

Stainless Steel  
Solutions for  
High Corrosion  
Resistance

**UGITECH**

Providing special steel solutions



				Chemical					
Grades		Standards		Typical chemical					
Name	Reference EN	Reference UNS (AISI/ATM)	C	Si	Mn	Ni	Cr	Mo	
Duplex	UGI 4362	1.4362	S32304	≤ 0,03	0,4	1	4,2	22,3	0,3
	UGIMA® 4460/ UGIMA® 329	1.4460	S32900	≤ 0,03	0,4	0,8	4,6	26,3	1,5
	UGI 4462/ UGI 45N	1.4462	S31803	≤ 0,03	0,4	1	5,3	22,3	2,7
	UGI 4507/UGI 52N+	1.4507	S32550	≤ 0,03	0,4	1	6,3	25,3	3,5
Austenitics	UGIMA® 4404	1.4404	S31603 / 316L	≤ 0,03	0,5	1,4	10,2	16,7	2,1
	UGIMA® 4571	1.4571	S31635 except stabilization	≤ 0,03	0,5	1,6	11,2	16,8	2,1
	UGIMA® 4435	1.4435	S31603 / 316L high Ni/Mo	≤ 0,03	0,5	1,6	12,6	17,2	2,6
	UGI 317L	1.4438	S31700	≤ 0,03	0,4	1,6	14,6	19	3,6
	UGI 209	-	S20910 / XM19 / NIT50	≤ 0,035	0,6	5	12	21,5	2,2
	UGI 4439/317LN	1.4439	~S31726 / 317LMN	≤ 0,03	0,5	1,2	12,6	16,7	4,3
Super Austenitics	UGI 4539	1.4539	N08904 / 904L	0,015	0,6	1,2	24,2	19,3	4,2
	UGI 926	1.4529	N08926 / 926	0,015	0,3	0,8	24,6	20,3	6,2

## Available finishes

### • Semi-finished products

Billets

■ 50 to 140 mm

Length: 3 to 8 m

### • Bars

● 1.5 to 250 mm for the austenitics, super-austenitics and duplex 1.4462

1.5 to 120 mm for the duplex (except 1.4462)

◆ 3 to 63 mm for the austenitics and super-austenitics

■ 3 to 50 mm for the austenitics and super-austenitics

Length: 2.5 to 6.2 m

\*Not all diameter/length combinations are available. Please contact us.

\*For the following grades, please contact us: 1.4438, Nitronic 50, 1.4439 and 1.4529.



analysis table						Mechanical characteristics table				
composition (%)					PREN	Conditions	Typical mechanical properties at ambient temp (20°C)			
Cu	S Maxi	P Maxi	N	Other elements	PREN		Rm (MPa)	Rp0,2 (MPa)	A (%)	KV (J)
-	≤ 0,01	0,03	0,12	-	26	Solution annealed	680	450	45	320
-	0,02	0,035	0,1	-	33	Solution annealed	700	530	30	120
-	≤ 0,01	0,03	0,15	-	34	Solution annealed	750	550	40	320
1,7	≤ 0,01	0,023	0,23	-	41	Solution annealed	850	620	35	300
-	0,025	0,04	0,04	-	25	Solution annealed	560	250	60	240
-	0,025	0,04	0,02	5°C < Ti < 0,4	25	Solution annealed	560	250	60	200
-	0,02	0,04	0,04	-	27	Solution annealed	550	250	60	240
-	< 0,010	0,025	0,05	-	32	Solution annealed	580	250	45	220
-	< 0,010	0,04	0,3	V=0,2 Nb=0,12	34	Solution annealed	850	540	40	300
-	0,015	0,03	0,18	-	34	Solution annealed	700	400	40	220
1,5	< 0,01	< 0,025	0,05	-	34	Solution annealed	580	250	50	350
1	< 0,01	< 0,02	0,2	-	44	Solution annealed	700	350	50	200

- **Wire rod**

- 5 to 32 mm for austenitics and super-austenitics  
5.5 to 32 mm for duplex

- 12.4 to 28 mm for austenitics and super-austenitics Coils of approximately 1000 kg.

\*For the following grades, please contact us: 1.4362, 1.4507, 1.4439, 1.4529.

\*For certain highly alloyed grades, the available coils weigh approximately 450 kg. Please contact us.

