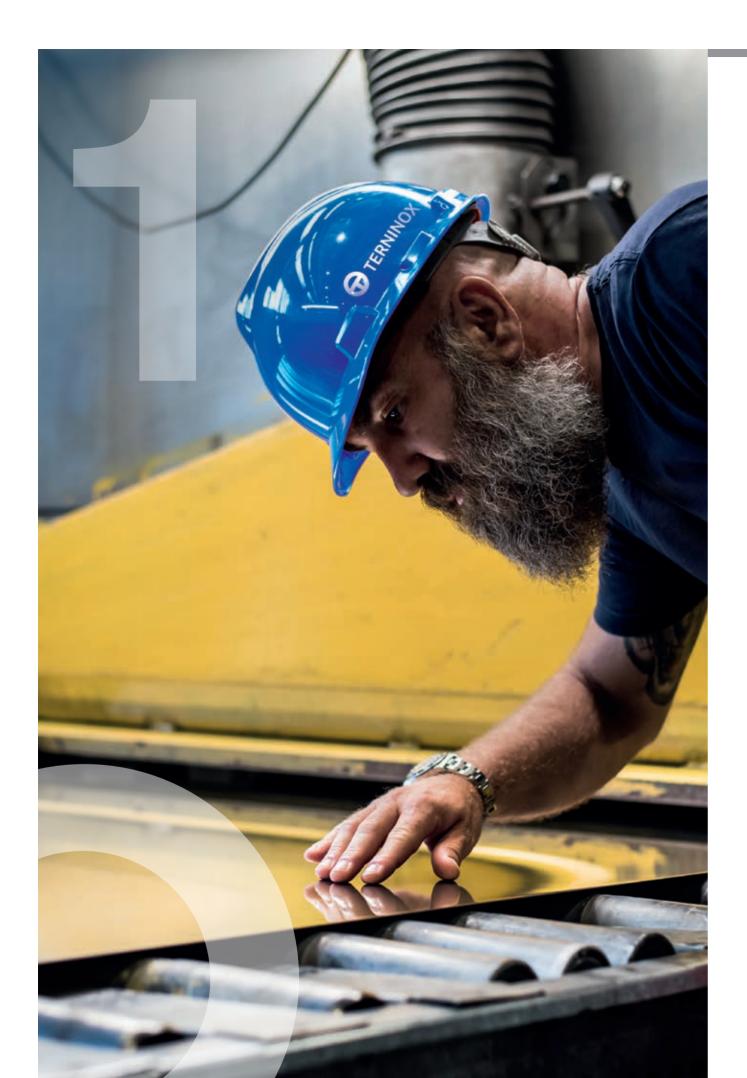


Products catalogue





ABOUT US

Italy's leading stainless steel service center

Terninox S.p.A. is the market leading finishing center for stainless steel in Italy. Founded as a private service center, owned since 2003 by the thyssenkrupp group, Terninox combines the best from its private and mill heritage.

The team of commercial and technical experts is based in Milan, Florence and Venice. Thanks to the close relationship to Acciai Speciali Terni and the focus on high service and quality, Terninox is able supply the most demanding customers all over Europe.

Founded as private SSC

Joined **AST** and

thyssenkrupp

Based in **Milan**Offices in Florence and Venice

200 Mio Euro/Year

Turnover around

16.000 tonsStock availability

50 trucks/day

Supply chain solutions

Certified

Quality & Environment ISO 9001 & ISO 14001



OUR VISION

Be the best Stainless SSC in Europe with focus on surface & quality solutions.

