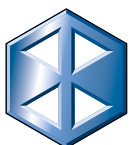


Stainless Steel and Alloys Drawn Wire Grades

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	(1)	≤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	(1)	≤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	(1)	≤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	(1)	≤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	(1)	≤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	(1)	≤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	(1)	≤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	(1)	≤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	(1)	≤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	≤1.0	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	-	(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	-	(1)	<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		-	(1)	≤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		-	(1)	≤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
ELASTIC	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
	2.4711	AMS 5844	(5)	≤0.030	≤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	
	-	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	R30003	-	-	-	-	PHYNOX®
CORROSION	-	ASTM A538	(7)	≤0.030	≤0.10	≤0.10	0.010	0.010	-	-	4.5/5.5	17.0/19.0	Co=8.5/9.5-Ti: 0.5/0.8 Al: 0.05/0.15	K93120	-	-	-	-	DURIMPHY®
	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): 3.0/4.0Co≤1 – Cu≤0.5 A≤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 Nb+Ta=4.75/5.5 Ti=0.6/1.2 Al=0.3/0.7 – B=0.002 - 0.006	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	Fe: 5/9 Ti 2.25/2.75 (N+Ta): 0.7/1.2 Al: 0.4/1 Cu≤0.5 – 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	Ti: 1.8/2.7 Al: 1.0/1.8 Fe≤1.5 Cu≤0.2 B≤0.008 – Co≤1.0	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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