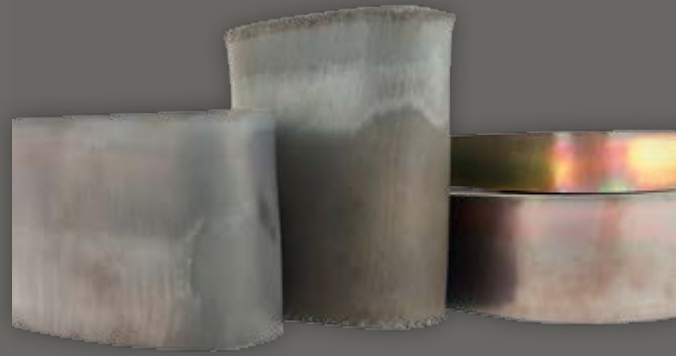




sij | griffon &
romano





Griffon & Romano S.p.A was founded in 1954. Since then has developed into a major service centre in the Italian stainless steel industry. Today the company is part of the multinational **Slovenian Steel Group (SIJ)**, which is made up of 20 companies across the globe. It leads the domestic market in the production and sale of stainless steel, Ni-Alloys and special steels.

Our headquarters is in Melzo (Milan) where we have sales offices and a factory. We have also a second factory in Corte Tegge (Reggio Emilia) and commercial agents throughout Italy who have been supporting our customers for over 60 years.

We are one of the biggest INOX steel service centres in Italy and we have relationships with customers in Austria, France, Spain, Russia and Israel among others. Our customers come from a wide variety of industrial sectors including food and food processing, pharmaceutical, packaging, textile, chemical and petrochemical, engineering, paper, shipbuilding, water treatment, nuclear, etc.

OUR MISSION

To create strong partnerships across all industries represented by our customers, by continuously improving technologies and service.

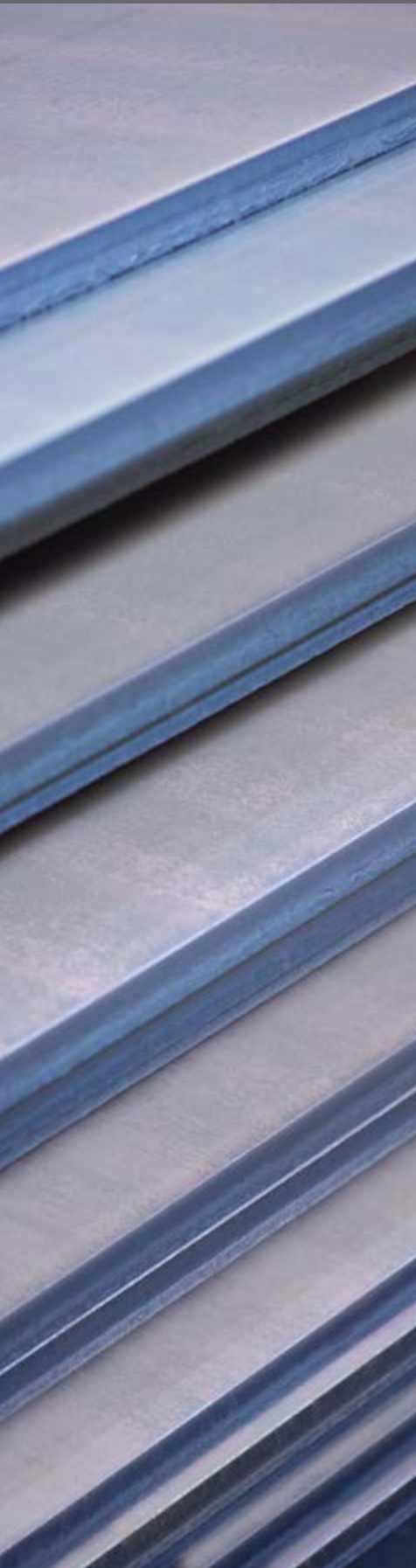
Our mission is to expand into the market by offering our customers a wide range of products at competitive prices and high quality service.

PRODUCTS

Our main strength is the ability to produce sheet metal in a variety of sizes up to 160 mm thickness by 3000 mm wide from European and Asian manufacturing. We use high definition plasma, waterjet and saw cutting technology to produce customized stainless steel between 50 and 3000 mm wide, with thickness from 8 to 160 mm.

