



CATALOGO PRODOTTI

**PRODUCT
CATALOGUE**

**ATTIVO DAL 1896 NEL
SETTORE SIDERURGICO,
AFV GRUPPO BELTRAME
È SINONIMO DI ECCELLENZA
E INNOVAZIONE NELLA
PRODUZIONE DI
LAMINATI MERCANTILI
E PROFILI SPECIALI PER
MOLTEPLICI AMBITI DI
IMPIEGO: COSTRUZIONI
EDILI, CANTIERISTICA
NAVALE, MACCHINE
MOVIMENTAZIONE TERRA.**

ACTIVE IN THE IRON AND STEEL SECTOR SINCE 1896,
AFV GRUPPO BELTRAME IS SYNONYMOUS WITH
EXCELLENCE AND INNOVATION IN THE PRODUCTION
OF MERCHANT BARS AND SPECIAL PROFILES FOR
MULTIPLE APPLICATIONS: CONSTRUCTION, SHIPYARDS
AND EXCAVATORS.

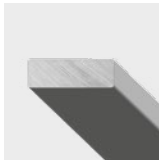
6 - STABILIMENTI / SITES

8 - GRUPPO IN NUMERI / GROUP IN NUMBERS

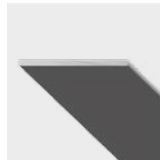
12 - SOSTENIBILITÀ E RICERCA / SUSTAINABILITY AND RESEARCH

14 - PROCESSO PRODUTTIVO / PRODUCTION PROCESS

LAMINATI MERCANTILI / MERCHANT BARS



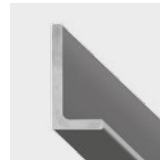
16
Piatti
Flat bars



17
Larghi piatti
Universal flats



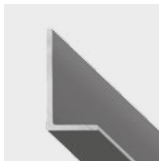
18
Angolari ad ali uguali
Equal angles



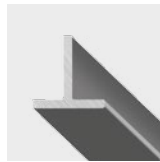
19
Angolari ad ali ineguali
Unequal angles



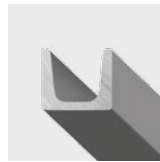
20
Angolari ad ali uguali con spigoli vivi
Sharp edged equal angles



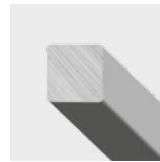
21
Angolari ad ali ineguali con spigoli vivi
Sharp edged unequal angles



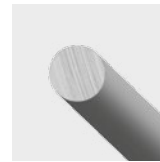
22
Profili a T
T bars



23
Ups
Small U-channels



24
Quadri
Squares

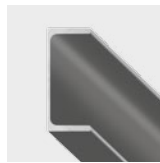


25
Tondi
Rounds

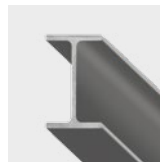
TRAVI / BEAMS



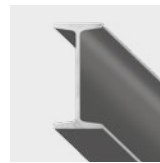
27
Travi UPN
Rolled Beams
UPN



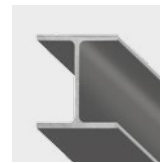
28
Travi UPE/UAP
Rolled Beams
UPE/UAP



29
Travi IPE
Rolled Beams
IPE

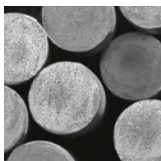


30
Travi IPN
Rolled Beams
IPN



31
Travi HE
Rolled Beams
HE

ACCIAI SPECIALI / SPECIAL STEEL SBQ



33
Tondi in acciai speciali
Special Bar
Quality SBQ

ACCIAIO PER CEMENTO ARMATO / REINFORCING STEEL



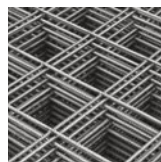
35
Tondo per cemento armato in barre topar-S 500C
Reinforcing bars
topar-S 500C



36
Tondo per cemento armato in rotoli ribobinati topar-Rc
Reinforcing bars topar-Rc in compact rings



37
Vergella
Wire rod



38
Reti da stock Accessori di collegamento Distanziatori
Stock meshes
Connecting systems
Distance cones

40 - DESIGNAZIONI PRECEDENTI / PREVIOUS DESIGNATION

42 - CERTIFICAZIONI / CERTIFICATIONS

44 - PRODUZIONI SPECIALI / SPECIAL PRODUCTIONS

44 - AVVERTENZE / WARNINGS

A PRESIDIO DI TUTTI I MERCATI EUROPEI E DEL BACINO DEL MEDITERRANEO

La presenza del Gruppo Beltrame sul mercato europeo è molto forte grazie ad una costante politica di acquisizioni e ad una distribuzione geografica degli impianti particolarmente favorevole rispetto alle aree di consumo dei prodotti e a quelle di approvvigionamento delle materie prime. La posizione di leadership di settore trova origine nel rafforzamento delle

sinergie create tra tutte le società del Gruppo e in una ricchezza di know-how e professionalità che caratterizzano tutta la rete di produzione e distribuzione di ciascun paese. Un modo di operare che ha assicurato ad AFV Beltrame Group, in oltre 120 anni di storia, risultati vincenti in termini di prodotto, servizio, qualità, innovazione e sostenibilità ambientale.



AFV ACCIAIERIE BELTRAME
VICENZA - ITALY
290,144 sq. m.



AFV ACCIAIERIE BELTRAME
SAN GIOVANNI VALDARNO - ITALY
49,269 sq. m.



AFV ACCIAIERIE BELTRAME
SAN DIDERO - ITALY
197,294 sq. m.



LAMINÉS MARCHANDS EUROPÉENS
TRITH SAINT LEGER - FRANCE
431,272 sq. m.



STAHL GERLAFINGEN
GERLAFINGEN - SWITZERLAND
486,039 sq. m.



DONALAM
CALARASI - ROMANIA
282,690 sq. m.

COVERING ALL EUROPEAN MARKETS AND THE MEDITERRANEAN BASIN

The Beltrame Group has strong presence in the European market thanks to its ongoing acquisitions policy and the particularly favourable geographical distribution of its plants in relation to where its products are used and where it acquires its raw materials. Its leading role in the sector can be traced to the strengthening of the synergies created between all of the Group companies and the wealth of knowledge and professional expertise that characterises the entire production and distribution network in each country. A *modus operandi* which in its over 120-year history has ensured AFV Beltrame Group great success in terms of its products, service, quality, innovation and environmental sustainability.



