

## MACHINABILITY RATINGS FOR STAINLESS STEELS

### Standard Comparison

AISI	UNS	EN	N°	HEAT TREATMENT	INDEX %	STRUCTURE
201	S20100	X12CrMnNiN17-7-5	1.4372	+AT	40	a
301	S30100	X10CrNi18-8	1.4310	+AT	45	a
304LN	S30453	X2CrNi18-10	1.4311	+AT	48	a
302	S30200	X9CrNi18-9	1.4325	+AT	45	a
303	S30300	X8CrNiS18-9	1.4305	+AT	85	a
304	S30400	X5CrNi18-10	1.4301	+AT	40	a
304L	S30403	X2CrNi19-11	1.4306	+AT	40	a
304L	S30403	X2CrNi18-9	1.4307	+AT	40	a
305	S30500	X4CrNi18-12	1.4303	+AT	49	a
310	S31000	X15CrNiSi25-21	1.4841	+AT	34	a
310S	S31008	X8CrNi25-21	1.4845	+AT	46	a
316	S31600	X5CrNiMo17-12-2	1.4401	+AT	36	a
316L	S31603	X2CrNiMo17-12-21	1.4404	+AT	36	a
316L	S31603	X2CrNiMo18-14-3	1.4435	+AT	36	a
321	S32100	X6CrNiTi18-10	1.4541	+AT	36	a
347	S34700	X6CrNiNb18-10	1.4550	+AT	36	a
403	S40300	X12Cr13	1.4006	+A	60	m
410	S41000				54	m
<b>416</b>	<b>S41600</b>	<b>X12CrS13</b>	<b>1.4005</b>	<b>+A</b>	<b>100 **</b>	<b>m</b>
(420)	(S42000)	X20Cr13	1.4021	+A	55	m
(420)	(S42000)	X30Cr13	1.4028	+A	50	m
430	S43000	X6Cr17	1.4016	+A	60	f
(420)	(S42000)	X39Cr13	1.4031	+A	48	m
(420)	(S42000)	X46Cr13	1.4034	+A	46	m
		X46CrS13	1.4035	+A	85	m
430F	S43020	X14CrMoS17 / X6CrMoS17	1.4104/1.4105	+A	90	m / f
431	S43100	X17CrNi16-2	1.4057	+A	48	m
		X14CrMoS17	1.4104	+A	80	m
440B	S44003	X90CrMoV18	1.4112	+A	44	m
		X50CrMoV15	1.4116	+A	48	m
		X39CrMo17-1	1.4122	+A	46	m
440A	S44002	X70CrMo15	1.4109	+A	45	m
440C	S44004	X105CrMo17	1.4125	+A	40	m
	S30331	X6CrNiCuS18-9-2	1.4570	+AT	95	a
304Cu	S30430	X3CrNiCu18-9-4	1.4567	+AT	75	a
444	S44400	X2CrMoTi18-2	1.4521	+A	42	f
Type 630	S17400	X5CrNiCuNb16-4	1.4542	+AT	48	m (ph)
Type 2205	S31803	X2CrNiMoN22-5-3	1.4462	+AT	44	d
Type 2304	S32304	X2CrNiN23-4	1.4362	+AT	45	d
Type 316Ti	S31635	X6CrNiMoTi17-12-2	1.4571	+AT	30	a
Type F55	S32760	X2CrNiMoCuWN25-7-4	1.4501	+AT	40	d

+A = annealed | a = austenitic | m = martensitic | f = ferritic | +AT = solution annealed | ph = precipitation hardening | d = duplex (austenitic-ferritic)

\*\* Indexes of machinability based on a value of 100% for AISI 416 (X12CrS13 n° 1.4005).  
The 100% value can be reached by using high speed steel cutting tools.