

MATERIAL COMPARISON TABLE



281/119 Vibhavadi Rangsit Rd.,
Sanambin, Donmueang,
Bangkok 10210 Thailand

TEL : +66 (0)2 156 9701-3
FAX : +66(0)2 156 9704
info@aee.co.th

EURONORM/DIN	W. Nr.	SAI	UNS	BRAND NAME
FERRITIC, MARTENSITIC & PRECIPITATION HARDENING STAINLESS STEEL				
X 6 Cr 13	1.4000	410 S	S 41008	
X 6 Cr Al 13	1.4002	405	S 40500	
X 12 Cr S 13	1.4005	416	S 41600	
X 12 Cr 13	1.4006	410	S 41000	
X 6 Cr 17	1.4016	430	S 43000	
X 20 Cr 13	1.4021	420	S 42000	
X 30 Cr 13	1.4028	420 F	S 42020	
X 46 Cr 13	1.4034			
X 17 Cr Ni 16-2	1.4057	431	S 43100	
X 14 Cr Mo S 17	1.4104	430 F	S 43020	
X 90 Cr Mo V 18	1.4112	440 B	S 44003	
X 6 Cr Mo 17-1	1.4113	434	S 43400	
X 39 Cr Mo 17-1	1.4122			
X 105 Cr Mo 17	1.4125	440C	S 44004	
X 3 Cr Ni Mo 13-4	1.4313		S 41500	F 6 NM
X 4 Cr Ni Mo 16-5-1	1.4418			
X 2 Cr Ti 12	1.4512	409	S 40900	
X 5 Cr Ni Cu Nb 16-4	1.4542	630	S 17400	17.4 PH
X7 Cr Ni Al 17-7	1.4568	631	S 17700	17.7 PH
X 5 Cr Ni Mo Cu Nb 14-5	1.4594	XM-12	S 15500	15.5 PH
AUSTENITIC STAINLESS STEEL				
X 5 Cr Ni 18-10	1.4301	304	S 30400	
X 4 Cr Ni 18-12	1.4303	305	S 30500	
X 8 Cr Ni S 18-9	1.4305	303	S 30300	
X 2 Cr Ni 19-11	1.4306	304 L	S 30403	
X 2 Cr Ni 18-9	1.4307	304 L	S 30403	
X 10 Cr Ni 18-8	1.4310	301	S 30100	
X 2 Cr Ni N 18-10	1.4311	304 LN	S 30453	
X 1 Cr Ni S 18-15-4	1.4361		S 30600	URANUS® SI / A610 ®
X 6 Cr Ni Ti 18-10	1.4541	321	S 32100	
X 6 Cr Ni Nb 18-10	1.4550	347	S 34700	
X 5 Cr Ni Mo 17-12-2	1.4401	316	S 31600	
X 2 Cr Ni Mo 17-12-2	1.4404	316 L	S 31603	
X 2 Cr Ni Mo N 17-11-2	1.4406	316 LN	S 31653	
X 2 Cr Ni Mo N 17-13-3	1.4429	316 LN (Mo+)	S 31653	
X 2 Cr Ni Mo 18-14-3	1.4435	316 L (Mo+)	S 31603	
X 3 Cr Ni Mo 17-13-3	1.4436	316 (Mo+)	S 31600	
X 2 Cr Ni Mo N 18-15-4	1.4428	317 L	S 31703	
X 2 Cr Ni Mo N 17-13-5	1.4439	317 LN	S 31753	
X 5 Cr Ni Mo 17-13	1.4449	317	S 31700	
X 4 Ni Cr Mo Cu Nb 20-18-2	1.4505			
X 6 Cr Ni Mo Ti 17-12-2	1.4571	316 Ti	S 31635	
X 6 Cr Ni Mo Nb 17-12-2	1.4580	316 Cb	S 31640	
X 10 Cr Ni Mo Nb 18-12	1.4583	318		