10

LAMINATOI
ROLLING MILLS



6

AZIENDE PARTECIPATE
GROUP COMPANIES



40

PAESI CON MIGLIAIA DI CLIENTI
COUNTRIES WITH THOUSANDS
OF CUSTOMERS



6

STABILIMENTI
PRODUCTION PLANTS



3

SUCCURSALI COMMERCIALI
COMMERCIAL BRANCHES


3

LINEE PRINCIPALI
DI PRODUZIONE
PRODUCTION LINES


+3,2

MILIONI DI TONNELLATE CAPACITÀ
PRODUTTIVA ANNUA
TONNES ANNUAL
PRODUCTION CAPACITY


+2.000

DIPENDENTI
EMPLOYEES

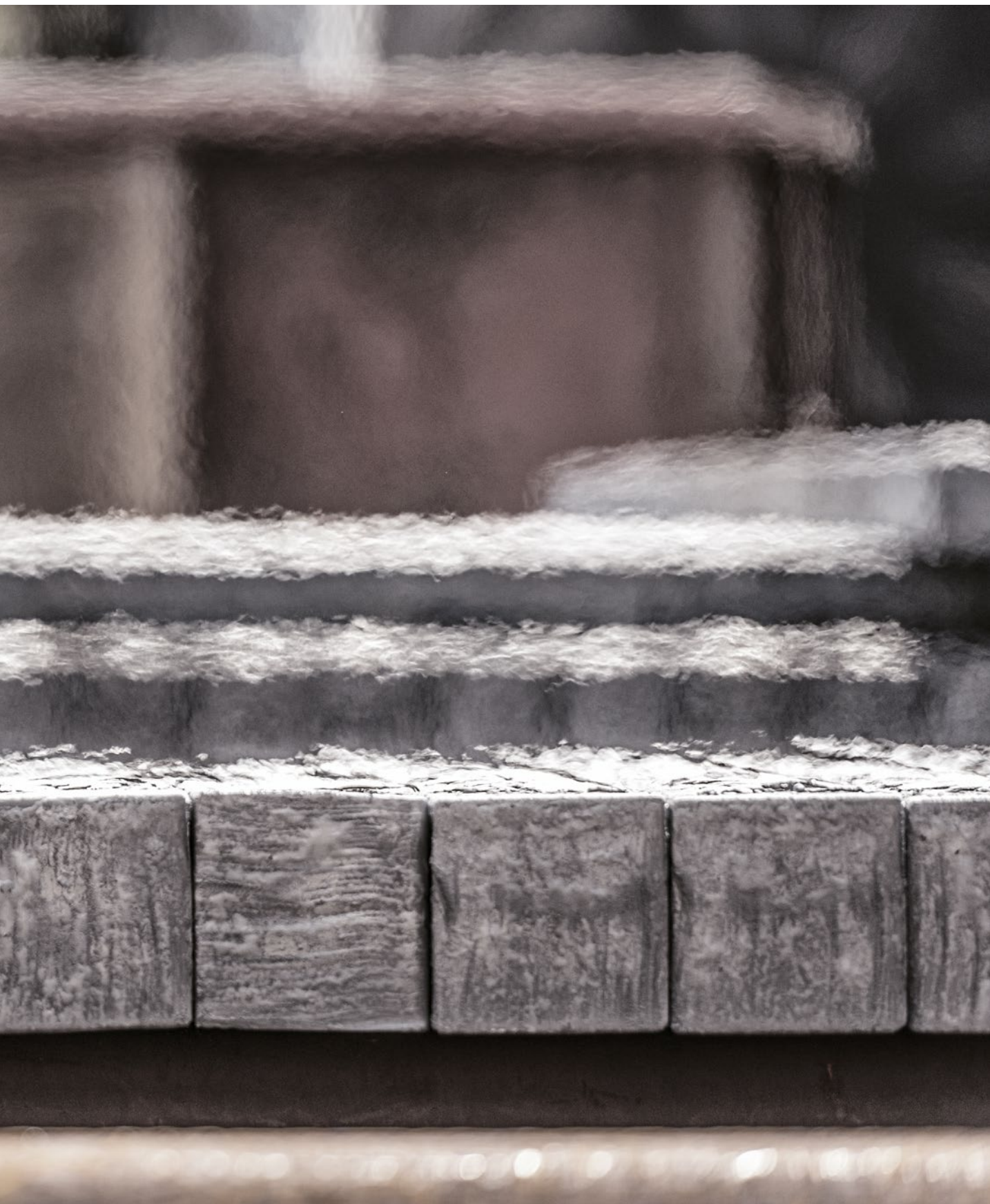

3

ACCIAIERIE
A FORNO ELETTRICO
ELECTRIC FURNACE
STEEL MILLS

Dal 1896 l'Azienda opera sotto la guida della famiglia Beltrame, facendo del miglioramento continuo e della cultura della produttività gli asset del proprio successo. Questi risultati vengono confermati anche dallo sviluppo di sinergie tecnologiche e dal costante ingresso di nuove competenze che garantiscono management di eccellenza e servizi ad alto valore aggiunto.

Since 1896 the company has been operating under the guidance of the Beltrame family, making continuous improvement and the culture of productivity the keys to its success. These results are further confirmed by its creation of technology synergies and its constant development of new expertise, a guarantee of excellent management and high value-added services.





SOSTENIBILITÀ E RICERCA. LE BASI PER UN MIGLIORAMENTO CONTINUO

Consapevolezza ambientale significa avere coscienza del limite delle risorse naturali, credere nella necessità di ridurre l'onere ambientale delle attività industriali, percepire il grande valore che sottende il concetto di economia circolare. Attualmente più del 97% dei rifiuti di processo prodotti negli impianti del Gruppo sono riciclati. La cooperazione con le aziende specializzate nel recupero, l'attenzione proattiva verso nuovi mercati per i materiali secondari, ulteriori attività di ricerca e sviluppo sui rifiuti e sui processi sono tra gli obiettivi primari del Gruppo e testimoniano il continuo impegno per una sempre migliore efficienza gestionale, sostenibile e rispettosa dell'ambiente.

Le attività nell'ambito EHS - ambiente, salute e sicurezza - sono prioritarie per il Gruppo Beltrame. Per raggiungere la loro ottimizzazione si adottano strategie trasversali di intervento in: formazione, informazione e addestramento dei lavoratori, evoluzione impiantistica e degli ambienti di lavoro e costante miglioramento del sistema di Gestione della Salute e Sicurezza aziendale. Bandiera dell'impegno e delle energie investite in tale settore è l'evento annuale "Safety Day", giornata basata sul concetto del Safety First, contemporaneamente in tutti gli stabilimenti del Gruppo con la partecipazione di tutti gli oltre 2.000 dipendenti.



