Products catalogue



Stainless steel flat products



ACCIAI SPECIALI TERNI

ACCIAI SPECIALI TERNI

No market is too far away for our knowledge, passion and spirit of innovation

Innovation, expertise, reliability and global vision are our business card that better describes our presence in the world market.

If you look for outstanding knowledge, innovation and quality, Acciai Speciali Terni is the solution. We are where you are, with a wide range of products and finishes and with a unique and innovative sales organization, offering every single customer our whole company's passion, know-how and expertise built on more than 130 years of history.

Abt. 1,000,000 tonnes

distributed worldwide

More than

130 years of history and expertise

Manufacturing plant

in Italy,

sales headquarter

in Germany



ALL OVER THE WORLD

A network with over **500 sites** belonging to the Group in **44 countries**

Global Key Accounts per segment

Regional Sales Approach

The strength of a unique sales network throughout the world ensures timely and customized responses for each market sector and application: transportation, household applications, industrial goods, architectural applications, tubes, pumps and other innovative applications.

Wherever you are, you can count on the expertise and innovativeness of our technical and sales team.



CUSTOMER ORIENTED

A wide and flexible product range

Austenitic, ferritic and martensitic

Stainless steel in coils, sheets and strips

Standard and innovative **finishes**

SHAPED ON YOUR NEEDS

Our product range is constantly improved and enriched: today our plant produces austenitic, ferritic and martensitic hot rolled and cold rolled stainless steel flat products with tailor made finishes, shapes and sizes.

Customized products, innovative solutions and service quality are behind the secret making our stainless steel be the material of excellence for many market sectors.

The depth of product range with the support and technical service of an integrated worldwide team of specialists offers tailor made solutions and maximum customer reliability.

New products and finishes

for specific market segments

Research in emerging and innovative applications

A state of the art IT infrastructure and tailor made technical solutions



INNOVATION, THE KEY FOR OUR FUTURE GROWTH

The cooperation with Centro Sviluppo Materiali (CSM), one of the major Italian research centers in materials, ensures excellent worldwide standards of quality.

The synergy built with our internal IT services provides first class solutions able to optimize timing and methodology for managing customer requirements.

The connecting link to our customers is all-round innovation found within our manufacturing, logistics and packaging processes in creating innovative products and services.



Dedicated integrated team of professionals committed to each single customer

Experienced personnel

for your support

YOUR REQUESTS, OUR EVERYDAY COMMITMENT

Everything we do is designed and oriented to meet your needs and expectations: an excellent product, all necessary certifications, prompt delivery terms, constant technical support and care of every detail along with a cross-functional team to support you at the best.

Thanks to an integrated manufacturing process, a worldwide sales and service network able to ensure closeness to local markets, we can provide solutions that best suit your needs promptly.





Training Center

Abt. 4,000 training days

All the main

Quality and Safety certifications

OVER 2,000 PEOPLE, ONE SINGLE COMPANY, ONE SINGLE MARKET FORCE

We aim to create an environment where all individuals can fulfill their potential, maintaining safety and health related issues in first place.

We care for the professional development of our workforce members: we have created a specific training center, as our employees are our primary asset and they mark the difference with their expertise and competence.

Their passion and motivation are the first welcome Acciai Speciali Terni gives to each customer.



PRODUCTS PORTFOLIO

Shaping your projects

Our range is enriched every day with new products and finishes.

We are able to produce austenitic, ferritic and martensitic stainless steels to meet the needs and expectations of customers from every market segment: transportation, household applications, industrial goods, architectural applications, tubes, pumps and other innovative applications. Each grade of stainless steel can differ widely in terms of chemical composition, mechanical properties, corrosion resistance, cold formability and weldability. We offer semi-finished products (Black coils), Hot rolled coils and cold rolled coils.

The product is manufactured with different thicknesses, widths and lengths based on specific customer requirements and needs.

Our Finishing Center is able to offer a wide range of surface finishes to improve aesthetics and technical performance of the product.

Our technical service, always close to the customer, supports the selection of the most suitable grade and more appropriate finish for the specific needs and final application of the stainless steel.



