

MATERIALI

Caratteristiche meccaniche e chimiche

MATERIALI

TUBI

RACCORDI

CALDARERIA

PREFABBRICAZIONI

Acciai inox

AISI Grade - Name	Main Trademarks ®	UNS	W.Nr.	EN	Density Kg/dm ³	Reference	Tensile Strength min N/mm ²	Yield Point min N/mm ²	Elongation 2" min %	Hardness max HB	Hardness max HRB
304	-	S30400	1.4301	X5CrNi18.10	8	A/SA 240	515	205	40	201	92
304 L	-	S30403	1.4306	X2CrNi19.11	8	A/SA 240	485	170	40	201	92
304 H	-	S30409	1.4948	X6CrNi18.10	8	A/SA 240	515	205	40	201	92
321	-	S32100	1.4541	X6CrNiTi18.10	8	A/SA 240	515	205	40	217	95
321 H	-	S32109	1.4878	X8CrNiTi18.10	8	A/SA 240	515	205	40	217	95
347	-	S34700	1.4550	X6CrNiNb18.10	8	A/SA 240	515	205	40	201	92
347 H	-	S34709	1.4912	X8CrNiNb16.13	8	A/SA 240	515	205	40	201	92
316	-	S31600	1.4401	X5CrNiMo17.12.2	8	A/SA 240	515	205	40	217	95
316 L	-	S31603	1.4404	X2CrNiMo17.12.2	8	A/SA 240	485	170	40	217	95
316LS	316 L Mod Urea	S31603	1.4435	X2CrNiMo18.14.3	8	EN 10028-7	520 - 670	220	45	-	-
316 H	-	S31609	1.4919	X6CrNiMo17.13	8	A/SA 240	515	205	40	217	95
316 Ti	-	S31635	1.4571	X6CrNiMoTi17.12.2	8	A/SA 240	515	205	40	217	95
317 L	-	S31703	1.4438	X2CrNiMoN18.15.4	8	A/SA 240	515	205	40	217	95
317 LN	-	S31753	1.4434	X2CrNiMoN18.12.4	8	A/SA 240	550	240	40	217	95
317 LNM	-	S31726	1.4439	X2CrNiMoN17.13.5	8	A/SA 240	550	240	40	223	96
309	-	S30900	1.4828	X15CrNiSi20.12	8	EN 10095	550 - 750	230	30	223	-
309 S	-	S30908	1.4833	X7CrNi23.14	8	A/SA 240	515	205	40	217	95
310 S	-	S31008	1.4845	X12CrNi25.21	8	A/SA 240	515	205	40	217	95
310 MoLN	25.22.2 Urea	S31050	1.4466	X1CrNiMoN25.22.2	8	A/SA 240	580 (a)	270 (a)	30	217	95
310 L NAG	URANUS 65	S31002	1.4335	X1CrNi25.21	7.9	EN 10028-7	470 - 670	200	40	-	-
330	Incoloy 330	N08330	1.4864	-	8	B536	483	207	30	-	70 - 90
S1	URANUS S1 - A610	S30600	1.4361	X1CrNiSi18.15.4	8	A/SA 240	540	240	40	-	-
904 L	URANUS B6 - 2RK65	N08904	1.4539	X1NiCrMoCu25.20.5	8	A/SA 240	490	220	35	-	90
926 - 6Mo	-	N08926	1.4529	X1NiCrMoCuN25.20.7	8	B/SB 625	650	295	35	-	-
6 Mo	254SMO	S31254	1.4547	X1CrNiMoCuN20.18.7	8	A/SA 240	655	310	35	223	96
6 Mo	AL6XN	N08367	-	-	8	A/SA 240	655	310	30	241	-
6 Mo	AL6XN	N08367	-	-	8	B/SB 688	690 (b)	310	30	(b)	100
-	253MA	S30815	1.4835	X10CrNiSiN21.11	8	A/SA 240	600	310	40	217	95
Alloy 28	SANICRO 28	N08028	1.4563	X1NiCrMoCu31.27.4	8	B/SB 709	500	214	40	-	70 - 90
Alloy 31	-	N08031	1.4562	X1NiCrMoCu32.28.7	8.1	B/SB 625	650	276	40	-	-
Alloy 33	-	R20033	1.4591	X1CrNiMoCuN33.32.1	7.9	B/SB 625	750	380	40	-	-
Lean Duplex 2101	LDX 2101	S32101	1.4162	X2CrMnNiN22-5-2	7.8	A/SA 240	700 (c)	530 (c)	30	290	-
Duplex 2304	URANUS 35N	S32304	1.4362	X2CrNiN23.4	7.8	A/SA 240	600	400	25	290	32
Duplex 2205	SAF 2205 - URANUS 45N	S31803	1.4462	X2CrNiMoN22.5.3	7.8	A/SA 240	620	450	25	293	31
Duplex 2205	SAF 2205 - URANUS 45N	S32205	1.4462	X2CrNiMoN22.5.3	7.8	A/SA 240	655	450	25	293	31
Superduplex 2507	SAF 2507 - URANUS 47N	S32750	1.4410	X2CrNiMoN25.7.4	7.8	A/SA 240	795	550	15	310	32
Superduplex	ZERON 100	S32760	1.4501	X2CrNiMoCuWN25.7.4	7.8	A/SA 240	750	550	25	270	-
Superduplex	URANUS 52 N	S32520	1.4507	X2 Cr Ni Mo Cu N 25.6.3	8	A/SA 240	770	550	25	310	-
Superduplex	URANUS 52 N	S32550	1.4507	X2 Cr Ni Mo Cu N 25.6.3	8	A/SA 240	760	550	15	302	32