OUR MISSION

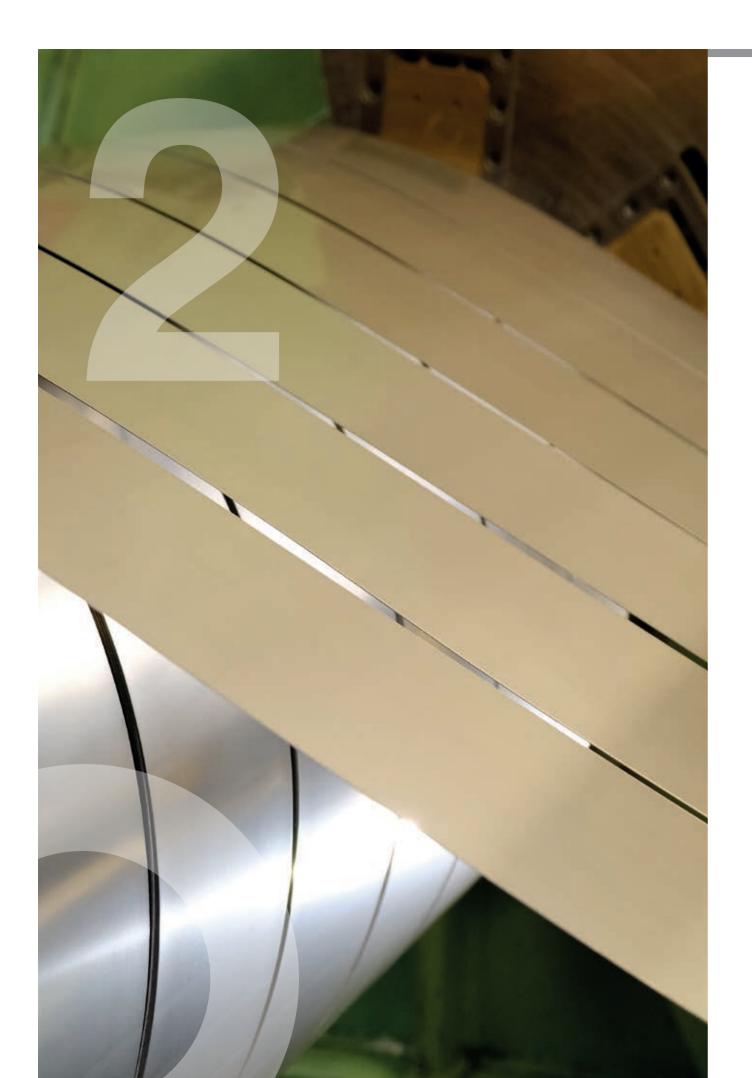
Increase our customers competiveness through exceptional surface quality and flexible solutions performed by our professional employees.

Value for our partners

Starting from our customers' technical and commercial needs, our experts define individual business solutions in order to provide the best-in-class service. The combination of tailor made services and high-consistent product quality ensures that our customers focus on what they can do best. We offer services for different needs including material sourcing, a wide range of grades & surface finishes, packaging and supply chain solutions.