A COMPLETE OFFER OF STAINLESS STEEL GRADES

		MAR	TENS	ITIC	FER	RITI	IC												AUS	TEN	ITIC																		
		FEF	RO CHR	OME	FEF	RRO CHR	ROME			FERRO	CHRO	ME STA	BILIZED		FERRO CHROME STABILIZED SUPER FERRITIC		RO CHR LYBDEN						ı	FERRO CI	HROME	NICKEL					FER		OME NICI DENUM	(EL		HEA.	T RESIST	ANT	
ACCIAI SPECIALI T	ERNI	420A	420J2	420	410 S	STR 12	430	409	409 LI	430 TI	439 M	439 MPS	441 LI	441 PS	470 LI	434	444	4513	301	301 Cu	301 L	304	304 L	304 DL	304 MSA	304 MS	304 PSA	304 PS	304 PSQ	321	316	316 L	316 SLD	316 Ti	304 H ****	309 S ****	310 S *****	321 H *****	4828 ****
EN 10088-2		1.4021	1.4028	1.4034	1.4000	1.4003	1.4016	1.4512	1.4512	1.4520	1.4510	1.4510	1.4509	1.4509	1.4613	1.4113	1.4521	1.4513	1.4310	-	1.4318	1.4301	1.4306	1.4307	1.4301	1.4301	1.4301	1.4301	1.4301	1.4541	1.4401	1.4404	1.4435	1.4571	1.4948	1.4833	1.4845	1.4878	1.4828
DELIVERY CONDITI	ONS																																						
HOT ROLLED COILS	N°1 Finish	✓	1	✓	✓	1	✓	✓	✓	/	1	1	1	1	✓	1	1	✓	✓	✓	✓	1	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	/	✓	✓	1	✓	✓
AND SHEETS	Floor plates																						/		✓	/					/	/							
	2E																		✓			/		✓						✓		/		✓					
	2D / 2B				✓	/	√ *	✓	/	√	/	/	1	✓	√	/	/	✓	✓		√	/	/	√	√	✓	✓	√	✓	√	✓	✓	✓	/	✓	√	/	✓	✓
COLD ROLLED COILS AND SHEETS	BA	/	1	/			/		/	/	/ ***	/	/ ***	✓	√			/	/	√	/	1	1	/	√	/	/	1	/	/		√	/	/					
OOILS AND SHEETS	Work hardened						/ **												✓		√	1				1	1												
	Patterned						√															1		/	✓	/	/	/				1							
	С	0.21	0.32	0.46	0.03	0.02	0.04	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.06	0.02	0.02	0.10	0.09	0.03	0.04	0.03	0.025	0.04	0.04	0.04	0.04	0.04	0.05	0.06	0.03	0.03	0.05	0.06	0.06	0.05	0.05	0.05
	Cr	13.2	13.2	13.2	12.2	11.3	16.2	11.5	11.5	16.2	17.7	17.7	18.2	18.2	24.0	16.7	17.7	16.3	17.4	17.2	17.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	17.3	16.7	16.7	17.4	16.7	18.2	22.6	24.3	17.2	19.3
TYPICAL COMPOSITION	Ni				-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	7.6	6.0	6.6	8.1	10.1	8.1	8.1	8.6	8.6	9.1	9.6	9.1	10.6	10.3	13.0	10.6	8.1	13.1	19.1	9.1	11.1
COMPOSITION	Мо				-	-	-	-	-	-	-	-	-	-	-	1.0	2.1	1.2	-	-	-	-	-	-	-	-	-	-	-	-	2.1	2.1	2.7	2.1	-	-	-	-	-
	Others				-	-	-	Ti	Ti	Ti	Ti, Nb	-	Ti, Nb	Ti	_	Cu	N	-	-	-	Cu	-	Cu	-	-	Ti	-	-	-	Ti	N	Si	Si	Ti	Si				
	0.2% Yield Strength Mpa	360	360	400	300	320	300	250	250	300	280	280	300	290	330	320	330	300	280	270	350	270	250	250	260	250	250	250	240	250	300	270	300	270	300	300	260	260	290
MECHANICAL PROPERTIES AT	Rm tensile Strength MPa	590	650	700	450	500	500	420	420	450	450	450	470	450	490	500	500	470	700	750	800	650	570	630	630	630	620	600	600	590	610	580	600	580	600	600	580	600	640
20 °C - TYPICAL VALUES	Elongation A% A _∞ (thickness <3mm) A ₅ (thickness ≥3mm)	26	23	19	25	23	27	30	32	27	30	34	28	32	30	25	28	28	50	58	45	54	55	54	56	56	58	58	60	57	50	52	50	55	54	45	45	57	55
FOOD CONTACT D.M	. 21/3/73	/	1	/			/				/	/	1	1	√		/		✓	1		1	1	√	/	/	1	/	/	√	/	1		/					
	General	+	+	+	0	0	+	0	0	+	+	+	+	+	+++	++	+++	++	+	++	++	++	++	++	++	++	++	++	++	+++	+++	+++	++++	+++	++	+++	+++	+++	+++
CORROSION	Pitting	+	+	+	0	0	+	0	+	++	+	++	++	++	+++	++	+++	++	+	++	++	++	++	++	++	++	++	++	++	+++	+++	+++	++++	+++	++	+++	+++	+++	++
RESISTANCE	SCC	+	+	+	+	+	++	+	+	++	++	++	++	++	+++	++	+++	++	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Heat resistence	+	+	+	0	0	+	0	++	+	++	+	+++	+++	+++	+	+	+	+	++	++	++	++	++	++	++	++	++	++	+++	++	++	++	++	++	++++	++++	++	+++
COLD FORMABILITY		+	+	+	+	+	+	++	++	++	++	++	++	+++	++	+	+	++	++	+++	++	++	+++	++	+++	+++	++++	++++	++++	+++	++	+++	+++	+++	++	+	+	++	+
WELDABILITY		+	+	+	+	++	+	++	+++	+++	+++	+++	+++	+++	+++	+	+++	+++	++	+++	++++	+++	++++	++++	+++	+++	+++	+++	+++	+++	+++	++++	++++	++++	+++	+++	++	++	+++

The above table reports the main steels produced and traded by Acciai Speciali Terni. Other steel grades are also available. You can check them out on our website. For any different requirements, please contact marketing.ast@acciaiterni.it

The above mentioned figures, which refer to 1 mm CR, 2B finish, are approximate; they can vary according to thickness and finishing