The wide range of stainless steel (3,000 t) and complementary products in stock (304, 304L, 304H, 316, 316L, 316Ti, 317, 321, 321H, 347, 347H, 310S, Duplex, Superduplex and others) ensures fast delivery of all products. This, along with our high cutting quality, are the features most appreciated by our customers.

References: ABB, Ansaldo, ConocoPhillips, ENEL, ENI, ExxonMobil, Mose (Venice), Foster Wheeler, Gazprom, Petronas, Statoil, Tetra Pack, Westinghouse, Tubacex, Rosneft, BP, Sinopec, Aramco, Saipem, EDF, Statoil, etc.



QUALITY

All production processes of SIJ | Griffon & Romano have been certified according to UNI EN ISO 9001 since 1996. All our products are identified and provided with certificates of origin. Being part of an international group means we can also perform tests according to the norms of PED, ISPEL, RINA, DNV, LLOYD REGISTER, BUREAU VERITAS, TÜV, APAVE, MMI, FFSS.

MATERIALS ANALYSIS

We can perform chemical analysis, mechanical and resiliency tests on customers' samples. These, and additional tests can be carried out on material in stock.

ULTRASOUND TESTING

We can provide specialised ultrasound testing if required.

TECHNICAL/COMMERCIAL ADVICE

Our highly trained technical personnel can assist and advise customers on their choice of suitable materials.

MISSION

Our wide sales network, logistics capabilities and new management system, along with over 60 years market knowledge form the foundations of our customer service capabilities. Our personal approach, consultancy, training and customer support are an integral part of our daily work.

WE GUARANTEE:

- Short lead times on processed material
- Fast and secure deliveries
- Fast response for all quotations
- Tight tolerance quality products
- After sales support
- No minimum order quantity or added charges for small quantity
- Wide selection of stainless and special steels



PRODUCTION

PLASMA CUTTING

SIJ|Griffon & Romano's latest generation plasma-cutting machinery sets new possibilities to satisfy our customers in the field of stainless steel service. It combines the latest developments in drive and control technology and provides flexibility of productivity, allowing unmatched precision cutting for steel plates of large dimensions in heavy-duty production environments, at positioning speed of 24.000 mm/min.

Our customers benefit from higher speed cutting, whilst ensuring excellent quality and lower process costs compared to our competitors, as the consumables are protected and the plasma cutting process is more efficient and rapid.

The systems allow cutting up to a thickness of 160 mm, with cutting benches for sheets up to 4m wide and 18m in length. Numeric control allows for profiles with very tight tolerances.

We also offer mechanical bevel cutting on large metal sheet plates, which simplifies further welding and mechanical treatments for tubes and fittings producers.



SAW CUTTING

Saw cutting is the solution for machining medium and large thicknesses (10-12 mm and higher).

This technology ensures a perfect right-angle cut with a high finish and minimizes alteration of the mechanical characteristics of the material. The plates are straightened as needed after cutting.

STRAIGHTENING

We straighten bars, sheets and details cut of dimensions maximum 250 × 2000 × 4000mm, using a 500-ton press.

WATER JET CUTTING

Water cutting is more expensive, however is the most precise method for sophisticated profiles of stainless steel and nickel alloys. It is the most suitable type of cut for precision finishing.

Material is cut using a high-pressure jet of a mixture of water and abrasive material. The process does not alter the chemical-physical characteristics of the material. The result is an excellent quality cut which often avoids further machining.

DEBURRING

To avoid the cost of subsequent machining to the customer, the cut pieces are automatically deburred. The final step is electronic weighing of the product.



SHEARING

We can shear sheets of length up to 3000 mm and varying thickness depending on the type of material, to a maximum 20 mm.

ADDITIONAL SERVICES

Production of various types of:

- Flanges
- Tube plates
- Rolled rings
- Turned and / or milled items

WAREHOUSE

Our warehouse is equipped with an automatic storage system for materials up to 2000 × 6000 mm. This allows for improved handling of products, with faster delivery times and improved safety for the staff. This accurate control system ensures instant identification of stock availability.

Quarto plates and hot/ cold rolled sheets of all possible thicknesses and sizes are always in stock.