financial services



BEST IN CLASS SERVICES

Cutting, slitting and finishing

OUR FULLY EQUIPPED MANIFACTURING PLANT

SLITTING MACHINES

Slitter and slittering line for cold-rolled coils



SCOTCH BRITE MACHINES

Scotch brite and grinding line for cold-rolled coils



CUT TO LENGTH MACHINES

Levelling and cutting lines for cold-rolled sheets

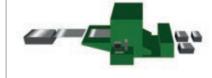


TAMPICO AND MIRROR MACHINE



SHEARING MACHINES

Shearing line for square sheets





BEST IN CLASS SERVICES

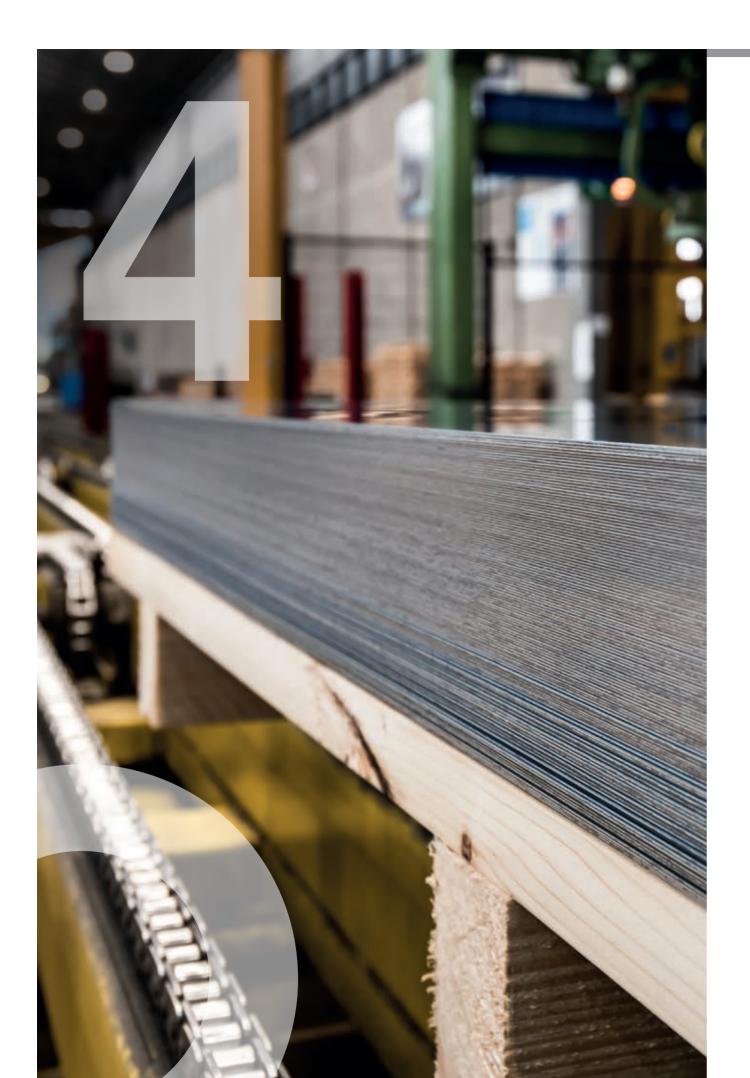
Quality finishes surface

We are able to offer a wide range of surface finishes and protections in order to improve the aesthetics and technical performance of the stainless steel, depending on customers need and final application. With the support of Acciai Speciali Terni we continue to develop new finishes and products.

FINISHES					
DESCRIPTION	AISI ASTM A 480	EN 10088-2	FINISH / GRAIN SIZE	SURFACE CONDITIONS	COMMENTS
Cold rolled, annealed, pickled and skinpassed	2B	2B	2B	Smoother than 2D	Most common finish to ensure good corrosion resistance, smoothness and flatness
Cold rolled, bright annealed and light skinpassed	ВА	2R	ВА	Smoth, bright, mirror-like	Smoother and brighter than 2B
Polished	3	2K	3	Dull	Unidirectional texture
Polished	4	2K	4	Polished, bright	Unidirectional texture
Polished	6	2K	6	Not very reflective	Unidirectional texture
Duplo	4	2K	Duplo	Soft bright polished	Unidirectiona texture, Ra < 0,5µm
Scotch Brite		2J	Scotch Brite	Bright	Brushed with unidirectional texture
Pattern on one side		2M	Patterned	Different designs available	Excellent textured finish mainly for architectural applications
Tampico	2B/ BA	2P	Tampico finish	Shiny	High performance finish for medical and architecture
Mirror	ВА	2P	Mirror finish	Shiny and glossy	High performance finish for medical and tanks



"Thanks to our expertise and manufacturing skills, we provide finishing with the right level of quality for the customer application, ensuring consistency and highest standards over time."



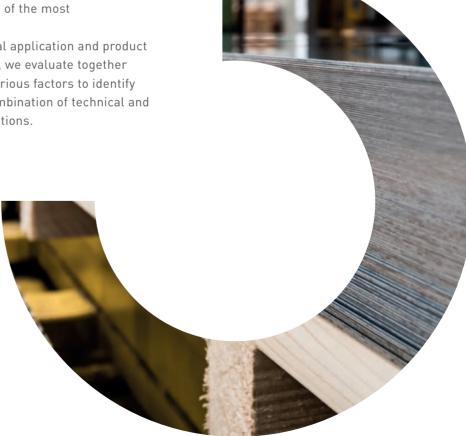
PRODUCT RANGE

Stainless steel flat products

Quality, aesthetics and performance.

Our technical and commercial departments support the selection of the most suitable products.

Starting from the final application and product of the stainless steel, we evaluate together with our customer various factors to identify the most suitable combination of technical and commercial specifications.



