

Stainless Steel and Alloys Drawn Wire Grades

Austenitic, Martensitic, Ferritic and Duplex grades

Chemical composition of Ugitech grades														Ugitech grades				
EN number	ASTM AMS AISI	C	Si	Mn	P max	S max	N	Cr	Mo	Ni	Others	UNS	JIS	Spring wires EN 10270-3	Cold heading EN 10263-5	Free machining	Others	
Ferritic																		
1.4000	410S	(1) ≤0.080	≤1.0	≤1.0	0.040	0.015	-	12.0/14.0	-	-	-	S41008	SUS410S	-	-	-	UGI® HQ410L	
1.4016	430	(1) ≤0.080	≤1.0	≤1.0	0.040	0.030	-	16.0/18.0	-	-	-	S43000	SUS430	-	UGI® H430L	-	UGI® F430 UGI® F430L	
1.4105	-	(1) ≤0.080	≤1.5	≤1.5	0.040	0.15 /0.35	-	16.0/18.0	0.2/0.6	-	-	S43020	SUS430F	-	-	UGI® M4105	-	
1.4113	434	(1) ≤0.080	≤1.0	≤1.0	0.040	0.030	-	16.0/18.0	0.9/1.4	-	-	S43400	SUS434	-	-	-	UGI® F434	
1.4511	-	(1) ≤0.050	≤1.0	≤1.0	0.040	0.015	-	16.0/18.0	-	-	Nb: 12xC/1.0	-	-	-	-	-	UGI® F4511	
Martensitic																		
1.4006	410	(1) 0.08/0.15	≤1.0	≤1.5	0.040	0.030	-	11.5/13.5	-	-	-	S41000	SUS410	-	UGI® H4006	-	UGI® F410	
1.4021	420	(1) 0.16/0.25	≤1.0	≤1.5	0.040	0.030	-	12.0/14.0	-	-	-	S42000	SUS420	-	-	-	UGI® HQ4021	
1.4028	420	(1) 0.28/0.35	≤1.0	≤1.5	0.040	0.030	-	12.0/14.0	-	-	-	S42000	SUS420	-	UGI® H4028	-	-	
1.4034	420	(1) 0.43/0.50	≤1.0	≤1.0	0.040	0.030	-	12.5/14.5	-	-	-	S42000	SUS420	-	UGI® H4034	-	-	
1.4057	431	(1) 0.14/0.20	≤1.0	≤1.0	0.040	0.030	-	15.0/17.0	-	1.25/2.0	-	S43100	SUS431	-	-	-	UGI® F431	
1.4116	-	(1) 0.45/0.55	≤1.0	≤1.0	0.040	0.030	-	14.0/15.0	0.5/0.8	-	V: 0.10/0.20 N<0.15	-	-	-	-	-	UGI® 4116N UGIPURE® 4116N	
1.4121	-	0.20/0.25	≤1.0	1.0 /1.5	0.045	0.15 /0.25	-	12.0/14.0	1.0/1.5	0.8/1.2	-	-	-	-	-	-	UGI® 4121 UGI® 4197	
1.4542	630	(1) ≤0.070	≤0.70	≤1.0	0.040	0.030	-	15.0/17.0	≤0.6	3.0/5.0	Cu: 3.0/4.0 Nb: 5xC/0.45	S17400	SUS630	-	-	-	UGI® S17-4PH UGI® HQ4542	
1.4568	631	(1) ≤0.090	≤0.70	≤1.0	0.040	0.015	-	16.0/18.0	-	6.5/7.75	Al: 0.75/1.5	S17700	SUS631	UGI® S301PH	-	-	-	
1.4913	-	(4) 0.17 /0.23	≤0.50	0.4 /0.9	0.025	0.015	0.05 /0.10	10.0/11.5	0.5/0.8	0.2/0.6	Nb: 0.25/0.55 V: 0.10/0.30 B≤0.015 Al≤0.020	-	-	-	UGI® H4913	-	-	
1.4923	-	(4) 0.18 /0.24	≤0.50	0.4 /0.9	0.025	0.015	-	11.0/12.5	0.8/1.2	0.3/0.8	V: 0.25/0.35	-	-	-	UGI® H4923	-	-	
Austenitic																		
1.4301	304	≤0.070	≤1.0	≤2.0	0.045	0.030	≤0.10	18.0/19.5	-	8.0/10.5	-	S30400	SUS304	-	UGI® H4301	-	UGI® F304 F4301	
-	-	≤0.10	0.30 /0.60	9.0 /10.0	0.035	0.030	0.25 /0.32	17.5/18.5	-	5.0/6.0	-	-	-	-	-	-	GRADE1® UGI® F202N	
1.4303	305	≤0.060	≤0.75	≤2.0	0.045	0.015	≤0.10	17.0/19.0	-	11.0/13.0	-	S30500	SUS305	-	UGI® H4303	-	UGI® F4303	
1.4305	303	(1) ≤0.10	≤1.0	≤2.0	0.045	0.15 /0.35	≤0.10	17.0/19.0	-	8.0/10.0	Cu≤1.0	S30300	SUS303	-	-	UGI® U303	-	
1.4306	304L	≤0.030	≤1.0	≤2.0	0.045	0.030	≤0.10	18.0/20.0	-	10.0/12.0	-	-	SUS304L	-	-	-	UGI® F4306 UGI® F304L	