^{* 2}D/2B finish is feasible only in relation to the final use

^{** 430} HT and 430 AR grades coil after work hardening process

^{***} Only for max. thickness 1.0 mm, larger thicknesses will be agreed according to the use

^{****} Chemical composition and mechanical properties according to EN 10028

^{*****} Chemical composition and mechanical properties according to EN 10095

Not applicable/not required

⁺ Acceptable

⁺⁺ Good +++ Excellent

⁺⁺⁺⁺ Superior performance

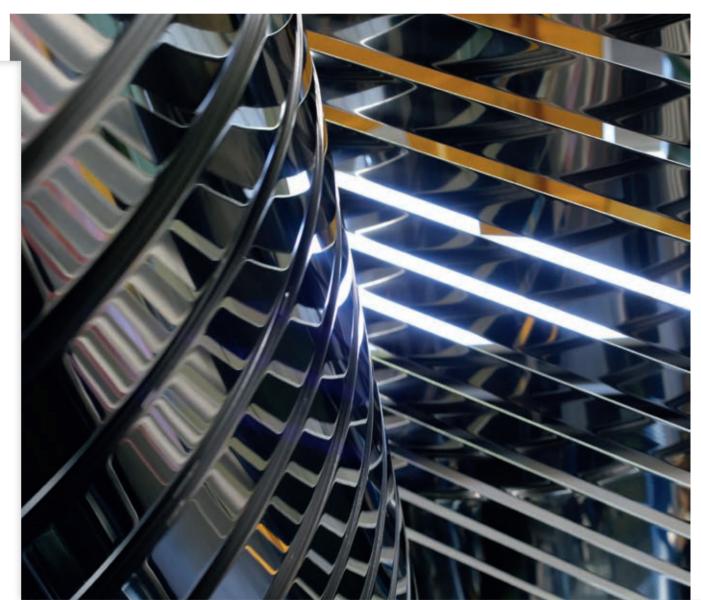


COLD ROLLED

Stainless steel

INOX





PRODUCTS PORTFOLIO 23
Cold Rolled

Dimensions

COLD ROLLED COILS	COLD ROLLED COILS								
STEEL GROUP	THICKN	ESS mm	WIDTH mm***						
	FROM	ТО	FROM	TO					
MARTENSITIC BA	0.5*	2	100	1270					
FERRITIC 2D-2B	0.35**	0.79	100	1270					
FERRITIC 2D-2B	0.8	3	100	1520					
	0.35**	0.79	100	1270					
AUSTENITIC AND FERRITIC BA	0.8	1.5	100	1520					
	1.51	2	100	1270					
AUSTENITIC 2D-2B	0.4	0.69	100	1270					
AUSTENTITE ZD-ZB	0.7	5	100	1520					

Coil inner diameter: 610 mm and 508 mm

STEEL GROUP	THICKNE	SS mm	WIDT	H mm	LENGTH mm***		
	FROM	TO	FROM	TO	FROM	TO	
	0.5*	1.5	150	500	250	4000	
	0.5*	1.5	501	1000	500	4000	
	0.5*	1.5	1001	1250	1000	4000	
MARTENSITIC BA	1.51	2	150	500	250	4000	
	1.51	2	501	1000	500	4000	
	1.51	2	1001	1250	1000	4000	
	0.35**	0.79	150	500	250	4000	
	0.35**	0.79	501	1000	500	4000	
	0.35**	0.79	1001	1250	1000	4000	
ERRITIC 2D-2B	0.8	3	150	500	250	4000	
	0.8	3	501	1000	500	4000	
	0.8	3	1001	1250	1000	4000	
	0.8	3	1250	1524	1000	6000	
	0.35**	1.5	150	500	250	4000	
	0.35**	1.5	501	1000	500	4000	
	0.35**	1.5	1001	1250	1000	4000	
AUSTENITIC AND FERRITIC BA	0.8	1.5	1251	1524	1000	6000	
	1.51	2	150	250	500	4000	
	1.51	2	501	1000	500	4000	
	1.51	2	1001	1250	1000	4000	
	0.4	0.69	150	500	250	4000	
	0.4	0.69	501	1000	500	4000	
	0.4	0.69	1001	1250	1000	4000	
	0.7	3	150	500	250	4000	
USTENITIC 2D-2B	0.7	3	501	1000	500	4000	
OSTENITIC ZU-ZB	0.7	3	1001	1250	1000	4000	
	0.7	3	1251	1524	1000	6000	
	3.01	5	500	1000	1000	4000	
	3.01	5	1001	1250	1000	4000	
	3.01	5	1251	1524	1000	6000	

^{* 0.5} mm thickness availability to be checked upon request

^{** 0.35} mm thickness availability to be checked upon request

^{***} >6000 length will be evalueted on client's request

PRODUCTS PORTFOLIO

Tolerances

THICKNESS TOLERANCES COILS AND	THICKNESS TOLERANCES COILS AND SHEETS							
THICKNESS	TOLERANCES*							
≤ 0.59	± 0.030							
0.60 - 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 Asymmetric tolerances available

WIDTH TOLERANCES COI	LS AND SHEETS	
THICKNESS	WIDTH	TOLERANCES*
≤ 1.75		- 0 + 0.3
1.76 - 2.50	< 150	- 0 + 0.4
2.51 - 3.00		- 0 + 0.5
≤ 1.75		- 0 + 0.3
1.76 - 3.00	151 - 230	- 0 + 0.5
3.01 - 5.00		- 0 + 2.0
≤ 3.00	231 - 609	- 0 + 0.5
3.01 - 5.00	231 - 007	- 0 + 2.0
≤ 3.00	610 - 1524	- 0 + 1.5
3.01 - 5.00	010 - 1324	- 0 + 2.0

^{*} Measured 30 mm from edge Asymmetric tolerances available

OTHER TOLE	OTHER TOLERANCES							
LEN	GTH	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							

Special requests of dimensions and tolerances will be evaluated from time to time

Surface Protection

Cold rolled products are protected with interleaving paper; on request they can be delivered without protection or protected on one side or both by a removable plastic film based on the customer requirements.