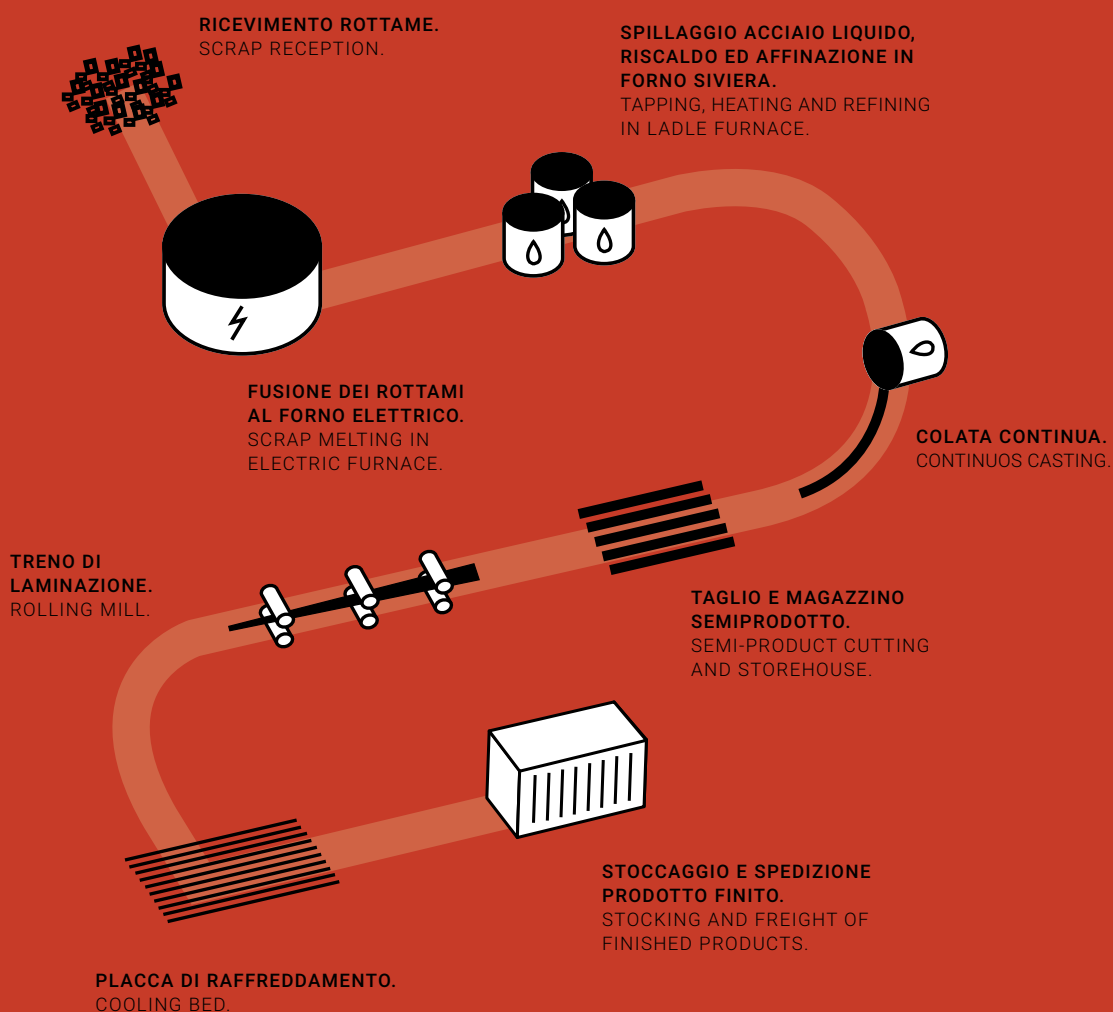
SUSTAINABILITY AND RESEARCH. THE BASIS FOR CONTINUOUS IMPROVEMENT

Environmental understanding means being aware of the limits of natural resources, believing in the need to reduce the environmental impact of industrial activities, and perceiving the immense value that underpins the concept of the circular economy. Currently more than 97% of the processing waste produced in the Group plants is recycled. Cooperation with companies specialising in recycling, the proactive focus on new markets for secondary materials and

additional R&D activities on waste and processes are among the Group's primary goals and underline its ongoing commitment to continuously improving its management and sustainable efficiency while ensuring respect for the environment. Its activities in the EHS area - environment, health and safety - are priorities for the Beltrame Group. To optimise them it adopts across-the-board strategies in the areas of the training and education of workers, the evolution of systems and working environments, and the constant improvement of company Health & Safety Management. Emblematic of the commitment and energy invested in this sector is the annual "Safety Day" event based on the concept of Safety First, which takes place simultaneously at all Group sites involving all 2,000+ employees.



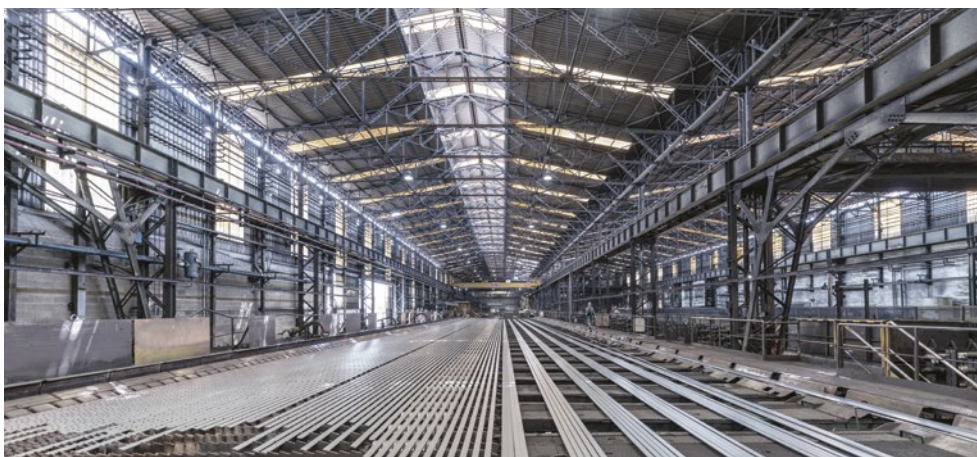
DA ROTTAME AD ACCIAIO DI PRIMA QUALITÀ



Il Gruppo Beltrame fonda l'attività aziendale sulla qualità (intesa non solo come pregio del prodotto ma anche quale attenzione alle esigenze del mercato), sulla produttività, sulla disponibilità e tempestività nei confronti delle richieste commerciali dei propri clienti. In quest'ottica, è stato istituito un Ufficio Centrale di Coordinamento che ha introdotto nuovi sistemi informatici e individuato dei team

transfunzionali nei vari stabilimenti per analizzare risultati prestazionali e migliorare i flussi di processo. Questa strategia aziendale trova fondamento nel concetto del "Best in Service", con interventi finalizzati a fornire:

- ampliamento dell'offerta produttiva
- disponibilità prodotti 365 giorni all'anno
- reattività alle richieste del mercato
- monitoraggio costante di ogni ordine
- tracciabilità dei prodotti finiti.