GRADES	Designation Acroni	Designation EN	Number W.Nr.	Designation AISI/ASTM	
AUSTENITIC STEEL GRADES	Acroni 4301	X5CrNi18-10	1.4301	304	
	Acroni 4305	X8CrNi18-9	1.4305	303	
	Acroni 4306	X2CrNi19-11	1.4306	304L	
	Acroni 4307	X2CrNi18-9	1.4307	304L	
	Acroni 4307S			304L+S	
	Acroni 4311	X2CrNi18-10	1.4311	304LN	
	Acroni 4315	X5CrNi19-9	1.4315	304N	
	Acroni 4541	6CrNiTi18-10	1.4541	321	
	Acroni 4550	X6CrNiNb18-10	1.4550	347	
	Acroni 4550A			347H	
	Acroni 4878	X8CrNiTi18-10	1.4878	321H	
	Acroni 4948	X6CrNi18-10	1.4948	304H	
	AUSTENITIC STEEL GRADES WITH Mo	Acroni 4401	X5CrNiMo17-12-2	1.4401	316
		Acroni 4404	X2CrNiMo17-12-2	1.4404	316L
Acroni 4404S				316L+S	
Acroni 4432		X2CrNiMo17-12-3	1.4432	316L	
Acroni 4435		X2CrNiMo18-14-3	1.4435	316L	
Acroni 4436		X3CrNiMo17-13-3	1.4436		
Acroni 4429		X2CrNiMoN17-13-3	1.4429	316LN	
Acroni 4919A				316H	
Acroni 4571		X6CrNiMoTi17-12-2	1.4571	316Ti	
Acroni 44XX				317L	
HEAT RESISTANT AUSTENITIC STEEL GRADES	Acroni 4828	X15CrNiSi20-12	1.4828		
	Acroni 4833	X12CrNi23-13	1.4833	309/309S	
	Acroni 4835	X9CrNiSiNCE21-11-2	1.4835		
	Acroni 4841	X15CrNiSi25-21	1.4841	314	
	Acroni 4845	X8CrNi25-21	1.4845	310/310S	
HEAT RESISTANT FERRITIC STEEL GRADES	Acroni 4713	X10CrAlSi7	1.4713		
	Acroni 4724	X10CrAlSi13	1.4724		
	Acroni 4742	X10CrAlSi18	1.4742		
	Acroni 4746		1.4746		
	Acroni 4762	X10CrAlSi25	1.4762		
FERRITIC OR MARTENSITIC STEEL GRADES	Acroni 4000	X6Cr13	1.4000	410S	
	Acroni 4003	X2CrNi12	1.4003		
	Acroni 4006	X12Cr13	1.4006	410	
	Acroni 4313	X3CrNiMo13-4	1.4313		
	Acroni 4542	X5CrNiCuNb16-4	1.4542	630	
DUPLEX STEEL GRADES	Acroni 4462	X2CrNiMoN22-5-3	1.4462	2205	
	Acroni 4362	X2CrNiN23-4	1.4362	2304	
	Acroni DX 2001			UNS 32001	
	Acroni 4410	X2CrNiMoN25-7-4	1.4410	2507	

Dimensions of Quarto Plates

Thickness (mm)	8	9 - 130
Width (mm)	1000 – 2000	1000 - 2500
Length (mm)	2000 – 12000	2000 - 12000
Weight (kg)	max. 9600	max. 9600

TYPE OF PROCESS ROUTE AND SURFACE FINISH OF THE PRODUCTS ¹⁾ (EN 10088-2)

Symbol	Type of condition	Surface finish	Notes
1D	Hot rolled, heat treated, pickled	Free of scale	Usually standard for most steel grades; also common finish for further processing.
1C	Hot rolled, heat treated, not descaled	Covered with rolling scale	Suitable for parts which will be descaled or machined in subsequent production or for certain heat-resisting applications.