EURONORM/DIN	W. Nr.	SAISI/ASTM	UNS	BRAND NAME
SUPERAUSTENITIC STAINLESS STEEL				
X 1 Cr Ni 25-21	1.4335	(310 L NAG)	S 31002	URANUS® 65 / SS 25L
X 1 Cr Ni Mo N 25-25-2	1.4465		N 08310	
X 1 Cr Ni Mo N 25-22-2	1.4466	310 MoLN	S 31050	
X 1 Ni Cr Mo Cu N 25-20-7	1.4529		N 08926	19-25 hMo / 6MO
X 1 Cr Ni Mo Cu N 25-25-5	1.4537		N 08932	URANUS® SB8
X 1 Ni Cr Mo Cu 25-20-5	1.4539	904 L	N 08904	URANUS® B6 / 2RK 65®
X 1 Cr Ni Mo Cu N 20-18-7	1.4547	F44	S 31254	254 SMO® / 6MO
X 1 Ni Cr Mo Cu 32-28-7	1.4562		N 08031	ALLOY 31
X 1 Ni Cr Mo Cu 31-27-4	1.4563		N 08028	SANICRO 28®
X 3 Cr Ni Mn Mo Nb N 23-17-5-3	1.4565		S 34565	4565 S
X 3 Cr Ni Mo Ti 25-25	1.4577			
X 1 Cr Ni Mo Cu N 24-22-8	1.4652		S 32654	654 SMO®
DUPLEX & SUPERDUPLEX				
X 2 Cr Ni N 23-4	1.4362		S 32304	URANUS® 35 N / 23 04
X 2 Cr Ni Mo N 25-7-4	1.4410	A182 F53	S 32750	25 07
X 3 Cr Ni Mo N 27-5-2	1.4460	329	S 32900	SS 44
X 2 Cr Ni Mo N 22-5-3	1.4462	A182 F51	S 31803	URANUS® 45 N / 22 05
X 2 Cr Ni Mo N 22-5-3	1.4462	A182 F60	S 32205	URANUS® 45 N / 22 05
X 2 Cr Ni Mo Cu W N 25-7-4	1.4501	A182 F55	S 32760	ZERON 100®
X 2 Cr Ni Mo Cu N 25-6-3	1.4507	A182 F61	S 32550	URANUS® 52 N
HIGH-TEMPERATURE RESISTING STAINLESS STEEL				
X 6 Cr Ni 18-11	1.4948	304 H	S 30409	
X 8 Cr Ni Ti 18-10	1.4941	321 H	S 32109	
X 6 Cr Ni Nb 18-10	1.4550	347 H	S 34709	
X 6 Cr Ni Mo 17-13	1.4919	316 H	S 31609	
X 10 Ni Cr Al Ti 32-20	1.4876		N 08800	INCOLOY® 800
X 5 Ni Cr Al Ti 31-20	1.4958		N 08810	INCOLOY® 800 H
X 8 Ni Cr Al Ti 32-21	1.4959		N 08811	INCOLOY® 800 HT
X 10 Cr Al 7	1.4713			
X 10 Cr Al 13	1.4724			
X 10 Cr Al 18	1.4742			
X 18 Cr N 28	1.4749	446	S44600	4 C 54®
X 10 Cr Al 24	1.4762			
X 20 Cr Ni Si 25-4	1.4821			
X 15 Cr Ni Si 20-12	1.4828			
X 7 Cr Ni 23-14	1.4833	309 S	S 30908	
X 10 Cr Ni Si N 21-11	1.4835		S 30815	253 MA®
X 15 Cr Ni Si 25-20	1.4841	314	S 31400	
X 12 Cr Ni 25-21	1.4845	310 S	S 31008	
X 12 Ni Cr Si 36-16	1.4864	330	N 08330	INCOLOY® DS

• Incoloy ®, Incoloy ® and Nimonic ® are trademarks of the Special Metals Corporation group of companies • Uranus ® is a trademark of the Arcelor-Mittal group of companies
 • A610 ® is a trademark of the Bühler-Uddeholm group of companies • 2RK 65 ®, 4 C 54 ® and Sanicro 28 ® are trademarks of Sandvik AB
 • Zeron 100 ® is a trademark of Weir Materials Ltd • 253 MA ®, 254 SMO ® and 254 SMO ® are trademarks of Outokumpu group of companies

