

AISI, ASTM标准和UNS系统不锈钢与耐热钢的钢号及化学成分(质)

钢号			C	Si	Mn	P≤	S≤	Cr
AISI	ASTM	UNTM						
奥氏体型								
201	201	S20100	≤0.15	≤1.00	5.50-7.50	0.06	0.03	16.0-18.0
—	—	S20161	≤0.15	3.00-4.00	4.00-6.00	—	—	15.0-18.0
202	202	S20200	≤0.15	≤1.00	7.50-10.00	0.06	0.03	17.0-19.0
205	205	S20500	0.12-0.25	≤1.00	14.0-15.0	0.06	0.03	16.5-18.0
301	301	S30100	≤0.15	≤1.00	≤2.00	0.045	0.03	16.0-18.0
302	302	S30200	≤0.15	≤1.00	≤2.00	0.04	0.03	17.0-19.0
302B	302B	S30215	≤0.15	2.00-3.00	≤2.00	0.045	0.03	17.0-19.0
303	303	S30300	≤0.15	≤1.00	≤2.00	0.2	0.15	17.0-19.0
303Cu	303Cu	S30330	≤0.15	≤1.00	≤2.00	0.15	0.1	17.0-19.0
303Se	303Se	S30323	≤0.15	≤1.00	≤2.00	0.2	0.06	17.0-19.0
304	304	S30400	≤0.08	≤1.00	≤2.00	0.45	0.03	18.0-20.0
304Cu	304Cu	S30430	≤0.08	≤0.75	≤2.00	0.45	0.03	17.0-19.0
304H	304H	S30409	0.04-0.10	≤1.00	≤2.00	0.45	0.03	18.0-20.0
304L	304L	S30403	≤0.03	≤1.00	≤2.00	0.045	0.03	18.0-20.0
—	—	S30415	0.04-0.05	1.00-2.00	≤0.80	0.045	0.03	18.0-19.0
—	—	S30424	≤0.08	≤0.75	≤2.00	0.045	0.03	18.0-20.0
304HN	304HN	S30452	≤0.08	≤1.00	≤2.00	0.045	0.03	18.0-20.0
304LN	304LN	S30453	≤0.03	≤1.00	≤2.00	0.045	0.03	18.0-20.0
304N	304N	S30451	≤0.08	≤1.00	≤2.00	0.045	0.03	18.0-20.0
304S	304S	—	≤0.01	≤1.00	≤2.00	0.025	0.2	17.0-19.0
305	305	S30500	≤0.12	≤1.00	≤2.00	0.045	0.03	17.0-19.0
305L	305L	S30503	≤0.08	≤1.00	≤2.00	0.045	0.03	17.0-19.0
306	306	—	≤0.08	≤1.00	≤2.00	0.045	0.03	18.0-20.0
—	—	S30600	≤0.018	3.70-4.30	≤2.00	0.02	0.02	17.0-18.5
308	308	S30800	≤0.08	≤1.00	≤2.00	0.045	0.03	19.0-21.0
308L	308L	S30803	≤0.025	≤0.40	≤1.75	0.045	0.03	19.0-21.0
309	309	S30900	≤0.20	≤1.00	≤2.00	0.045	0.03	22.0-24.0
309S	309S	S30908	≤0.08	≤1.00	≤2.00	0.045	0.03	22.0-24.0
310	310	S31000	≤0.25	≤1.50	≤2.00	0.045	0.03	24.0-26.0
310S	310S	S31008	≤0.08	≤1.50	≤2.00	0.045	0.03	24.0-26.0
—	310H	S31009	0.04-0.10	≤1.50	≤2.00	0.045	0.03	24.0-26.0
314	314	S31400	≤0.25	1.50-3.00	≤2.00	0.045	0.03	23.0-26.0
315	—	—	≤0.15	≤1.00	≤2.00	0.045	0.03	17.0-19.0
316	316	S31600	≤0.08	≤1.00	≤2.00	0.045	0.03	16.0-18.0
316F	316F	S31620	≤0.08	≤1.00	≤2.00	0.02	≥0.10	17.0-19.0
316H	316H	S31609	0.04-0.10	≤1.00	≤2.00	0.04	0.03	16.0-18.0
316L	316L	S31603	≤0.03	≤1.00	≤2.00	0.045	0.03	16.0-18.0
316LN	316LN	S31653	≤0.03	≤1.00	≤2.00	0.045	0.03	16.0-18.0
316N	316N	S31651	≤0.08	≤1.00	≤2.00	0.045	0.03	16.0-18.0
316Ti	316Ti	S31635	≤0.08	≤1.00	≤2.00	0.045	0.03	16.0-18.0
317	317	S31700	≤0.08	≤1.00	≤2.00	0.045	0.03	18.0-20.0
317L	317L	S31703	≤0.03	≤1.00	≤2.00	0.045	0.03	18.0-20.0
—	—	S31725	≤0.03	≤1.00	≤2.00	0.045	0.03	18.0-20.0
—	—	S31726	≤0.03	≤1.00	≤2.00	0.045	0.03	17.0-20.0
321	321	S32100	≤0.08	≤1.00	≤2.00	0.045	0.03	17.0-19.0
329	329	S32900	≤0.20	≤0.75	≤2.00	0.04	0.03	23.0-28.0
330	330	S38330	≤0.15	≤1.50	≤2.00	0.045	0.04	14.0-17.0
332	332	S33200	≤0.08	≤0.75	≤2.00	0.045	0.03	19.0-23.0
384	384	S38400	≤0.03	≤1.00	≤2.00	0.045	0.03	15.0-17.0
385	385	S38500	≤0.08	≤1.00	≤2.00	0.04	0.03	11.5-13.5
铁素体型								