FROM SCRAP TO TOP QUALITY STEEL

The activities of the Beltrame Group are founded on quality (not just that of the product but also in terms of its focus on the needs of the market), productivity, availability and promptness with regards to the commercial needs of its customers.

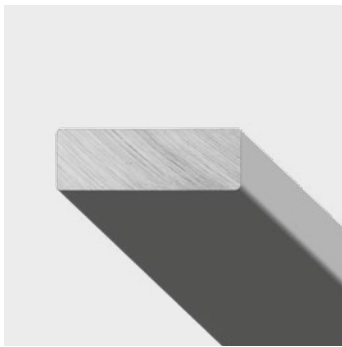
To this end a Central Coordination Office has been set up, introducing new computer systems and identifying cross-functional teams at the various sites for analysing performances and improving process flows. The business strategy is based on the concept of "Best in Service", series of actions aimed to provide excellent service to customers:

- expansion of the product range
- product availability 365 days a year
- responsiveness to market demands
- constant monitoring of each order
- traceability of finished products.



LAMINATI MERCANTILI

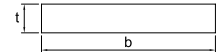
MERCHANT BARS
STABSTAHL
LAMINÉS MARCHANDS
LAMINADOS MERCANTILES



PIATTI

Flat bars
Flachstahl
Plats
Pletinas

EN 10058

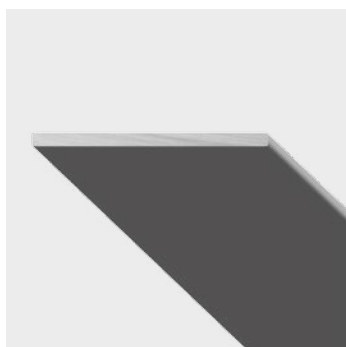


t (mm) >													
b (mm)	3	4	5	6	8	10	12	15	20	25	30	40	50
10	0,24	0,31	0,39	0,47									
12	0,28	0,38	0,47	0,57									
14	0,33	0,44	0,55	0,66									
15	0,35	0,47	0,59	0,71	0,94								
16	0,38	0,50	0,63	0,75	1,00								
20	0,47	0,63	0,79	0,94	1,26	1,57	1,88	2,36					
25	0,59	0,79	0,98	1,18	1,57	1,96	2,36	2,94					
30	0,71	0,94	1,18	1,41	1,88	2,36	2,83	3,53	4,71				
35	0,82	1,10	1,37	1,65	2,20	0,14	3,30	4,12	5,50				
40	0,94	1,26	1,57	1,88	2,51	2,14	3,77	4,71	6,28	7,85	9,42		
45	1,06	1,41	1,77	2,12	2,83	3,53	4,24	5,30	7,07	8,83	10,6		
50	1,18	1,57	1,96	2,36	3,14	3,93	4,71	5,89	7,85	9,81	11,8	15,7	
60	1,41	1,88	2,36	2,83	3,77	4,71	5,65	7,07	9,42	11,8	14,1	18,8	
65	1,53	2,04	2,55	3,06	4,08	5,10	6,12	7,65	10,2	12,8	15,3	20,4	
70	1,65	2,20	2,75	3,30	4,40	5,50	6,59	8,24	11,0	13,7	16,5	22,0	
80	1,88	2,51	3,14	3,77	5,02	6,28	7,54	9,42	12,6	15,7	18,8	25,1	31,4
90	2,12	2,83	3,53	4,24	5,65	7,07	8,48	10,6	14,1	17,7	21,2	28,3	35,3
100	2,36	3,14	3,93	4,71	6,28	7,85	9,42	11,8	15,7	19,6	23,6	31,4	39,3
110			4,32	5,18	6,91	8,64	10,4	13,0	17,3	21,6	25,9	34,5	43,2
120			4,71	5,65	7,54	9,42	11,3	14,1	18,8	23,6	28,3	37,7	47,1
130			5,10	6,12	8,16	10,2	12,2	15,3	20,4	25,5	30,6	40,8	51,0
140			5,50	6,59	8,79	11,0	13,2	16,5	22,0	27,5	33,0	44,0	55,0
150			5,89	7,06	9,42	11,8	14,1	17,7	23,6	29,4	35,3	47,1	58,9
kg/m >													

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

b (mm)	10 ≤ b ≤ 40	40 < b ≤ 80	80 < b ≤ 100	100 < b ≤ 120	120 < b ≤ 150	t (mm)	t ≤ 20	20 < t ≤ 40	40 < t ≤ 80
	± 0,75	± 1,0	± 1,5	± 2,0	± 2,5		± 0,5	± 1,0	± 1,5

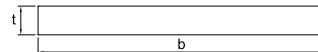
Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación
6 m → 15 m (± 100 mm).