1) Not all process routes and surface finishes are available for all steel grades



STAINLESS STEEL - HOT AND COLD ROLLED STRIPS AND SHEETS

GRADES	Designation Acroni	Designation EN	EN Number W.Nr.	Des.AISI/ASTM
HEAT RESISTANT FERIC STEEL GRADES	Acroni 4713	X10CrAlSi7	1.4713	
	Acroni 4724	X10CrAlSi13	1.4724	
	Acroni 4742	X10CrAlSi18	1.4742	
	Acroni 4746	X8CrTi25	1.4746	
	Acroni 4762	X10CrAlSi25	1.4762	

	Hot and cold rolled STRIP	Hot and cold rolled SHEET
Thickness (mm)	1,0 - 6,0	1,0 - 6,0
Width (mm)	1000	1000
Length (mm)	2000 – 6000	2000 - 6000
Weight (kg/mm width)	Coil weight: 6 - 8	
ID (mm)	610	

TYPE OF PROCESS ROUTE AND SURFACE FINISH OF THE PRODUCTS ¹⁾ (EN 10088-2)

	Symbol	Type of condition	Surface finish	Notes
HOT ROLLED	1C	Hot rolled, heat treated, not descaled	Covered with rolling scale	Suitable for parts which will be descaled or machined in subsequent production or for certain heat-resisting applications.
COLD ROLLED	2C	Cold rolled, heat treated, not descaled.	Smooth with scale from heat treatment.	Suitable for parts which will be descaled or machined in subsequent production or for certain heat-resisting applications.

¹⁾ Not all process routes and surface finishes are available for all steel grades



STAINLESS STEEL STANDARDS

MATERIAL STANDARDS ADDITIONAL SPECIFICATION

EN 10088-1	Stainless steels — Part 1: List of stainless steels
EN 10088-2	Stainless steels — Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes
EN 10088-4	Stainless steels — Part 4: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for construction purposes
EN 10028-7	Flat products made of steels for pressure purposes — Part 7: Stainless steels
EN 10095	Heat resisting steels and nickel alloys
EN 10269	Steels and nickel alloys for fasteners with specified elevated and/or low temperature properties
ASTM A240/A 240M	Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications
ASTM A167	Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip
ASTM A176	Standard Specification for Stainless and Heat-Resisting Chromium-Steel Plate, Sheet, and Strip
ASME SA 240M	Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet and Strip for pressure vessels and for General Applications

TOLERANCES ON DIMENSIONS AND SHAPE

EN 10029	Hot rolled steel plates 3 mm thick or above — Tolerances on dimensions, shape and mass
ASTM A480/A 480M	Standard Specification for General Requirements for Flat-Rolled Stainless and Heat-Resisting Steel Plate, Sheet, and Strip
EN ISO 18286	Hot rolled Stainless steel plates — Tolerances on dimensions and shape

CORROSION RESISTANCE OF STEEL

EN ISO 3651-1	Determination of resistance to intergranular corrosion of stainless steels - Part 1: Austenitic and ferritic-austenitic (duplex) stainless steels - corrosion test in nitric acid medium by measurement of loss in mass (Huey test)
EN ISO 3651-2 Method A, B, C	Determination of resistance to intergranular corrosion of stainless steels - Part 2: Ferritic, austenitic and ferritic - austenitic (duplex) stainless steels - corrosion test in media containing sulfuric acid
EN ISO 15156 – 3	Materials for use in H ₂ S - containing environments in oil and gas production - Part 3: Cracking-resistant CRAs (corrosion-resistant alloys) and other alloys
ASTM A262 Practice A, B, C, E, F	Standard Practices for detecting susceptibility to intergranular attack in austenitic stainless steels
ASTM A923 Method A, B, C	Standard Test methods for detecting detrimental intermetallic phase in Duplex austenitic / ferritic stainless steels
ASTM G 48 Practice A	Standard Test methods for Pitting Corrosion Resistance of stainless Steels and Related Alloys by Use of Ferric Chloride Solution
NACE MR 0103	Materials resistant to sulfide stress cracking in corrosive petroleum refining environments
NACE MR 0175	Metals for sulfide stress cracking and stress corrosion cracking resistance in sour oilfield environments

QUALIFICATION

System:	ISO 9001 Quality management systems ISO 14001 Environmental management systems OHSAS 18001 Occupational Health and Safety management systems
Approvals:	AD 2000 — Merkblatt W0 AD 2000 — Merkblatt W 2 AD 2000 — Merkblatt W 10 CE Making acc CPD 89/106/EEC Pressure Equipment Directive 97/23/EC Lloyd's Register of Shipping (LR) German Lloyd (GL) Det Norske Veritas (DNV) NORSOK M-650

CERTIFICATE

EN 10204 codes for inspection documents:

3.1 Manufacturers inspection

3.2 Notified body inspection or third party inspection

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