PRODUCTS PORTFOLIO 25
Cold Rolled

Surface Finishes

A wide range of surface finishes for aesthetic and technical solutions.

FINISHES					
DESCRIPTION	AISI ASTM A 480	EN 10088-2	ACCIAI SPECIALI TERNI EQUIVALENT	SURFACE CONDITIONS	COMMENTS
Hot rolled, annealed, pickled and cold rolled		2H	Work hardened	Oiled	Cold worked to achieve higher tensile strength
Cold rolled, annealed and mechanically descaled		2E	ZH	Rough and dull	Usually applied to steels with a scale which is very resistant to pickling solutions
Cold rolled, annealed and pickled	2D	2D	2D	Smooth	Finish for good formability, but not as smooth as 2B or 2R
Cold rolled, annealed, pickled and skinpassed	2B	2B	2В	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	2G	3	Dull	Unidirectional texture
Polished	4	2G	4	Polished, bright	Unidirectional texture
Scotch Brite		2J	Scotch Brite	Brushed	Unidirectional texture Ra←0,2µm
Duplo	4	2K	Duplo	Soft bright polished	Unidirectiona texture, Ra←0,5µm
Transparent coil-coated			Silver Ice®	Steel texture is visible	Anti-fingerprint, easy-to- clean
Coloured coil-coated		2L	Vernest®	Coloured	General use coloured coating
Pre-primed coil-coated			Primerinox®	Backing coat on B-side	Improves the adhesion of PU/epoxy foams

Surface finishes availability must be verified by steel grade on the basis of specific requests

Standard Finishes



2H - Work hardened coils

TYPICAL MECH	IANICAL PROPE	RTIES		
GRADE ACCIAI SPECIALI TERNI	COLD WORK LEVEL	TENSILE STRENGTH Rm (mpa)	0.2% STRENGTH Rp 0.2% mpa	ELONGATION A50 (%)
	Annealed	> 620	> 310	> 40
	1/8 hard	> 690	> 380	> 40
301	1/4 hard	> 860	> 515	> 25
301 L	1/2 hard	> 1035	> 760	> 18
	3/4 hard	> 1205	> 930	> 12
	full hard	> 1275	> 965	> 9
	Annealed	> 515	> 205	> 40
	1/16 hard	> 620	> 310	> 40
304	1/8 hard	> 690	> 380	> 30
	1/4 hard	> 860	> 515	> 10
	1/2 hard	> 1035	> 760	> 7
430 HT / 430 AR	Up to HRC 32			

Delivery conditions: thickness from 0.4 to 2.00; width from 1000 to 1250 mm
The hardening operation gives stainless steel higher mechanical resistance.
Acciai Speciali Terni 430 HT/430 AR, 304, 301 and 301 L are delivered in the work hardened condition

2E - Cold rolled, annealed and mechanically descaled

Thickness tolerances according to UNI EN ISO 9445-2

MINIMUM T	MINIMUM THICKNESS mm							
STEEL GROUP	WIDTH mm							
STEEL GROUP	1020	1270	1520					
304 / 321	1.50	1.50	2.50					
301	1.50	1.80	3.00					
316L	1.50	2.50	4.00					
309S	1.80	2.00	3.50					
310	1.80	3.00	4.00					

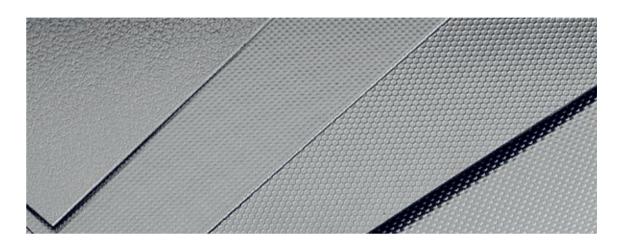
Shown table may be revised in the future for additional thickness ranges and new materials $% \left(1\right) =\left(1\right) \left(1$

PRODUCTS PORTFOLIO 27
Cold Rolled

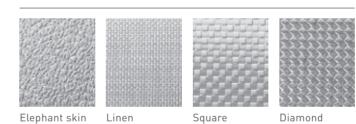
Patterned and Micro-Patterned finishes

Perfection is shown in all its details

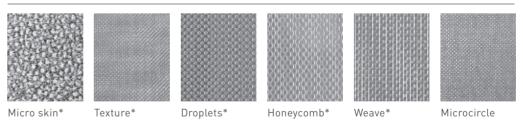
Patterned and micro-patterned finishes are obtained using specifically patterned cylinders during cold rolling operations and followed by bright annealing.