LARGHI PIATTI

Universal flats
Breitflachstahl
Larges-plats
Pletinas anchas

DIN 59200

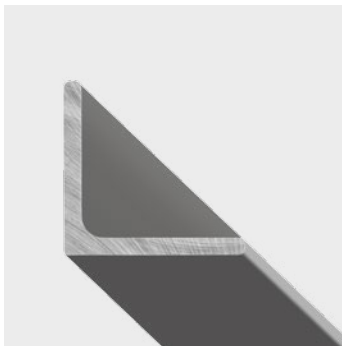


b (mm)	t (mm) >									
	5	6	8	10	12	15	20	25	30	40
160	6,28	7,54	10,0	12,6	15,1	18,8	25,1	31,4	37,7	50,2
170	6,67	8,01	10,676	13,3	16,0	20,0	26,7	33,4	40,0	53,4
180	7,07	8,48	11,3	14,1	17,0	21,2	28,3	35,3	42,4	56,5
190	7,46	8,95	11,9	14,9	17,9	22,4	29,8	37,3	44,7	59,7
200	7,85	9,42	12,6	15,7	18,8	23,6	31,4	39,3	47,1	62,8
220			13,8	17,3	20,7	25,9	34,5	43,2	51,8	69,1
230			14,4	18,1	21,7	27,1	36,1	45,1	54,2	72,2
240			15,1	18,8	22,6	28,3	37,7	47,1	56,5	75,4
250			15,7	19,6	23,6	29,4	39,3	49,1	58,9	78,5
260			16,3	20,4	24,5	30,6	40,8	51,0	61,2	81,6
280			17,6	22,0	26,4	33,0	44,0	55,0	65,9	87,9
300			18,8	18,8	18,8	18,8	18,8	18,8	18,8	18,8
320			20,1	25,1	30,1	37,7	50,2	62,8	75,4	100,5
350			22,0	27,5	33,0	41,2	55,0	68,7	82,4	109,9
400			25,1	31,4	37,7	47,1	62,8	78,5	94,2	125,6
	kg/m >									

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

b (mm)	$\pm 2\% b$	t (mm)	$4 \leq t < 10$	$10 \leq t < 20$	$20 \leq t < 25$	$25 \leq t < 30$	$30 \leq t < 40$	$40 \leq t < 50$
			- 0,4 / + 0,6	- 0,4 / + 0,8	- 0,5 / + 0,9	- 0,6 / + 1,0	- 0,7 / + 1,1	- 0,9 / + 1,1

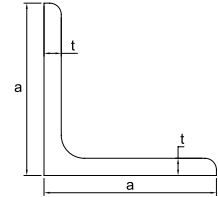
Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación
6 m $\rightarrow$ 15 m (- 0 / + 200 mm) / 25 m (on request).



ANGOLARI AD ALI UGUALI

Equal angles
Gleichschenklige Winkel
Cornières à ailes égales
Angulares de lados iguales

EN 10056-1 / EN 10056-2



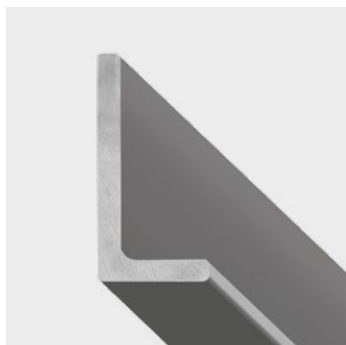
axa (mm ²)	t (mm) >																		
	2,7	3	3,5	4	5	6	7	8	9	10	11	12	13	14	15	16	18	20	24
15x15	0,58	0,64																	
20x20	0,79	0,88	1,00	1,14															
25x25	1,00	1,12	1,28	1,45	1,78														
30x30	1,21	1,36	1,55	1,78	2,18	2,57													
35x35		1,60	1,85	2,09	2,57	3,04													
40x40		1,84	2,10	2,42	2,97	3,52													
45x45				2,74	3,38	4,00	4,56	5,15											
50x50				3,06	3,77	4,47	5,15	5,82											
60x60					4,57	5,42	6,26	7,09	7,90	8,69									
70x70					5,32	6,38	7,38	8,36	9,34	10,2	11,1	12,1							
80x80						7,34	8,48	9,63	10,7	11,9	12,9	14,0							
90x90						8,32	9,61	10,9	12,2	13,4	14,6	15,8							
100x100						9,20	10,7	12,2	13,5	15,0	16,4	17,8							
110x110						10,1	11,7	13,5	15,0	16,6	18,2	19,7							
120x120								14,8	16,5	18,2	19,9	21,6	23,3	25,0	26,6				
150x150*										23,0	25,2	27,3	29,5	31,6	33,8	35,9	40,1		
200x200*																48,5	54,3	59,9	71,1

kg/m >

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

a (mm)	a ≤ 50	50 < a ≤ 100	100 < a ≤ 150	150 < a ≤ 200	t (mm)	t ≤ 5	5 < t ≤ 10	10 < t ≤ 15	t > 15
	± 1,0	± 2,0	± 3,0	± 4,0		± 0,50	± 0,75	± 1,00	± 1,20

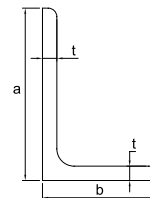
Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación
6 m → 15 m (- 0 / + 100 mm) / *25 m (on request).



ANGOLARI AD ALI INEGUALI

Unequal angles
Ungleichschenklige Winkel
Cornières à ailes inégales
Angulares de lados desiguales

EN 10056-1 / EN 10056-2

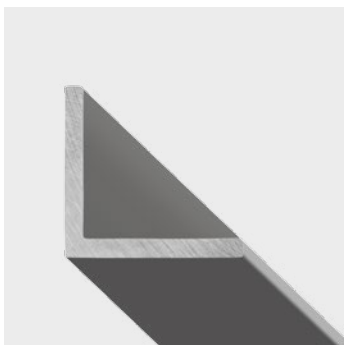


axb (mm ²)	t (mm) >										
	3	4	5	6	7	8	9	10	11	12	14
30x20	1,12	1,46	1,78								
40x20	1,36	1,77	2,18								
40x25		1,93	2,37								
45x30		2,25	2,77								
50x30		2,41	2,96	3,51							
50x40		2,72	3,35	3,96							
60x30			3,36	3,99	4,59						
60x40			3,76	4,46	5,14						
70x50			4,51	5,40	6,21						
75x50			4,71	5,65	6,28						
75x55			4,95	5,84	6,80						
80x40				5,41	6,21	7,07					
80x60				6,37	7,36	8,34					
80x65				6,54	7,58	8,66	9,61	10,7			
90x60				6,82	7,86	8,96	9,96	11,1			
100x50				6,84	7,86	8,97	9,96	11,1			
100x65				7,49	8,77	9,94	11,1	12,2	13,4		
100x75					9,32	10,6	11,8	13,0	14,3		
120x60						10,9	12,1	13,4	14,6		
120x80						12,2	13,5	15,0	16,3	17,8	
130x65						11,8	13,1	14,6	15,9	17,3	
150x75							15,4	17,0	18,6	20,2	
150x100								19,0	20,6	22,5	26,1
160x80								18,2	19,9	21,6	24,8
kg/m >											

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

a, b (mm)	a ≤ 50	50 < a ≤ 100	100 < a ≤ 150	150 < a ≤ 200	t (mm)	t ≤ 5	5 < t ≤ 10	10 < t ≤ 15	t > 15
	± 1,0	± 2,0	± 3,0	± 4,0		± 0,50	± 0,75	± 1,00	± 1,20

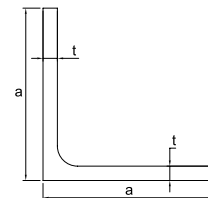
Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación
6 m → 15 m (- 0 / + 100 mm).