429	429	S42900	≤ 0.12	≤ 1.00	≤ 1.00	0.04	0.03	14.0-16.0
430	430	S43000	≤ 0.12	≤ 1.00	≤ 1.00	0.04	0.03	16.0-18.0
430F	430F	S43020	≤ 0.12	≤ 1.00	≤ 1.25	0.06	0.15	16.0-18.0
马氏体型								
403	403	S40300	≤ 0.15	≤ 0.50	≤ 1.00	0.04	0.03	11.5-13.0
410	410	S41000	≤ 0.15	≤ 1.00	≤ 1.00	0.04	0.03	11.5-13.5
410S	410S	S41008	≤ 0.06	≤ 1.00	≤ 1.00	0.04	0.03	11.5-13.5
414	414	S41400	≤ 0.15	≤ 1.00	≤ 1.00	0.04	0.03	11.5-13.5
—	—	S41500	≤ 0.05	≤ 0.60	0.50-1.00	0.03	0.03	11.5-14.0
416	416	S41600	≤ 0.15	≤ 1.00	≤ 1.25	0.06	≥ 0.15	12.0-14.0
420	420	S42000	≥ 0.15	≤ 1.00	≤ 1.00	0.04	0.03	12.0-14.0
—	—	S42010	0.15-0.30	≤ 1.00	≤ 1.00	0.04	0.03	13.5-15.0
420F	420F	S42020	≥ 0.15	≤ 1.00	≤ 1.25	0.06	≥ 0.15	12.0-14.0

分 (质量分数) 【%】

Ni	Mo	其它	钢号
			AISI
3.50-5.50	-	N \leq 0.25	201
4.00-6.00	-	N 0.08-0.20	-
4.00-6.00	-	N \leq 0.25	202
1.00-1.75	-	N 0.32-0.40	205
6.00-8.00	-	-	301
8.00-10.00	-	-	302
8.00-10.00	-	-	302B
8.00-10.00	-	Zn或Mo \leq 0.60	303
8.00-10.00	-	Cu2.50-4.00 Se \leq 0.10	303Cu
8.00-10.00	-	Se \geq 0.15	303Se
8.00-10.50	-	-	304
8.00-10.00	-	Cu 3.00-4.00	304Cu
8.00-11.00	-	-	304H
8.00-12.00	-	-	304L
9.00-10.00	-	N 0.12-0.18	-
12.0-15.0	-	B 1.00-1.25	-
8.00-10.50	-	N 0.10	304HN
8.00-12.0	-	N 0.16-0.30	304LN
8.00-10.50	-	N 0.10-0.16	304N
8.00-10.0	-	N 0.10-0.16	304S
10.5-13.0	-	-	305
10.5-13.0	-	-	305L
9.00-11.0	-	-	306
14.0-15.5	\leq 0.2	-	-
10.0-12.0	-	-	308
8.00-12.0	-	-	308L
12.0-15.0	-	-	309
12.0-15.0	-	-	309S
19.0-22.0	-	-	310
19.0-22.0	-	-	310S
19.0-22.0	-	-	-
19.0-22.0	-	-	314
7.00-9.50	1.00-1.50	Cu 1.00-1.50	315
10.0-14.0	2.00-3.00	-	316
12.0-14.0	1.75-2.50	-	316F
10.0-14.0	2.00-3.00	-	316H
10.0-14.0	2.00-3.00	-	316L
10.0-14.0	2.00-3.00	-	316LN
10.0-14.0	2.00-3.00	N 0.10-0.16	316N
10.0-14.0	2.00-3.00	N 0.10-0.16	316Ti
11.0-15.0	3.00-4.00	Ti \geq 5 \times C	317
11.0-15.0	3.00-4.00	-	317L
13.5-17.5	4.00-5.00	-	-
13.5-17.5	4.00-5.00	Cu \leq 0.75 N 0.10	-
9.00-12.0	-	Cu \leq 0.75 N 0.10-0.20	321
2.50-5.00	1.00-2.00	Ti \geq 5 \times C	329
33.0-37.0	-	-	330
30.0-34.0	-	Ti \leq 0.60 Al \leq 0.60	332
17.0-19.0	-	-	384
14.0-16.0	-	-	385

-	-	-	429
-	-	-	430
-	≤ 0.60	-	430F
<hr/>			
-	-	-	403
-	-	-	410
≤ 0.60	-	-	410S
1.25-2.50	-	-	414
3.50-5.50	0.50-1.00	-	-
-	-	Zn或Mo ≤ 0.60	416
-	-	-	420
0.35-0.85	0.40-0.85	-	-
-	≤ 0.60	-	420F