Patterned Finishes



Micro-Patterned Finishes



Personalized patterns on request

AVAILABLE DIMENSIONS								
TYPE	THICKNESS	WIDTH	SHEETS					
304 / 430	0.6 ÷ 1.5	500 ÷ 1250	500 ÷ 4000					
304 / 430	0.8 ÷ 1.5	1251 ÷ 1520	500 ÷ 4000					

^{*} Based on project.

VIVINOX® Coil coated stainless steel

Vivinox® is Acciai Speciali Terni's brand of coil-coated products, manufactured with special organic coatings which allow the enhancement and customization of the surface finishes found on all standard stainless steel grades.

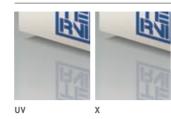
With the anti-fingerprint coating **Silver Ice**®, the visual impact of stains and fingerprint smudges is lowered. Furthermore, these stains can be dry-cleaned – no cleaning fluids and rinsing needed! **Silver Ice**® also offers a limited protection against scratches and corrosion.

Stainless steel panels coated with **Vernest**® colored coatings offer unlimited freedom in the choice of color schemes for architectural and construction projects.

The organic primer layer applied on the bottom side of the **Primerinox®** products increases the surface energy of stainless steel, allowing for an optimal spread and adhesion of epoxy and PU foams.

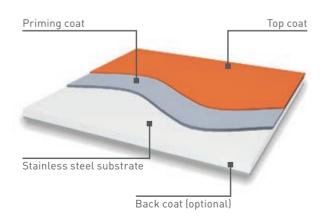
The **Vivinox®** organic coatings are applied on stainless steel on a state-of-the-art coil coating line which ensures that the product properties are homogenous over the entire surface of the coil.

Silver Ice®



Vernest®





PRODUCTS PORTFOLIO 29
Cold Rolled

Coil coated stainless steel

PRODUCT RANGE								
	MIN	MAX						
Thickness	0.4 mm	1.2 mm						
Width	100 mm	1500 mm						
Coil weight	2,000 kg	12,000 kg						
Surface protection	Temporary protective film on request							
Packaging	Special for coil coated products							

ORGANIC C	OATS		
SERIES		DRY FILM THICKNESS	DESCRIPTION
SILVER ICE®	Transparent finishing	1.5 - 3.5 µm	Anti-fingerprint and cleanability properties
VERNEST®	Coloured finishing	20 - 25 μm	Polyester, super polyester or PVDF are available for outdoor applications
PRIMERINOX®	Preprimed surface	5 - 8 µm	For foam adhesion, post painting, adhesive structural bonding

 $\label{thm:continuous} \textit{Various steel grades and coatings can be provided in agreement with the sales department}$