ANGOLARI AD ALI UGUALI CON SPIGOLI VIVI

Sharp edged equal angles
Gleichschenklige scharfkantige Winkel
Cornières à ailes égales et à angles vifs
Angulares de lados iguales de aristas vivas

DIN 1022

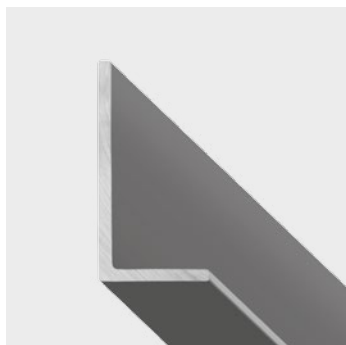


axa (mm ²)	t (mm) >									
	3	3,5	4	4,7	5	5,8	6	6,8	8,8	10,8
20x20	0,87	1,00	1,13							
25x25	1,11	1,28	1,44							
30x30	1,34	1,55	1,76	2,04	2,16					
31,2x31,2	1,40	1,62	1,83	2,13	2,25	2,58	2,66			
35x35	1,58	1,83	2,07	2,41	2,55	2,92	3,01			
40x40	1,81	2,10	2,39	2,78	2,94	3,38	3,49			
41,2x41,2		2,17	2,46	2,87	3,04	3,49	3,60	4,04		
50x50			3,01	3,52	3,73	4,29	4,43	4,98		
51,2x51,2			3,09	3,60	3,82	4,40	4,54	5,10		
60x60					4,51	5,20	5,37	6,04		
61,2x61,2					4,61	5,31	5,48	6,17		
81,2x81,2							7,37	8,31	10,6	12,9
101,2x101,2							9,23	10,4	13,3	16,2
kg/m >										

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

a (mm)	a ≤ 50	50 < a ≤ 100	100 < a ≤ 150	t (mm)	t ≤ 5	5 < t ≤ 10	10 < t ≤ 15
	± 1,0	± 2,0	± 3,0		± 0,50	± 0,75	± 1,00

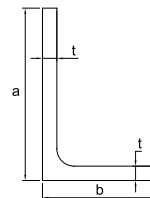
Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación
6 m → 15 m (- 100 / + 100 mm).



ANGOLARI AD ALI INEGUALI CON SPIGOLI VIVI

Sharp edged unequal angles
Ungleichschenklige scharfkantige Winkel
Cornières à ailes inégales et à angles vifs
Angulares de lados desiguales de aristas vivas

UNI 6762

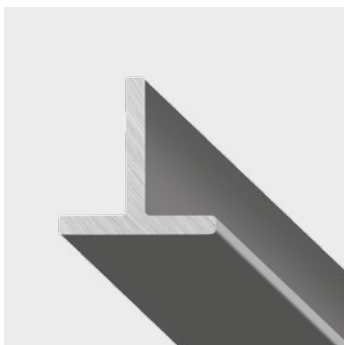


axb (mm ²)	t (mm) >						
	4	4,5	5	5,8	6	6,8	8,8
20x12	0,88						
25x15		1,25					
30x17,5			1,67				
40x22				2,56	2,64		
61,2x41,2				4,40	4,54		
81x41				5,29	5,46	6,15	7,82
81,2x41,2						6,17	
kg/m >							

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

a, b (mm)	a ≤ 50	50 < a ≤ 100	t (mm)	t ≤ 5	5 < t ≤ 10
	± 1,0	± 2,0		± 0,50	± 0,75

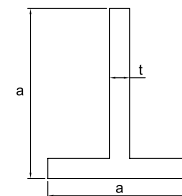
Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación
6 m → 15 m (- 100 / + 100 mm).



PROFILI A T

T bars
T Profilstahl
Fers à T
Perfiles T

UNI 5681 / DIN 59051

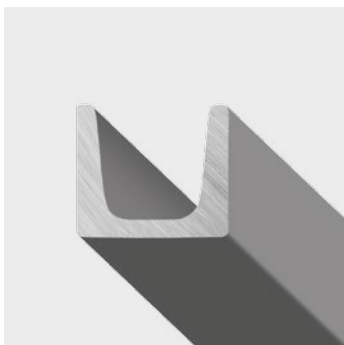


t (mm) >													
axa (mm²)	2,7	3	3,5	4	4,5	5	5,5	6	6,5	7	8	9	11
20x20	0,79	0,87		1,13									
25x25	1,00	1,11	1,28		1,61								
30x30	1,21	1,34	1,55	1,76		2,16							
35x35		1,58	1,83	2,07	2,31		2,78						
40x40				2,39	2,67	2,94		3,49					
45x45							3,65						
50x50								4,43	4,77	5,11			
60x60										6,21	7,03		
70x70											8,29	9,26	
80x80												10,67	
100x100													16,32
kg/m >													

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

a (mm)	20 ≤ a ≤ 50	60 ≤ a ≤ 100	t (mm)	20 ≤ a ≤ 50	60 ≤ a ≤ 100
	± 1,0	± 1,5		± 0,50	± 0,75

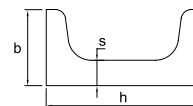
Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación
6 m → 15 m (- 100 / + 100 mm).



UPS

Small U-channels
Kleiner U-Profilstahl
Petits fers U
Perfiles en U

EN 10365 / EN 10279

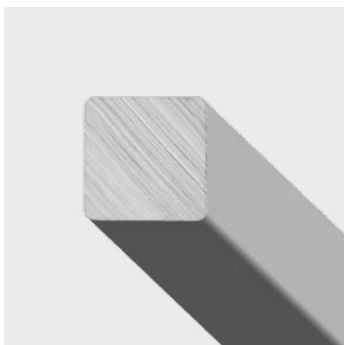


hxb (mm²)	s (mm) >			
	4	5	5,5	6
25x12	1,3			
30x15	1,74	2,2		
30x33		4,27		
35x17,5	2,15			
40x20		2,87		
40x35		4,87		
50x25		3,86		
50x38		5,59		
60x30				5,07
65x42			7,09	
70x40				6,72
kg/m >				

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

h (mm)	h ≤ 65	65 < h ≤ 200	b (mm)	b ≤ 50	s (mm)	s ≤ 10
	± 1,5	± 2,0		± 1,5		± 0,50

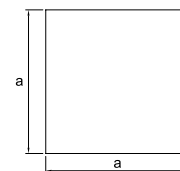
Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación
6 m → 15 m (- 0 / + 100 mm).