(a) W.T. >6.35mm: T.S. min=540, Y.P. min=255 (b) W.T.>4.8mm: T.S. min=655, HB max=240 (c) W.T. >5mm: T.S. min=650, Y.P. min=450

Stainless steels

C % max	Mn % max	Si % max	P % max	S % max	Cr %	Ni %	Mo %	Fe %	Cu % max	Other elements
0.07	2.00	0.75	0.045	0.030	17.5 - 19.5	8 - 10.5	-	Resto Balance	-	N 0.10 max
0.03	2.00	0.75	0.045	0.030	17.5 - 19.5	8 - 12	-	Resto Balance	-	N 0.10 max
0.04 - 0.10	2.00	0.75	0.045	0.030	18 - 20	8 - 10.5	-	Resto Balance	-	-
0.08	2.00	0.75	0.045	0.030	17 - 19	9 - 12	-	Resto Balance	-	N 0.10 max / Ti 5 x (C+N) min, 0.7max
0.04 - 0.10	2.00	0.75	0.045	0.030	17 - 19	9 - 12	-	Resto Balance	-	Ti 4 x (C+N) min, 0.7 max
0.08	2.00	0.75	0.045	0.030	17 - 19	9 - 13	-	Resto Balance	-	Cb 10 x C min, 1.0 max
0.04 - 0.10	2.00	0.75	0.045	0.030	17 - 19	9 - 13	-	Resto Balance	-	Cb 8 x C min, 1.0 max
0.08	2.00	0.75	0.045	0.030	16 - 18	10 - 14	2 - 3	Resto Balance	-	N 0.10 max
0.03	2.00	0.75	0.045	0.030	16 - 18	10 - 14	2 - 3	Resto Balance	-	N 0.10 max
0.03	2.00	1.00	0.045	0.015	17 - 19	12.5 - 15	2.5 - 3	Resto Balance	-	N 0.10 max
0.04 - 0.10	2.00	0.75	0.045	0.030	16 - 18	10 - 14	2 - 3	Resto Balance	-	-
0.08	2.00	0.75	0.045	0.030	16 - 18	10 - 14	2 - 3	Resto Balance	-	N 0.1 / Ti 5x (C+N) min, 0.7max
0.03	2.00	0.75	0.045	0.030	18 - 20	11 - 15	3 - 4	Resto Balance	-	N 0.1 max
0.03	2.00	0.75	0.045	0.030	18 - 20	11 - 15	3 - 4	Resto Balance	-	N 0.1 - 0.22
0.03	2.00	0.75	0.045	0.030	17 - 20	13.5 - 17.5	4 - 5	Resto Balance	-	N 0.1 - 0.2
0.20	2.00	1.5 - 2.5	0.045	0.015	19 - 21	11 - 13	-	Resto Balance	-	N 0.11 max
0.08	2.00	0.75	0.045	0.030	22 - 24	12 - 15	-	Resto Balance	-	-
0.08	2.00	1.50	0.045	0.030	24 - 26	19 - 22	-	Resto Balance	-	-
0.02	2.00	0.50	0.030	0.010	24 - 26	20.5 - 23.5	1.6 - 2.6	Resto Balance	-	N 0.09 - 0.15