MATERIAL COMPARISON TABLE



281/119 Vibhavadi Rangsit Rd.,
Sanambin, Donmueang,
Bangkok 10210 Thailand

TEL : +66 (0)2 156 9701-3
FAX : +66(0)2 156 9704
info@aee.co.th

EURONORM/DIN	W. Nr.	DENSITY	UNS	BRAND NAME
NICKEL, TITANIUM, CUPRO-NICKEL, ZIRCONIUM & ALLOYS				
Ni 99.2	2.4066	8.9	N 02200	NICKEL 200
LC-Ni 99	2.4068	8.9	N 02201	NICKEL 201
NiCu 30 Fe	2.4360	8.8	N 04400	MONEL® 400
NiCu 30 Al	2.4375	8.5	N 05500	MONEL® K 500
NiCr 20 Cu Mo	2.4660	8.0	N 08020	20 Cb 3 / ALLOY 20
NiCr 21 Mo	2.4858	8.1	N 08825	INCOLOY® 825
NiCr 25 FeAlY	2.4633	7.9	N 06025	ALLOY 602 CA
NiCr 29 Fe	2.4642	8.2	N 06690	INCONEL® 690
NiCr 23 Co 12 Mo	2.4663	8.4	N 06617	INCONEL® 617
NiCr 19 NbMo	2.4668	8.2	N 07718	INCONEL® 718
NiCr 15 Fe 7 TiAl	2.4669	8.3	N 07750	INCONEL® X-750
NiCr 15 Fe	2.4816	8.4	N 06600	INCONEL® 600
NiCr 23 Fe	2.4851	8.1	N 06601	INCONEL® 601
NiCr 22 Mo 9 Nb	2.4856	8.5	N 06625	INCONEL® 625
NiMo 29 Cr	2.4600	9.2	N 10629	ALLOY B4
NiCr 21 Mo 14 W	2.4602	8.7	N 06022	HASTELLOY® C22
NiCr 30 FeMo	2.4603	8.2	N 06030	HASTELLOY® G30
NiCr 23 Mo 16 Al	2.4605	8.6	N 06059	ALLOY 59
NiCr 21 Mo 16 W	2.4606	8.8	N 06686	INCONEL® 686
NiMo 16 Cr 16 Ti	2.4610	8.6	N 06455	HASTELLOY® C4
NiMo 28	2.4617	9.2	N 10665	HASTELLOY® B2
		9.2	N 10675	HASTELLOY® B3
NiCr 22 Mo 6 Cu	2.4618	8.4	N 06007	HASTELLOY® G
NiCr 22 Mo 7 Cu	2.4619	8.3	N 06985	HASTELLOY® G3
NiCr 22 Fe 18 Mo	2.4665	8.3	N 06002	HASTELLOY® X
NiCr 23 Mo 16 Cu	2.4675	8.5	N 06200	HASTELLOY® C 2000
NiMo 16 Cr 15 W	2.4819	8.9	N 10276	HASTELLOY® C276
NiCr 20 Ti	2.4951	8.4	N 06075	NIMONIC 75®
NiCr 20 Ti Al	2.4952	8.2	N 07080	NIMONIC 80 A®
NiCr 20 Co 18 Ti	2.4969	8.2	N 07090	NIMONIC 90®
NiCo 20 Cr 15 MoAlTi	2.4634	8.0	N 13021	NIMONIC 105®
	3.7025	4.5	R 50250	Grade 1
	3.7035	4.5	R 50400	Grade 2
	3.7065	4.5		Grade 4
	3.7165	4.4		Grade 5 / 6 Al 4 V
	3.7235	4.5	R 52400	Grade 7
	3.7225	4.5	R 52250	Grade 11
CuNi 10 Fe 1 Mn	2.0872	8.9	C 70600	CUPRONICKEL 90/10
CuNi 30 Mn 1 Fe	2.0882	8.9	C 71500	CUPRONICKEL 70/30
		6.5	R 60702	

EURONORM	DIN	W.Nr.	ASTM	ASTM	ASTM
LOW / HIGH-TEMPERATURE RESISTING CARBON / ALLOY STEEL					
12 Ni 14 10 Ni 14		1.5637	A 333 Gr. 3	A 420 WPL 3	A 350 LF 3
X 8 Ni 9		1.5662	A 333 Gr. 8	A 420 WPL 8	
T St E 285		1.0488	A 333 Gr. 8	A 420 WPL 6	A 350 LF 2
P 235GH ST 35.8		1.0305	A106 Gr. A		
P 265GH ST 45.8		1.0405	A106 Gr. B	A 234 WPB	A 105
			API 5L Gr. B		
16 Mo 3 15 Mo 3		1.5415			
16 Mo 5		1.5423	A 335 P 1	A 234 WP 1	A 182 F 1
			A 335 P 11	A 234 WP 11	A 182 F 11
13 Cr Mo 4-5 13 Cr Mo 4 4		1.7335	A 335 P 12	A 234 WP 12	A 182 F 12
10 Cr Mo 9-10 10 Cr Mo 9 10		1.7380	A 335 P 22	A 234 WP 22	A 182 F 22
X 11 Cr Mo 5 12 Cr Mo 19 5		1.7362	A 335 P 5	A 234 WP 5	A 182 F 5
X 12 Cr Mo 9 1 X 11 Cr Mo 9-10		1.7386	A 335 P 9	A 234 WP 9	A 182 F 9
X 10 Cr Mo V Nb 9-1 X 10 Cr Mo V Nb 9-1		1.4903	A 335 P 91	A 234 WP 91	A 182 F 91
X 20 Cr Mo V 12-1 X 20 Cr Mo V 11-1		1.4922			

Registered Trademark information

- Incoloy ®, Incoloy ® and Nimonic ® are trademarks of the Special Metals Corporation group of companies
- Uranus ® is a trademark of the Arcelor-Mittal group of companies
- A610 ® is a trademark of the Böhler-Uddeholm group of companies
- 2RK 65 ®, 4 C 54 ® and Sanicro 28 ® are trademarks of Sandvik AB
- Zeron 100 ® is a trademark of Weir Materials Ltd
- 253 MA ®, 254 SMO ® and 254 SMO ® are trademarks of Outokumpu group of companies
- Hastelloy ® is a trademark of Haynes International Inc.