QUADRI

Squares
Vierkantstahl
Carrés
Cuadrados

EN 10059



a (mm)	6	8	9	10	11	12	14	15	16
kg/m	0,28	0,50	0,64	0,79	0,95	1,13	1,54	1,77	2,01

a (mm)	18	19	20	22	25	30	35	40	45	50
kg/m	2,54	2,83	3,14	3,80	4,91	7,07	9,62	12,6	15,9	19,6

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

a (mm)	$a \leq 14$	$14 < a \leq 25$	$25 < a \leq 35$	$35 < a \leq 50$
	$\pm 0,4$	$\pm 0,5$	$\pm 0,6$	$\pm 0,8$

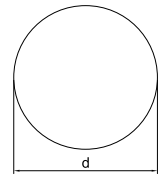
Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación
6 m $\rightarrow$ 15 m (- 100 / + 100 mm).



TONDI

Rounds
Rundstahl
Ronds
Redondos

EN 10060



d (mm)	6	8	10	12	14	15	16	18	20	22	23	24	25	26	28	30
kg/m	0,22	0,39	0,62	0,89	1,21	1,39	1,58	2,00	2,47	2,98	3,26	3,55	3,85	4,17	4,83	5,55

d (mm)	32	34	35	36	37	40	42	45	47	50	52	55	58	60	62	63
kg/m	6,31	7,13	7,55	7,99	8,44	9,86	10,9	12,5	13,6	15,4	16,7	18,7	20,7	22,2	23,7	24,5

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

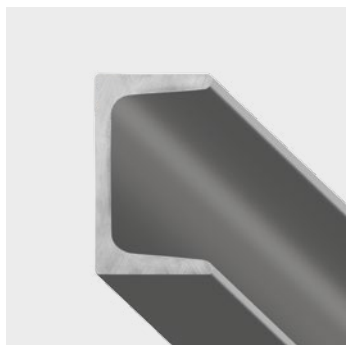
d (mm)	$d \leq 15$	$15 < d \leq 25$	$25 < d \leq 35$	$35 < d \leq 50$	$50 < d \leq 80$
	$\pm 0,4$	$\pm 0,5$	$\pm 0,6$	$\pm 0,8$	$\pm 1,0$

Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación
6 m $\rightarrow$ 15 m (- 100 / + 100 mm).



TRAVI

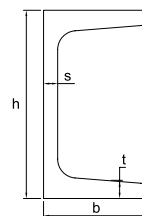
BEAMS
TRÄGER
POUTRELLES
VIGAS



TRAVI UPN

Rolled Beams UPN
UPN Träger
Poutrelles UPN
Perfil UPN

EN 10365 / EN 10279



	h	b	s	t	kg/m
UPN 80	80	45	6	8	8,6
UPN 100	100	50	6	8,5	10,6
UPN 120	120	55	7	9	13,4
UPN 140	140	60	7	10	16,0
UPN 160	160	65	7,5	10,5	18,8
UPN 180	180	70	8	11	22,0
UPN 200	200	75	8,5	11,5	25,3
UPN 220	220	80	9	12,5	29,4
UPN 240*	240	85	9,5	13	33,2
UPN 260*	260	90	10	14	37,9
UPN 280*	280	95	10	15	41,8
UPN 300*	300	100	10	16	46,2

*** a richiesta**
on request
auf Anfrage
sur demande
a solicitud

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

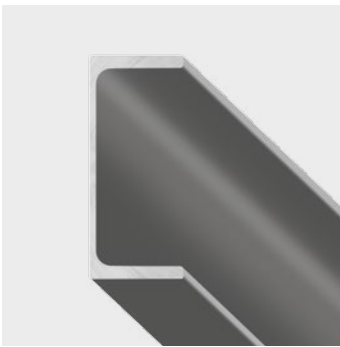
h (mm)	65 < h ≤ 200	200 < h ≤ 400
	± 2,0	± 3,0
s (mm)	s ≤ 10	
	± 0,50	

b (mm)	b ≤ 50	50 < b ≤ 100	
	± 1,5	± 2,0	
t (mm)	t ≤ 10	10 < t ≤ 15	t > 15
	-0.5 / + *	-1.0 / + *	-1.5 / + *

*plus tolerances are
limited by the permissible
exceeding of weight

Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación

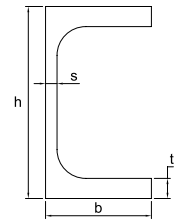
UPN 80 > UPN 140: 6 m → 15 m (- 0 / + 100 mm).
UPN 160 > UPN 300: 6 m → 25 m (- 0 / + 100 mm).



TRAVI UPE/UAP

Rolled Beams UPE/UAP
 UPE/UAP Träger
 Poutrelles UPE/UAP
 Perfil UPE/UAP

EN 10365 / EN 10279



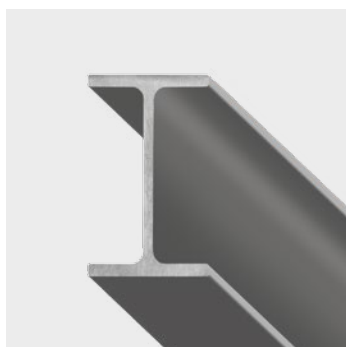
	h	b	s	t	kg/m
UAP 150*	150	65	7	10,25	17,9
UPE 160*	160	70	5,5	9,5	17,0
UAP 175*	175	70	7,5	10,75	21,2
UPE 180*	180	75	5,5	10,5	19,7
UAP 200*	200	75	8	11,5	24,1
UPE 200*	200	80	6	11	22,8
UAP 220*	220	80	8	12,5	28,5
UPE 220*	220	85	6,5	12	26,6
UPE 240*	240	90	7	12,5	30,2
UAP 250*	250	85	9	13,5	34,4
UPE 270*	270	95	7,5	13,5	35,2
UPE 300*	300	100	9,5	15	44,4
UAP 300*	300	100	9,5	16	46,0

*** a richiesta**
 on request
 auf Anfrage
 sur demande
 a solicitud

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

h (mm)	65 < h ≤ 200	200 < h ≤ 400	b (mm)	50 < b ≤ 100			*plus tolerances are limited by the permissible exceeding of weight
	± 2,0	± 3,0		± 2,0			
s (mm)	s ≤ 10		t (mm)	t ≤ 10	10 < t ≤ 15	t > 15	
	± 0,50			-0,5 / + *	-1,0 / + *	-1,5 / + *	

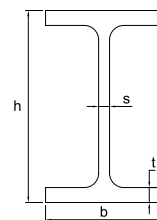
Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación
 6 m → 25 m (- 0 / + 100 mm).