- **Drawn products**

- Wires: 13 microns to 18 mm; coils, spools, baskets

- Profiles: sections from 1 to 60 mm<sup>2</sup>; coils, reels, straightened products

\*For other requests, please contact us

\*Flats with round edges, fibers, etc.: please contact us



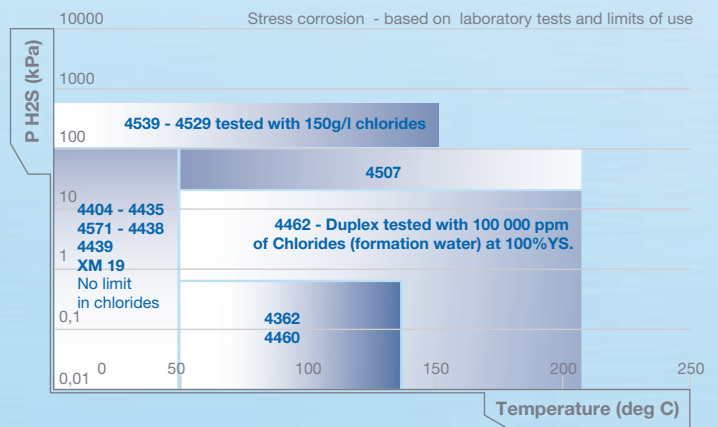
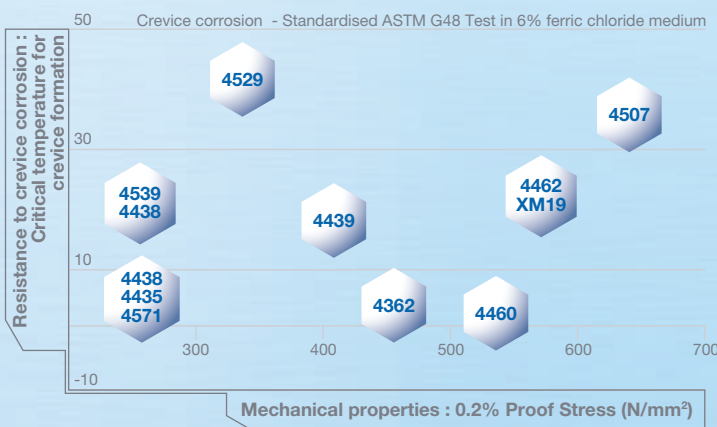
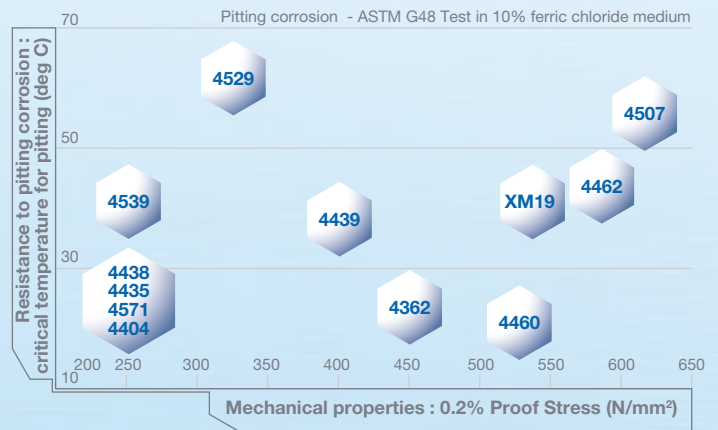
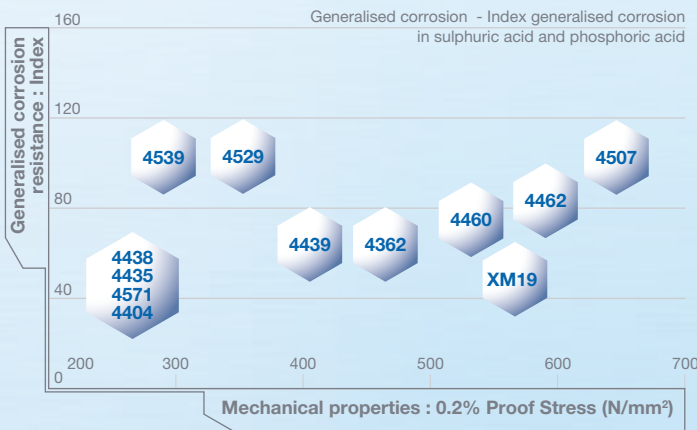
# Fields of application

For many applications, conventional stainless steels fully satisfy requirements. However, a wide range of industrial activities and aggressive environments often lead to the recommendation of stainless steels with high chromium, molybdenum and nitrogen contents, which are major corrosion-protective elements. Aware of the growing demand for stainless steels with improved corrosion resistance and guaranteed availability, UGITECH has decided to offer an appropriate solution: austeno-ferritic or duplex stainless steels. Their remarkable usage properties, combining high mechanical characteristics with an often exceptional corrosion resistance, along with their reasonable cost (linked to their low nickel and molybdenum content), make them extremely attractive for: Industries traditionally consuming highly alloyed grades:

- **Petroleum industry**  
Natural gas extraction
- **Chemical industry**  
Cellulose and paper pulp industry
- **Sea water desalination**

and also industries that usually employ austenitic stainless steels and are looking for an alternative to these grades that are so dependent on the high and volatile cost of alloying elements:

- **Food processing**
- **Water treatment**
- **Thalassotherapy – Thermal spas**
- **Building industry**



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