



Alloy consistency and material comparison

Mat.	C ≤	Si ≤	Mn ≤	Cr	Mo	Ni	oth. Elemente	Synonym	Application (standard value)
1.4301	0,07	1,00	2,00	17,0-20,0	-	8,5-10,0	-	V 2A	Water and slightly polluted drainage, food and organic chemistry generally up to ph 4,5, resistant in poor-in-chloride attacking materials.
1.4307	0,03	1,00	2,00	17,5-19,5	-	8,0-10,0	-		
1.4541	0,10	1,00	2,00	17,0-19,0	-	9,0-11,5	Ti ≤ 5x%C		
1.4550	0,10	1,00	2,00	17,0-19,0	-	9,0-11,5	Nb ≤ 8x%C		
1.4401	0,07	1,00	2,00	16,5-18,5	2,0-2,5	10,5-13,5	-	V 4A	Higher general resistance than a.m. group. Preferred in chemical and apparatus engineering, purification plants, paper industrie, esp. at higher chloride contents.
1.4404	0,03	1,00	2,00	16,5-18,5	2,0-2,5	11,0-14,0	-		
1.4571	0,10	1,00	2,00	16,5-18,5	2,0-2,5	10,5-13,5	Ti ≤ 5x%C		
1.4580	0,10	1,00	2,00	16,5-18,5	2,0-2,5	10,5-18,5	Nb ≤ 10x%C		
1.4435	0,03	1,00	2,00	16,5-18,5	2,5-3,0	12,0-14,5	-		
1.4432	0,03	1,00	2,00	16,5-18,5	2,5-3,0	10,5-13,0	-		
1.4462	0,07	1,00	2,00	21,0-23,0	2,5-3,5	4,5-6,5	N: 0,08-0,20		1*
1.4529	0,03	1,00	2,00	19,0-21,0	5,5-7,0	24,0-26,0	Cu: 1,5-2,0	Avesta® 254 SMO	2*
1.4539	0,03	1,00	2,00	19,0-21,0	4,0-5,0	24,0-26,0	Cu: 1,0-2,0		3*
1.4828	0,20	1,50-2,50	2,00	19,0-21,0	-	11,0-13,0	-	-	Nitrogenous, poor in oxygen gases
1.4841	0,20	1,50-2,50	2,00	24,0-26,0	-	19,0-21,0	-		
1.4845	0,15	0,75	2,00	24,0-26,0	-	19,0-22,0	-		
1.4876	0,12	1,00	1,50	19,0-23,0	-	30,0-34,0	Al: 0,15-0,60	Incoloy 800®	

1*high resistance to stress corrosion cracking in neutral, chloride containing fluids, resistance under acid gas conditions	2*highest resistance in acid chloride fluids, f.e. seawater, high resistance to sulphuric acid	3*highest resistance to phosphorus and sulphate fluids at concurrently chloride pollution
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Mat.	DIN	AISI1)	BS2)	SS3)	AFNOR4)
1.4301	X5CrNi 18 10	304	304 S15	2332	Z6CN 18.09
1.4307	X2CrNi 18 9	304L	304 S11	2352	Z2CN 18.09
1.4541	X6CrNiTi 18 10	321	321 S31	2337	Z6CNT 18.10
1.4550	X10CrNiNb 18 9	347	347 S17	2338	Z6CNCNb 18.10
1.4401	X5CrNiMo 17 12 2	316	316 S31	2347	Z6CND 17.11
1.4404	X2CrNiMo 17 13 2	316L	316 S11	2348	Z2CND 17.12
1.4571	X6CrNiMoTi 17 12 2	316Ti	320 S31	2350	Z6CNDT 17.12
1.4580	X10CrNiMoNb 18 10	316Cb	-	-	Z6CNDNb 17.12
1.4435	X2CrNiMo 18 14 3	316L	316 S13	2353	Z2CND 17.13
1.4432	X2CrNiMo 17 12 2	316L	316 S33	2343	Z2CND 17.12
1.4462	X2CrNiMoN 22 5	-	-	-	Z5CND 21.08
1.4529	X2NiCrMoCu 25 20 6	-	-	-	-
1.4539	X2NiCrMoCu 25 20 5	-	-	2562	Z1NCU 25.20
1.4828	X15CrNiSi 20 12	309	-	-	Z15CNS 20.12
1.4841	X15CrNiSi 25 20	314	-	-	Z12CNS 25.20
1.4845	X12CrNi 25 21	310	310 S24	2361	Z12CN 25.20
1.4876	X10NiCrAlTi 32 20	-	NA 15	-	Z8NC 32.21

1) AISI	= American Iron and Steel Institute
ASTM	= American Society for Testing and Materials
2) BS	= British Standard
3) SS	= Swedish Standard
4) AFNOR	= Association Francaise de Normalisation