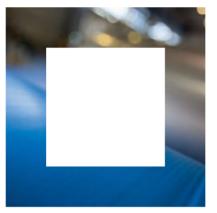


31

HOT ROLLED

Stainless steel





Dimensions*

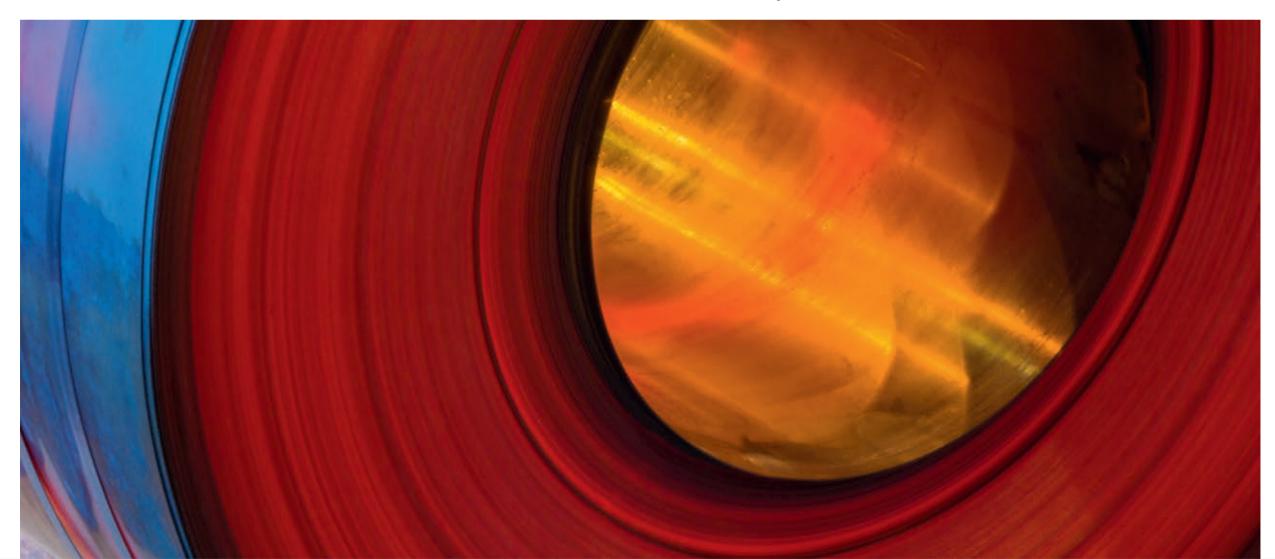
PRODUCTS PORTFOLIO

Hot Rolled

HOT ROLLED COILS							
STEEL GROUP	THICKN	ESS mm	TRIMMED EDGES	MILL EDGES			
SHEETS FROM 1000 TO 6000 mm	FROM	ТО	WIDTH mm				
Martensitic Ferro Chrome	2.5	6,5	1000	1020			
Martensitic Ferro Chrome	3.0	6,5	1250	1270			
5 01 01 14111	2.0	6.5	1000	1020			
Ferro Chrome - Chrome Molybdenum and Stabilized Ferritic	2.5	6.5	1250	1270			
	3.5	6.5	1500	1520			
	5.0	6.5	1000	1020			
Superferritic	5.0	6.5	1250	1270			
	5.0	6.5	1500	1520			
	1.84	6.5	1000	1020			
Ferro Chrome Nickel Austenitic**	2.5	6.5	1250	1270			
	3.5	6.5	1500	1520			
5 0 10 11 14 11 1	2.5	6.5	1000	1020			
Ferro Chrome Nickel Molybdenum and Heat Resistant Austenitic	3.5	6.5	1250	1270			
neat Resistant Austennic	5.5	6.5	1500	1520			

^{*} Indicative values: limits to be confirmed for each stainless steel grade

321 for 1520 mm length, min. thickness 3.8 mm



^{**} Ferro Chrome Nickel Manganese Nitrogen Austenitic available



Tolerances

THICKNES	S TOLERAN	ICES
THICKNESS	TOLERANCE*	
2.00	± 0.12 mm	Inner coil diameter: 610 mm (implicit) and 508 mm CAMBER 20 mm every 5 metres
2.01 - 5.0	± 0.15 mm	FLATNESS According to required standard
5.01 - 6.0	± 0.18 mm	
>6.0	± 0.22 mm	

^{*} Or asymmetrical tolerances of the same total range; thickness is measured 40 mm from the edge

TRIMMED EDGES		THICKN	ECC mm							
WIDTH mm		THICKNESS mm								
	2.00 ÷ 2.50	2.51 ÷ 3.00	3.01 ÷ 5.00	5.01 ÷ 6.50						
150 ÷ 230	- 0 +0.50	- 0 +0.50	- 0 +2.00	- 0 +3.00						
231 ÷ 609	- 0 +0.50	- 0 +0.50	- 0 +2.00	- 0 +4.00						
610 ÷ 1524	- 0 +1.50	- 0 +1.50	- 0 +2.00	- 0 +4.00						

L	LENGTH TOLERANCES						
	LEN	GHT	TOLEF	RANCE			
	from mm	to mm	mm	mm			
	250	2000	-0	+4			
	2001	4000	-0	+6			
	4001	6000	-0	+8			

Special requests of dimensions and tolerances will be evaluated upon need ISO 9444-2 applicable to all dimensional tolerances

PRODUCTS PORTFOLIO 33
Hot Rolled

Surface Finishes

A wide range of surface finishes for aesthetic and technical solutions.

Finishes



1

FINISHES									
DESCRIPTION	ASTM A793 PATTERN B	AISI ASTM A 480	EN 10088-2	ACCIAI SPECIALI TERNI EQUIVALENT	SURFACE CONDITIONS	NOTE			
Hot rolled, not annealed not pickled		(HR)	1U	Black	Covered with mill scale	Suitable for products which are further processed (e.g. Strip for rerolling)			
Hot rolled, annealed and pickled		1	1D	1	Free from scale	Normal standard to guarantee good corrosion resistance			
Floor plates	V		1M	1M	Floor pattern	Patterned on one side			

Finishes



Floor Plates Floor Plates

FLOOR PLATES SPECIFICATIONS									
Nominal thickness (mm)	3	3.5	4	4.5	5	5.5	6	6.35	
Pattern thickness (mm)	1.39	1.39	1.39	1.52	1.52	1.52	1.52	1.52	
Weight (kg/m²)	30	33	38	41	45	48	52	55	
Length (mm)	1000 - 6000								
Acciai Speciali Terni	Width		1020. 1270 mm		Min. thickness		3 mm		
304 MS - 304MSA - 304 L			1545 mm		Min. thick	rness	4 mm		
Acciai Speciali Terni	\\/i	dth	1020 mm		Min. thickness -		4 mm		
316 - 316 L	Width		1270 mm		MIII. UIICKIIESS		5 mm		

Antisliding characteristics of floor plates are certified according to DIN 51130 Dimensional tolerances are according to ASTM A793 Pattern B

PRODUCTS PORTFOLIO





TAILOR MADE SERVICES

Solutions designed to meet your needs

Quality Management System Technical Customer Support Supply Chain

Packaging

The Acciai Speciali Terni group started to produce steel under a Quality System in the 1970s, with the granting of a Quality System Certificate by ASME (the American Society of Mechanical Engineers) and it continued through the 1990s with greater impetus. Acciai Speciali Terni is certified ISO 9001:2008 Certificate No. 9009 by IGQ – Istituto Italiano di Garanzia della Qualità. This body is a member of CISQ (Italian Certification for Company Quality Systems), a member of IQNet, The International Certification Network. This Certificate covers all operations and productions carried out at Acciai Speciali Terni plants. Acciai Speciali Terni also holds Certificate No. 09/2001/MUC by TÜV Süddeutschland, attesting Quality System compliance with the Pressure Equipment Directive 97/23/EC (PED).