PRODUCT PORFOLIO

		FERI	RITIC	AUSTENITIC						
		FERRO CHROME	FERRO CHROME STABILIZED	ROME FERRO CHROME NICKEL			FERRO CHROME NICKEL MOLYBDENUM			
ACCIAI SPECIALI TERNI		430	441 LI	304	304 DL	304 MSA	304 MS	304 PSA	304 PS	316 L
EN 10088-2		1,4016	1,4509	1,4301	1,4307	1,4301	1,4301	1,4301	1,4301	1,4404
COLD ROLLED	2B	√ *	✓	1	1	√	1	✓	✓	✓
COILS AND	BA	√	✓	1	1	√	1	1	✓	✓
SHEETS	Patterned	✓	✓	1	1	✓	1	1	✓	✓
	С	0,04	0,02	0,04	0,025	0,04	0,04	0,04	0,04	0,03
	Cr	16,2	18,2	18,2	18,2	18,2	18,2	18,2	18,2	16,7
TYPICAL COMPOSITION	Ni	-	-	8,1	8,1	8,1	8,6	8,6	9,1	10,3
	Мо	-	-	-	-	-	-	-	-	2,1
	Others	-	Ti, Nb	-	-	Cu	-	Cu	-	-
MECHANICAL	0.2% Yield Strength Mpa	300	300	270	250	260	250	250	250	270
PROPERTIES AT 20 °C	Rm tensile Strength MPa	500	470	650	630	630	630	620	600	580
- TYPICAL VALUES	Elongation A% A ₈₀ (thickness <3mm) A5 (thickness ≥3mm)	27	28	54	54	56	56	58	58	52
FOOD CONTACT	D.M. 21/3/73	✓	✓	✓	✓	✓	✓	✓	✓	✓
	General	+	+	++	++	++	++	++	++	+++
CORROSION	Pitting	+	++	++	++	++	++	++	++	+++
RESISTANCE	SCC	++	++	0	0	0	0	0	0	0
Heat resistence		+	+++	++	++	++	++	++	++	++
COLD FORMABIL	LITY	+	++	++	++	+++	+++	++++	++++	+++
WELDABILITY		+	+++	+++	++++	+++	+++	+++	+++	++++

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DIMENSIONS

Produced to the individual need to enable high utilization and low scrap rate.

COLD ROLLED COILS							
STEEL GROUP	THICKN	ESS mm	WIDTH mm				
STEEL GROUP	FROM	то	FROM	то			
304/430	0.4*	0,.49	5	1270			
304/430	0.5	3	6	1520			
21///1	0.4*	0.59	5	1270			
316/441	0.6	3**	6	1520			

COLD ROLLED SHEETS							
THICKNESS mm		WIDT	H mm	LENGTH mm			
FROM	то	FROM	то	FROM	то		
0.4*	1.5	150	500	250	3000		
0.4*	3**	501	1000	500	6000		
0.4*	3**	1001	1520	1000	6000		

st 0,35 mm thickness availability to be checked upon request

"Our attention to individual customer needs is the starting point for us to provide tailor made products and solutions."

TOLERANCES

Tight quality controls to ensure that customers consistently receive the best quality for their products. The dedication to quality makes it possible to supply the most demanding customers in the market.

THICKNESS TOLERANCES COILS AND SHEETS						
THICKNESS mm	TOLERANCES mm*					
≤ 0.69	± 0.030					
0.70 - 0.99	± 0.040					
1.00 - 1.49	± 0.050					
1.50 - 1.99	± 0.060					
2.00 - 2.99	± 0.090					
3.00 - 4.49	± 0.13					
4.50 - 4.99	± 0.14					
5.0	± 0.15					

^{*} Measured 30 mm from edge

WIDTH TOLERANCES COILS AND SHEETS					
WIDTH mm	TOLERANCES mm				
< 300	± 0.1				
301 - 1000	- 0 + 0.3				
1001 - 1500	- 0 + 0.5				

OTHER TOLERANCES							
	LENGTH	FLATNESS	CAMBER				
LENGTH	TOLERANCES mm	FLAINESS	CAMBER				
250 -2000	- 0 + 4						
2001 -4000	- 0 + 6	According to required standard	According to required standard				
4001 - 6000	- 0 + 8	Stallual u	Standard				

^{**} up to 5 mm thickness availability to be checked upon request

^{* 0,35} mm thickness availability to be checked upon request

 $[\]ensuremath{^{**}}$ up to 5 mm thickness availability to be checked upon request



PRODUCT RANGE

Stainless steel tubes

We fulfill a wide range of customer needs with our stock of welded tubes for aesthetical and architectural applications. We are able to offer a wide range of Ferritic and Austenitic grades including STR 12, 409LI, 441LI, 470LI, 304DL, 316TI, 4828 and several more. For further information please contact us.