1.4307	304L	(1) ≤0.030	≤1.0	≤2.0	0.045	0.030	≤0.10	18.0/19.5	-	8.0/10.0	-	S30403 SUS304L	-	UGI® H304L	-	UGI® F304L UGI® F4307		
1.4310	302	(1) 0.05 /0.15	≤1.0	≤2.0	0.045	0.015	≤0.10	17.0/19.0	≤0.8	8.0/9.5	-	S30200	-	UGI® S302	-	UGI® F302		
1.4310	301	(1) 0.05 /0.15	≤2.0	≤2.0	0.045	0.015	≤0.10	16.0/18.0	≤0.8	6.0/8.0	-	-	-	SPRINOX®	-	-		
1.4401	316	≤0.070	≤1.0	≤2.0	0.045	0.030	≤0.10	16.5/18.5	2.0/2.5	10.0/13.0	-	S31600	SUS316	UGI® S316	-	UGI® F316		
1.4404	316L	(1) ≤0.030	≤1.0	≤2.0	0.045	0.030	≤0.10	16.5/18.5	2.0/2.5	10.0/13.0	-	S31603 SUS316L	-	UGI® H316L	UGI® H4404	UGI® F4404 UGI® F316L		
1.4435	316L	≤0.030	≤1.0	≤2.0	0.045	0.030	≤0.10	17.0/19.0	2.5/3.0	12.5/15.0	-	-	-	-	-	UGI® F4435		
1.4438	317L	(1) ≤0.030	≤0.75	≤2.0	0.045	0.030	≤0.10	18.0/19.5	3.0/4.0	13.0/15.0	-	S31703 SUS317L	-	-	-	UGI® F317		
1.4441	-	(7) ≤0.030	≤1.0	≤2.0	0.025	0.010	≤0.10	17.0/19.0	2.25/3.0	13.0/15.0	Cu<0.5	S31673	-	-	-	UGIPURE® 4441		
1.4472	-	(8) ≤0.080	≤0.75	≤2.0 /4.25	0.025	0.010	0.25 /0.50	19.5/22.0	2.0/3.0	9.0/11.0	Nb: 0.25/0.80 Cu<0.25	S31675	-	-	-	UGIPURE® 4472		
1.4529	926	≤0.020	≤0.5	≤1.0	0.030	0.010	0.15/0.25	19.0/21.0	6.0/7.0	24.0/26.0	Cu: 0.5/1.5	N08925	-	-	-	UGI® F4529		
1.4539	904L	(1) ≤0.020	≤0.70	≤2.0	0.030	0.010	≤0.15	19.0/21.0	4.0/5.0	24.0/26.0	Cu: 1.2/2.0	N08904 SUS890L	URANUS® B6 (N)	URANUS® B6 (N)	-	UGI® 904L UGI® 4539		
1.4541	321	≤0.080	≤1.0	≤2.0	0.040	0.030	-	17.0/19.0	-	9.0/12.0	Ti: 5xC/0.70	-	-	-	-	UGI® F4541		
1.4550	347	≤0.080	≤1.0	≤2.0	0.045	0.030	-	17.0/19.0	-	9.0/12.0	Nb: 10xC/1.0	S34700	-	-	-	UGI® 4550		
1.4567	304Cu	(1) ≤0.040	<1.0	≤2.0	0.045	0.030	≤0.10	17.0/19.0	-	8.5/10.5	Cu: 3/4	S30430 SUSXM7	-	UGI® H4567	-	-		
1.4571	316Ti	≤0.080	<1.0	≤2.0	0.040	0.030	-	16.5/18.0	2.0/2.5	10.5/13.5	Ti: 5xC/0.70	-	-	-	-	UGI® F4571		
1.4578	-	(1) ≤0.040	<1.0	≤2.0	0.045	0.015	≤0.10	16.5/17.5	2.0/2.50	10.0/11.0	Cu: 3.0/3.5	-	-	-	UGI® H4578	-		
(1.4597)	204Cu	(1) ≤0.15	<2.0	6.5 /8.5	0.040	0.030	≤0.30	15.5/17.5	-	≤3.5	Cu: 2.0/4.0	-	-	-	-	UGI® 204Cu		
1.4615 ¹	201Cu	<0.03	<1.0	7.0 /9.0	0.040	0.010	0.02/0.06	14.0/16.0	<0.80	4.5/6.0	Cu: 2.0/4.0	-	-	-	UGI® H201CU	UGI® F201CU		
1.4878	321H	(2) ≤0.10	<1.0	<2.0	0.045	0.015	-	17.0/19.0	-	9.0/12.0	Ti: 5xC/0.80	S32109	-	-	-	UGI® 4878		
209	-	≤0.06	≤0.75	4.0 /6.0	0.040	0.030	0.20/0.40	20.5/23.5	1.5 /3.0	11.5/13.5	Nb: 0.10/0.30 V: 0.10/0.30	S20910	-	-	-	UGI® F209 UGIPURE® 209		
Duplex																		
1.4062 ¹	-	<0.03	<1.0	<2.0	0.035	0.015	0.05/0.20	22.0/24.0	<0.60	2.5/3.5	Cu<0.6	S32202	-	-	-	-	UGI® 4062	
1.4362	-	<0.03	<1.0	<2.0	0.035	0.015	0.05/0.20	22.0/24.0	0.1/0.6	3.5/5.5	Cu: 0.1/0.6	S32304	-	-	-	-	UGI® 4362	
1.4362	-	≤0.030	<1.0	≤2.0	0.035	0.015	0.10/0.22	21.0/23.0	2.5/3.5	4.5/6.5	-	S31803	-	-	-	-	UGI® 4462	
1.4507	-	≤0.030	≤0.70	≤2.0	0.035	0.015	0.20/0.30	24.0/26.0	3.0/4.0	6.0/8.0	Cu: 1.0/2.5	S32550	-	-	-	-	UGI® 4507 UGI® 52N+	