In addition to the above Quality System Certifications, Acciai Speciali Terni holds the following product approvals:

- production and trading of items for pressure vessels in accordance with AD-2000 Merkblatt W0, W2 and W10 by TÜV Süddeutschland
- production and trading of construction products according to Regulation CPR 305/2011 CE and standards 10088-4/5;
 CE marking of stainless steel products by IGQ
- anti-slip properties of floor plates according to DIN 51130 by TÜV Rheinland
- confirmation of the environmental certification in accordance with UNI EN ISO 14021 on the minimum postconsumer waste content (IGQ) of austenitic ferritic and carbon steels
- approval of Manufacturer Certificate for Naval Applications issued by Lloyd's Register
- approval of Manufacturer Certificate for Naval Application issued by DNV DL.















TAILOR MADE SERVICES 39

Technical Customer Support

Worldwide support

High quality products requires the highest standards of service.

Our work consists in ensuring the highest quality in technical service and support.

Our worldwide network is at your service to provide insights and information on products, testing applications and help you to identify the product and finish that best suits your manufacturing needs.

In every step of our supply, your needs require our constant commitment.



Supply Chain

From design to delivery, our service is always tailor made

With our network of worldwide sales and service centers, we are close enough to every customer to ensure maximum efficiency even with delivery time.

Our global presence supported by an innovative IT and logistics infrastructure, helps us simplify and speed up the management process, enabling us to satisfy any request within a highly competitive time frame.





Packaging

Coils Packaging



Example of packaging for eye-to-the-side coils (R7)

EYE-TO-THE-SIDE COILS (min. width 650 mm)						
	99	R7	R1	R2	R8	RT
Wooden board			1	1	1	
Anti-parasite wooden board						1
Outer protection with ribbed plastic sheet	1		1	1	1	1
Outer protection with heavy slatted cover		1				
Edge-protectio angle pieces		1			1	1
Multiple pieces				1		
Strip wrapped in plastic film						1



Example of packaging for eye-to-the-sky coils (V1)

EYE-TO-THE-SKY COILS (heigh	EYE-TO-THE-SKY COILS (height ≤1000 mm)							
	V1	V1	V2	VC	VB	VT		
Wooden board	1	1	1	1	1			
Anti-parasite wooden board				1		1		
Outer protection with ribbed plastic sheet, smooth plastic sheet and lower disk		1	1	1	1	1		
Outer plastic collar		1	1	1	1	1		
Edge-protection angle pieces				1	1			
Strips wrapped in nylon film				1	1	1		
Multiple pieces	1	1	1	1	1	1		
Hygroscopic salts inside					1			
Upper ribbed plastic disk			1	1	1	1		

TAILOR MADE SERVICES 41

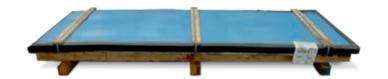
Sheets Packaging



Example of packaging for blanks (Q1)

BLANKS			
	Q1	QT	QR
Wooden frame	1		
Anti-parasite wooden frame		1	1
Protection for upper and lower package faces	1	1	1
Package wrapped in polythene paper *		1	1
Vertical edge-protection angle pieces		1	1
Horizontal edge-protection angle pieces	1	1	1
Pickup side turned by 90°			/

^{*} Packages may be wrapped or only covered with polythene paper

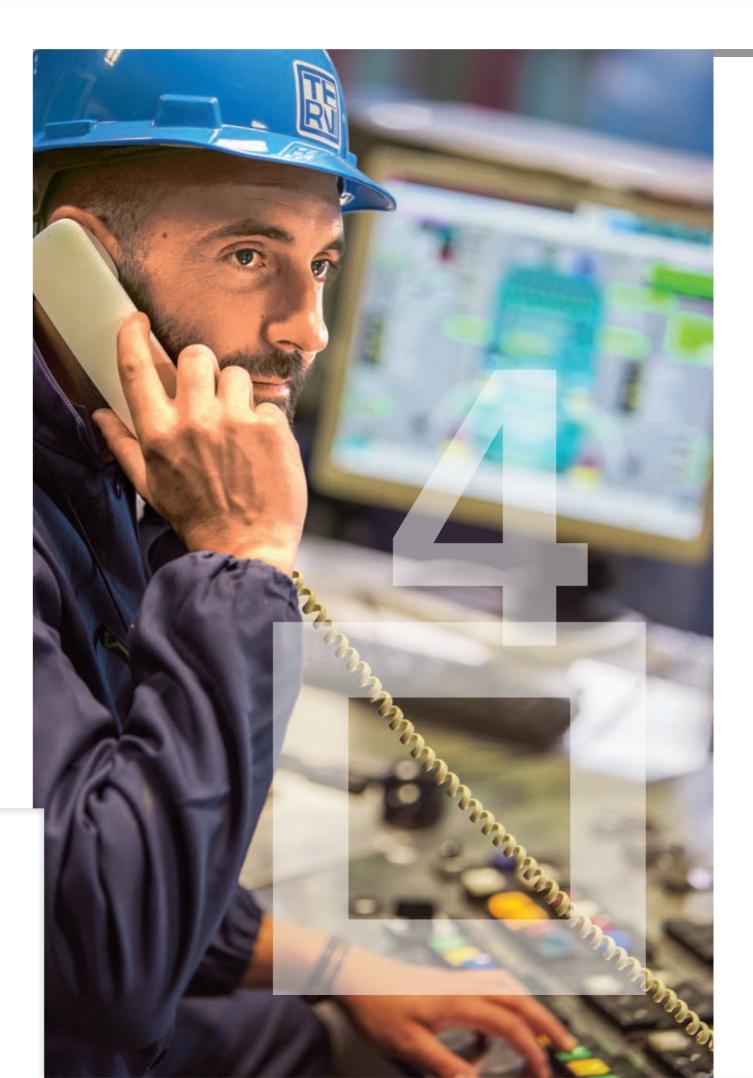


Example of packaging for sheets (F8)

