85-0.95	≤1.00	≤1.00	17.0-19.0	-	0.90-L30	≤0.040	≤0.020	V0.70-0.12	57-60	630-700	hardened stainless steel
440 C	1.4037	X65Cr13	0.58-0.70	≤1.00	≤1.00	12.5-14.5	-	-	≤0.40	≤0.015	-	57-60	630-700	hardened stainless steel
440 C	1.4125	7	0.95-1.20	≤1.00	≤1.00	16.0-18.0	-	0.40-0.80	≤0.040	≤0.020	-	57-60	630-700	hardened stainless steel