¹ Grade patented by Ugitech



Superalloys, Corrosion, Elastic, Heat resisting alloys

Chemical composition of Ugitech grades

Ugitech grades

EN number	ASTM AMS AISI	C	Si	Mn	P max	S max	N	Cr	Mo	Ni	Others	UNS	JIS	Spring wires EN 10270-3	Cold heading EN 10263-5	Free machining	Others	
Heat resisting alloys																		
1.4841	314	(2) ≤0.20	1.5 /2.5	≤2.0	0.045	0.015	≤0.10	24.0 /26.0	-	19.0/22.0		S31400	-	-	-	-	UGI® F314	
1.4845	310	(2) ≤0.100	≤1.5	≤2.0	0.045	0.015	≤0.10	24.0 /26.0	-	19.0/22.0		S31000	-	-	-	-	UGI® F4845	
1.4828		(2) ≤0.20	1.5 /2.5	≤2.0	0.045	0.015	≤0.10	19.0 /21.0	-	11.0/13.0			-	-	-	-	UGI® F4828	
1.4886	330	(2) ≤0.15	1.0 /2.0	≤2.0	0.030	0.015	≤0.10	17.0 /20.0	-	33.0/37.0		N08330	-	-	-	-	UGI® NY330	
1.4887	330Nb	(2) ≤0.15	1.0 /2.0	≤2.0	0.030	0.015	≤0.10	20.0 /23.0	-	33.0/37.0	Nb: 1.0/1.5	-	-	-	-	-	UGI® NY330Nb	
-	-	- ≤0.10	1.0 /2.0	≤2.0	0.040	0.030	-	22.0 /24.0	-	40.0/45.0		-	-	-	-	-	UGI® NY845	
2.4851	ASTM B166	(2) 0.03 /0.10	≤0.5	≤1.0	0.020	0.015	-	21.0 /25.0	-	58.0/63.0	Fe≤18 – Al 1.0/1.7 Ti≤0.5 – Cu≤0.5 B≤0.006 – Co≤1.5	N06601	-	-	-	-	UGI® NY601	
Elastic																		
	AMS 5844	(5) ≤0.030	≤0.15	≤0.15	≤0.15	≤0.01	-	19.0 /21.0	9.0 /10.5	33.0/37.0	Co: balance Fe<1.0 – Ti<1.0	R30035	-	-	-	-	UGI® KC35N	
2.4711	AMS 5833	(6) ≤0.15	≤1.20	≤2.0	0.015	0.015	-	19.0 /21.0	6.0 /8.0	14.0/16.0	Co = 39.0/41.0 Fe = balance Co = 8.5/9.5 – Ti: 0.5/0.8 Al: 0.05/0.15	R30003	-	-	-	-	PHYNOX®	
-	ASTM A538	(7) ≤0.030	≤0.10	≤0.10	0.010	0.010	-	-	4.5 /5.5	17.0/19.0		K93120	-	-	-	-	DURIMPHY®	
Corrosion																		
2.4660	ASTM B473	≤0.07	≤1.0	≤2.0	0.025	0.015	-	19.0 /21.0	2.0 /3.0	32.0/38.0	Cu: 3/4 – Nb=8xC/≤1 Co≤1.5	N08020	-	-	-	-	UGI® HT920S	
1.4876	800	(2) ≤0.12	≤1.0	≤2.0	0.030	0.015	-	19.0 /23.0	-	30.0/34.0	Al: 0.15/0.60 Ti: 0.15/0.60	N08800	-	-	-	-	UGI® HT800	
2.4858	-	- ≤0.025	≤0.50	≤1.0	0.025	0.015	-	19.5 /23.5	2.5 /3.5	38.0/46.0	Ti = 0.60/1.20 Cu = 1.5.3.0 – Al≤0.20	N08825	-	-	-	-	UGI® HT825	