STAINLESS STEEL TUBES

RECT	ANGUL	AR TU	BES				
		TH	IICKNESS n	nm			
SECTION mm	1,0	1,2	1,5	2,0	3,0		
	THEORETICAL WEIGHTS kg/m						
20x10	0,453	0,538	0,661				
20x15	0,533	0,634	0,781	1,813			
25x15		0,729					
30x15			1,020	1,335			
30x20	0,772	0,921	1,140	1,495			
40x15			1,259	1,654			
40x20		1,112	1,379	1,813			
40x30		1,303	1,618	2,132	3,156		
50x20		1,303	1,618	2,132	3,156		
50x25			1,737	2,292			
50x30			1,857	2,451			
50x40			2,096	2,770			
60x20			1,857	2,451			
60x30			2,096	2,770	4,080		
60x40			2,336	3,089	4,558		
80x40			2,813	3,726	5,515		
80x60			3,291	4,364	6,471		
100x40				4,364	6,471		
100x50				4,683	6,949		
100x60				5,001	7,427		
120x40				5,001	7,427		
120x60				5,639	8,384		
120x80				6,277	9,340		
150x50				6,277	9,340		
150x100				7,871	11,731		
160x80				7,552	11,253		

	THICKNESS mm							
SECTION	1,0	1,2	1,5	2,0	3,0	4,0		
	THEORETICAL WEIGHTS kg/m							
10x10	0,294							
12x12	0,358	0,415	0,508					
15x15	0,453	0,538	0,661					
20x20	0,613	0,729	0,900	1,176				
25x25	0,772	0,921	1,140	1,495				
30x30	0,932	0,112	1,379	1,813	2,645			
35x35	1,091	1,303	1,618	2,132	3,124			
40x40	1,250	1,494	1,857	2,451	3,602			
45x45			2,097	2,770				
50x50		1,878	2,335	3,089	4,558			
60x60			2,814	3,726	5,515			
80x80			3,771	5,003	7,427			
100x100				6,279	9,340	no		
120x120				7,555	11,253	14,905		
150x150					14,129			

INDUSTRIAL TUBES

WELDE TIG/LA IN ACC	SER					HOD
DIAMETER			THICKN	ESS mm		
DIAMETER FROM 8 TO 34	1,0	1,2	1,5	2,0	2,5	3,0
mm		THE	RETICAL	WEIGHTS	kg/m	
6,0	0,125					
8,0	0,175		0,244			
10,0	0,225	0,264	0,319			
12,0	0,275		0,394			
14,0	0,326	0,385	0,469			
15,0	0,351	0,415	0,507			
16,0	0,376	0,445	0,545	0,701		
17,2			0,597	0,761		
18,0	0,426	0,505	0,620	0,804		
20,0	0,476	0,565	0,695	0,901		
21,3	0,508	0,604	0,744	0,966	1,177	1,375
22,0	0,526	0,625	0,770	1,002		
25,0	0,601	0,715	0,883	1,152		
26,9	0,648	0,772	0,954	1,247	1,527	1,795
28,0	0,676	0,805	0,995	1,302		
30,0	0,726	0,865	1,070	1,402	1,722	2,028
32,0	0,776	0,925	1,146	1,502		
33,0			1,183	1,552		
33,7		0,977	1,209	1,588	1,953	2,306

IN ACC	ORDA	NCE	EN 10	271-7	- TC1			
DIAMETER	THICKNESS mm							
FROM 35 TO	1,0	1,2	1,5	2,0	2,5	3,0		
127 mm		THE	RETICAL	WEIGHTS	kg/m			
35	0,851	1,016	1,258	1,653				
38	0,926	1,106	1,371	1,803				
40	0,977	1,166	1,446	1,903		2,779		
42,4	1,037	1,238	1,536	2,023	2,498	2,960		
45	1,102	1,316	1,634	2,153				
48,3	1,184	1,415	1,758	2,319	2,867	3,403		
50	1,227	1,466	1,822	2,404				
52	1,277	1,526	1,897	2,504				
54	1,327	1,586	1,972	2,604				
60,3	1,485	1,776	2,208	2,919	4,304	5,639		
63,5		1,872	2,329	3,080				
70			2,573	3,405				
76,1			2,802	3,711		5,491		
80			2,948	3,906				
84			4,107					
88,9			3,283	4,352	5,409	6,453		
101,6			3,760	4,988				
104,0				5,108				
114,3			4,237	5,624	6,999	8,361		
129,0				6,360	9,465			
139,7			5,191	6,896		10,269		
154,0				7,612				
168,3				8,328	10,379	12,417		
204,0				10,116				
206,0						15,249		
219,1				10,872		16,233		
254,0				12,620		18,855		
256,0						19,005		
273,0				13,572		16,933		
304,0				15,124				
306,0						22,761		
323,9				16,121	20,120	28,873		
355,6				17,708	22,104	26,487		
406,4				20,252		30,303		

WELDED ROUND TUBES WITH METHOD TIG/LASER



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