0.02	2.00	0.25	0.025	0.010	24 - 26	20 - 22	0.20 max	Resto Balance	-	-
0.08	2.00	0.75 - 1.5	0.030	0.030	17 - 20	34 - 37	-	Resto Balance	1	Pb 0.005 max, Sn 0.025 max
0.018	2.00	3.7 - 4.3	0.020	0.020	17 - 18.5	14 - 15.5	0.20 max	Resto Balance	0.50	-
0.02	2.00	1.00	0.045	0.035	19 - 23	23 - 28	4 - 5	Resto Balance	1 - 2	N 0.1 max
0.02	2.00	0.50	0.03	0.01	19 - 21	24 - 26	6 - 7	Resto Balance	0.5 - 1.5	N 0.15 - 0.25
0.02	1.00	0.80	0.030	0.01	19.5 - 20.5	17.5 - 18.5	6 - 6.5	Resto Balance	0.5 - 1	N 0.18 - 0.22
0.030	2.00	1.00	0.040	0.030	20 - 22	23.5 - 25.5	6 - 7	Resto Balance	0.75	N 0.18 - 0.25
0.030	2.00	1.00	0.040	0.030	20 - 22	23.5 - 25.5	6 - 7	Resto Balance	0.75	N 0.18 - 0.25
0.05 - 0.10	0.80	1.4 - 2	0.040	0.030	20 - 22	10 - 12	-	Resto Balance	-	N 0.14-0.2 Ce 0.03 - 0.08
0.03	2.50	1.00	0.030	0.030	26 - 28	29.5 - 32.5	3 - 4	Resto Balance	0.6 - 1.4	-
0.015	2.00	0.30	0.020	0.010	26 - 28	30 - 32	6 - 7	Resto Balance	1 - 1.4	N 0.15 - 0.25
0.015	2.00	0.50	0.020	0.010	31 - 35	30 - 33	0.5 - 2	Resto Balance	0.3 - 1.2	N 0.35 - 0.60
0.04	4-6	1.00	0.040	0.030	21 - 22	1.35 - 1.70	0.1 - 0.8	Resto Balance	0.1 - 0.8	N 0.2 - 0.25
0.03	2.5	1.00	0.040	0.030	21.5 - 24.5	3 - 5.5	0.05 - 0.60	Resto Balance	0.05 - 0.6	N 0.05 - 0.2
0.03	2.00	1.00	0.030	0.020	21 - 23	4.5 - 6.5	2.5 - 3.5	Resto Balance	-	N 0.08 - 0.2
0.03	2.00	1.00	0.030	0.020	22 - 23	4.5 - 6.5	3 - 3.5	Resto Balance	-	N 0.14 - 0.2
0.03	1.20	0.80	0.035	0.020	24 - 26	6 - 8	3 - 5	Resto Balance	0.5	-
0.03	1.00	1.00	0.030	0.010	24 - 26	6 - 8	3 - 4	Resto Balance	0.5 - 1.0	W 0.5 - 1.0
0.030	1.50	0.80	0.035	0.020	24 - 26	5.5 - 8.0	3 - 4	Resto Balance	0.5 - 2	-
0.04	1.50	1.00	0.040	0.030	24 - 27	4.5 - 6.5	2.9 - 3.9	Resto Balance	1.5 - 2.5	-