2.4817	ASTM B166 AMS 5687	- ≤0.030	≤0.5	≤1.0	0.020	0.015	-	14.0 /17.0	-	> 72	Ti≤0.3 Al≤0.3 Fe: 6/10 – Cu≤0.5 Co≤1.0 – B≤0.006	N06600	-	-	-	-	UGI® HT600	
2.4831	625 AMS 5837	(2) ≤0.10	≤0.5	≤0.5	0.020	0.015	-	20.0 /23.0	8.0 /10.0	> 60	Fe≤5 – (Nb + Ta): 3.0/4.0 Co≤1 – Cu≤0.5 As≤0.4 – Ti≤0.4	N06625	-	-	-	-	UGI® HT625	
2.4886	276	(2) ≤0.020	≤0.08	≤1.0	0.04	0.020	-	14.5 /16.5	15.0 /17.0	> 50	Fe: 4/7 – W: 3/4.5 V≤0.40 – Co≤2.5	N10276	-	-	-	-	UGI® HT276	
Superalloys																		
1.4980	660	(3) 0.03 /0.08	≤1.0	1.0 /2.0	0.025	0.015	-	13.5 /16.0	1.0 /1.5	24.0/27.0	Ti: 1.9/2.3 – Al≤0.35 V: 0.1/0.5 – B: 0.03/0.010	S66286	-	-	-	-	UGI® HQ286	
2.4632	AMS 5829	(4) ≤0.13	≤1.0	≤1.0	0.020	0.015	-	18.0 /21.0	-	balance	Co: 15/21 – Ti: 2/3 Al: 1/2 – Fe≤1.5 Cu≤0.20	N07090	-	-	-	-	UGI® HT90	
2.4668	AMS 5832	(4) 0.02 /0.08	≤0.35	≤0.35	0.015	0.015	-	17.0 /21.0	2.8 /3.3	50.0/55.0	Co≤1 – Ti = 0.6/1.2 Nb + Ta = 4.75/5.5 Al = 0.3/0.7 B = 0.002 – 0.006 Fe: 5/9 – Ti 2.25/2.75 (N + Ta): 0.7/1.2 Al: 0.4/1 – Cu≤0.5 Co≤1.0	N07718	-	-	-	-	UGI® HT718	
2.4669	AMS 5698 AMS 5699	(3) ≤0.08	≤0.5	≤1.0	0.020	0.015	-	14.0 /17.0	-	> 70	Ti: 1.8/2.7 – Al: 1.0/1.8 Fe≤1.5 – Cu≤0.2 B≤0.008 – Co≤1.0	N07750	-	-	-	-	UGI® HT750	
2.4952	-	(3) 0.04 /0.10	≤1.0	≤1.0	0.020	0.015	-	18.0 /21.0	-	> 65		N07080	-	-	-	-	UGI® HQ80A	

This table displays the main Ugitech grades only. Please contact us for further information

Reference standard

- (1) EN 10088 Stainless Steels – Composition and delivery conditions
 - (2) EN 10095 Heat resisting steels and Nickel Alloys
 - (3) EN 10269 Steels and nickel alloys for fasteners
 - (4) EN 10302 Creep resisting steels, nickel and cobalt alloys
 - (5) ASTM F562 - ISO 5832-6: Co alloy for surgical implants
 - (6) ASTM 1058 - ISO 5832-7: Co alloy for surgical implants
 - (7) ASTM F138 – ISO 5832-1 Stainless steel for surgical implants
 - (8) ASTM F1586 – ISO 5832-9 High nitrogen stainless steel for surgical implants
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