

TABELA DE NORMAS EM VIGOR: COMPOSIÇÃO QUÍMICA E VALORES DE PROPRIEDADES MECÂNICAS REPRESENTATIVAS PARA PLANOS (1)

	AIISI	FEITAL	ASTM (UNS)	DIN	EQUIVALÊNCIA DIN	C	Mn	Si	P	S	Cr	Ni	Mo	N	OUTROS	LIMITE DE RESISTÊNCIA (Mpa)	LIMITE DE ESCOAMENTO (Mpa)	ALONGAMENTO 50mm(%)	DUREZA HRB(2)
AUSTENÍTICOS	-	IT 200	-	-	-	0,07 a 0,10	8,50 a 10,50	0.75	0.045	0.01	13,0 a 16,0	0,8 a 2,0	-	0.20	Cu 0,80 a 2,00	650	325	40	100
	201	201	S20100	1.4618	-	0.15	5,50 a 7,50	1.00	0.06	0.03	16,0 a 18,0	3,5 a 5,5	-	0.25	-	515	260	40	95
	301	301	S30100	1.4310	X 12 Cr Ni 177	0.15	2.00	1.00	0.045	0.03	16,0 a 18,0	6,0 a 8,0	-	0.10	-	750	250	40	95
	304	304	S30400	1.4301	X 5 Cr Ni 189	0.07	2.00	0.75	0.045	0.03	17,5 a 19,5	8,0 a 10,5	-	0.10	-	700	300	54	92
	304	304EP	S30400	1.4301	X 5 Cr Ni 189	0.07	2.00	0.75	0.045	0.03	17,5 a 19,5	8,0 a 10,5	-	0.10	-	600	280	58	92
	304L	304L	S30403	1.4307	X 2 Cr Ni 189	0.03	2.00	0.75	0.045	0.03	17,5 a 19,5	8,0 a 12,0	-	0.10	-	600	240	45	92
	304H	304H	S30409	-	X 5 Cr Ni 189	0,04 a 0,10	2.00	0.75	0.045	0.03	18,0 a 20,0	8,0 a 10,5	-	-	-	600	240	50	92
	310S	310S	S31008	1.4845	X 8 Cr Ni 25 21	0.08	2.00	1.50	0.045	0.03	24,0 a 26,0	19,0 a 22,0	-	-	-	530	205	40	95
	316	316	S31600	1.4401	X 5 Cr Ni Mo 18 10	0.08	2.00	0.75	0.045	0.03	16,0 a 18,0	10,0 a 14,0	2,0 a 3,0	0.10	-	515	300	52	95
	316L	316L	S31603	1.4404	X 2 Cr Ni Mo 18 10	0.03	2.00	0.75	0.045	0.03	16,0 a 18,0	10,0 a 14,0	2,0 a 3,0	0.10	-	620	260	45	95
	321	321	S32100	1.4541	X 10 Cr Ni Ti 18 9	0.08	2.00	0.75	0.045	0.03	17,0 a 19,0	9,0 a 12,0	-	0.10	5(C+N2) ≤ Ti ≤ 0,70	530	240	40	95
	317L	317L	S31703	-	X 2 Cr Ni Mo 18 15 4	0.03	2.00	0.75	0.045	0.03	18,0 a 20,0	11,0 a 15,0	3,0 a 4,0	0.1	-	530	205	40	95
	347/347H	347/347H	S34709	-	X 10 Cr Ni Mb 18 9	0,04 a 0,10	2.00	0.75	0.045	0.03	17,0 a 19,0	9,0 a 13,0	-	-	Nb 8xC mín., 1,00 máx.	515	205	40	92
	-	410D	S41003	1.4003	-	0.03	1.50	1.00	0.04	0.03	10,5 a 12,5	1,50	-	0.03	-	515	275	18	20 HCR
FERRÍTICOS	409	409	S40910	1.4512	X 2 Cr Ti 12	0.03	1.00	1.00	0.04	0.02	10,50 a 11,7	0,50	-	0.030	6(C+N2) ≤ Ti ≤ 0,50	455	200	32	88
	430	430	S43000	1.4016	X 6 Cr 17	0.12	1.00	1.00	0.04	0.03	16,0 a 18,0	0,75	-	-	-	450	250	22	89
	-	430EP	S43000	1.4016	-	0.12	1.00	1.00	0.04	0.03	16,0 a 18,0	0,75	-	-	Nb = 0,60 máx.	450	250	28	89
	-	439	S43932	-	-	0.03	1.00	1.00	0.04	0.03	17,0 a 19,0	0,75	-	0.030	0,20 + 4(C+N2) ≤ Ti + Nb ≤ 0,75	420	240	28	89
	-	441	-	1.4509	-	0.03	1.00	1.00	0.04	0,015	17,5 a 18,5	0,50	-	0.030	3C + 0,30 ≤ Nb ≤ 1,00 Ti = 0,10 a 0,60	440	250	20	-
	-	444	S44400	-	-	0.025	1.00	1.00	0.04	0.03	17,5 a 19,5	1,00	1,75 a 2,50	0.035	0,20 + 4(C+N2) ≤ Ti + Nb ≤ 0,80	490	337	32	96
MARTENSÍTICOS	420	420	S42000	-	-	0,15 Min.	1.00	1.00	0.04	0.03	12,0 a 14,0	0,75	0.50	-	-	530	300	20	96
	-	498	-	1.4116	-	0,42 a 0,47	0.50	0,30 a 0,70	0.035	0,006	14,0 a 14,5	-	0,50 a 0,55	0,020 a 0,040	V = 0,10 a 0,20	-	-	-	-
DUPLEX	-	2304	S32304	1.4362	-	0.03	2.50	1.00	0.04	0.03	21,5 a 24,5	3,0 a 5,5	0,05 a 0,6	0,05 a 0,20	-	600	400	25	32 HCR
	-	2205	S32205/S31803	1.4462	-	0.03	2.00	1.00	0.03	0.02	22,0 a 23,0	4,5 a 6,5	3,0 a 3,50	0,14 a 0,20	-	655	450	25	31 HCR

Notas:

(1) Valores Máximos de Composição Química salvo onde Faixa ou Mínimo é Indicado.

(2) Valor de Dureza Máximo conforme Norma ASTM A240