SHEET PACKAGES			
	F7	F8	FT
Wooden frames	✓		
Anti-parasite wooden frames		1	1
Cover for upper and lower package sides	✓	1	1
Package covered with plastic film			1
Package wrapped in plastic film	✓	1	
Horizontal edge-protection angle pieces	✓	/	1
Standard size board			1
Fork pickup board	✓	1	

Different packaging types may be provided whose special features depend on product and customer requirements

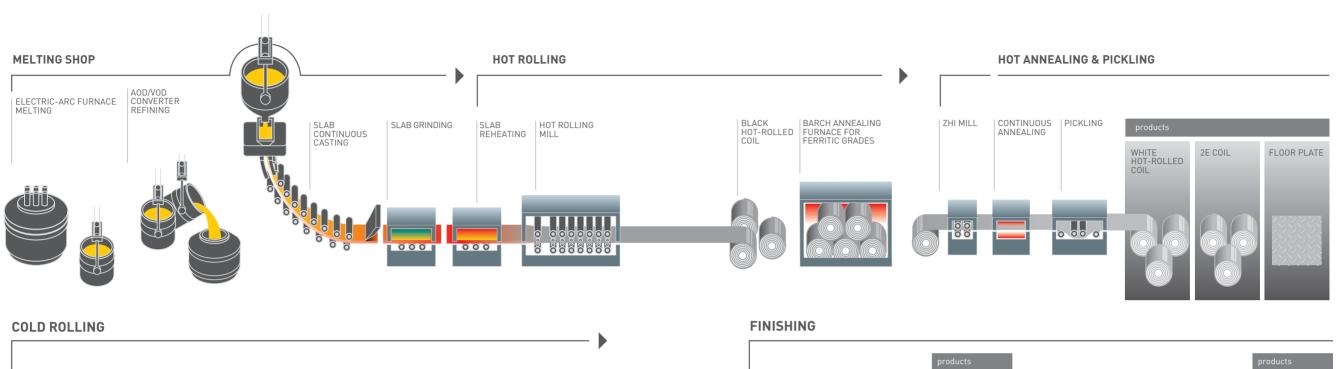


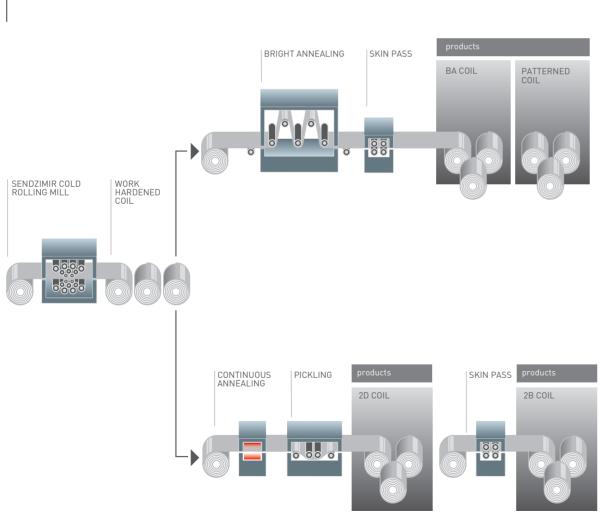


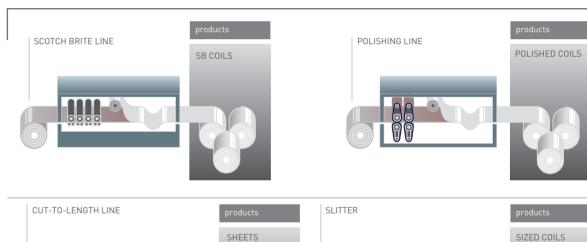
MANUFACTURING EFFICIENCY

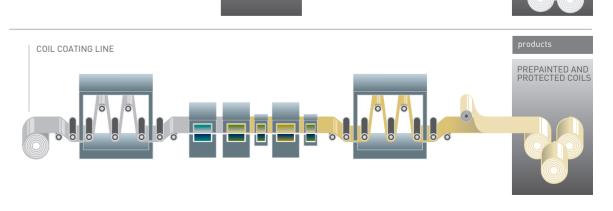
Fully integrated manufacturing plant, unique in the world

You can count on a completely integrated and highly efficient productive cycle. All steps of the manufacturing processes are completed at the Terni plant, from the steel casting to the surface finish treatment as to customize all solutions to your needs. Our processes are constantly monitored and certified.











ACCIAI SPECIALI TERNI

HEAD OFFICE

Viale B. Brin, 218 – 05100 Terni – Italia Tel. +39 0744-4901 www.acciaiterni.it

marketing.ast@acciaiterni.it Tel. +39 0744-490282