TRAVI IPE

Rolled Beams IPE
IPE Träger
Poutrelles IPE
Perfil IPE

EN 10365 / EN 10034



	h	b	s	t	kg/m
IPE 80	80	46	3,8	5,2	6,0
IPE 100	100	55	4,1	5,7	8,1
IPE 120	120	64	4,4	6,3	10,4
IPE 140	140	73	4,7	6,9	12,9
IPE 160	160	82	5,0	7,4	15,8
IPE 180	180	91	5,3	8,0	18,8
IPE 200	200	100	5,6	8,5	22,4
IPE 220	220	110	5,9	9,2	26,2
IPE 240*	240	120	6,2	9,8	30,7
IPE 270*	270	135	6,6	10,2	36,1
IPE 300*	300	150	7,1	10,7	42,2

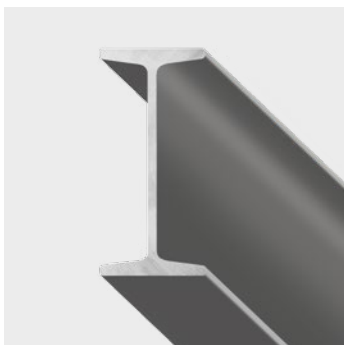
*** a richiesta**
on request
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sur demande
a solicitud

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

h (mm)	h ≤ 180	180 < h ≤ 400	b (mm)	b ≤ 110	110 < b ≤ 210	
	+ 3,0 / - 2,0	+ 4,0 / - 2,0		+ 4,0 / - 1,0	+ 4,0 / - 2,0	
s (mm)	s < 7	7 ≤ s ≤ 10	t (mm)	t < 6,5	6,5 ≤ t < 10	10 ≤ t < 20
	± 0,70	± 1,00		+ 1,5 / - 0,5	+ 2,0 / - 1,0	+ 2,5 / - 1,5

Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación

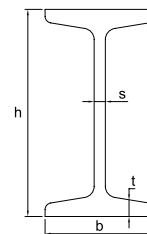
IPE 80 > IPE 140: 6 m $\rightarrow$ 15 m (- 0 / + 100 mm).
IPE 160 > IPE 300: 6 m $\rightarrow$ 25 m (- 0 / + 100 mm).



TRAVI IPN

Rolled Beams IPN
IPN Träger
Poutrelles IPN
Perfil IPN

EN 10365 / EN 10024



	h	b	s	t	kg/m
IPN 80	80	42	3,9	5,9	5,9
IPN 100	100	50	4,5	6,8	8,3
IPN 120*	120	58	5,1	7,7	11,1
IPN 140*	140	66	5,7	8,6	14,3
IPN 160*	160	74	6,3	9,5	17,9
IPN 180*	180	82	6,9	10,4	21,9
IPN 200*	200	90	7,5	11,3	26,2
IPN 220*	220	98	8,1	12,2	31,1
IPN 240*	240	106	8,7	13,1	36,2
IPN 260*	260	113	9,4	14,1	41,9
IPN 280*	280	119	10,1	15,2	47,9
IPN 300*	300	125	10,8	16,2	54,2

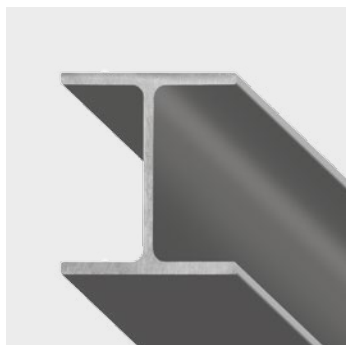
*** a richiesta**
on request
auf Anfrage
sur demande
a solicitud

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

h (mm)	h ≤ 200	200 < h ≤ 400	b (mm)	b ≤ 75	75 < b ≤ 100	100 < b ≤ 125
	+2,0 / -2,0	+3,0 / -3,0		+1,5 / -1,5	+2,0 / -2,0	+2,5 / -2,5
s (mm)	s ≤ 7	7 < s ≤ 10	t (mm)	t ≤ 7	7 < t ≤ 10	10 < t ≤ 20
	+0,5 / -1,0	+0,7 / -1,5		+1,5 / -0,5	+2,0 / -1,0	+2,5 / -1,5

Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación

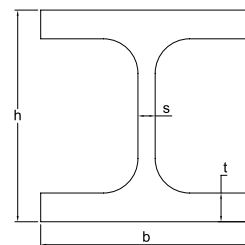
IPN 80 > IPN 100: 6 m → 15 m (- 0 / + 100 mm).
IPN 120 > IPN 300: 6 m → 25 m (- 0 / + 100 mm).



TRAVI HE

Rolled Beams HE
HE Träger
Poutrelles HE
Perfil HE

EN 10365 / EN 10034



	h	b	s	t	kg/m
HEA 100	96	100	5,0	8,0	16,7
HEB 100	100	100	6,0	10,0	20,4
HEM 100	120	106	12,0	20,0	41,8
HEA 120	114	120	5,0	8,0	19,9
HEB 120	120	120	6,5	11,0	26,7
HEM 120	140	126	12,5	21,0	52,1
HEA 140	133	140	5,5	8,5	24,7
HEB 140	140	140	7,0	12,0	33,7
HEM 140	160	146	13,0	22,0	63,2
HEA 160*	152	160	6,0	9,0	30,4
HEB 160*	160	160	8,0	13,0	42,6
HEM 160*	180	166	14,0	23,0	76,2
HEA 180*	171	180	6,0	9,5	35,5
HEB 180*	180	180	8,5	14,0	51,2
HEM 180*	200	186	14,5	24,0	88,9
HEA 200*	190	200	6,5	10,0	42,3
HEB 200*	200	200	9,0	15,0	61,3
HEM 200*	220	206	15,0	25,0	103

*** a richiesta**
on request
auf Anfrage
sur demande
a solicitud

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

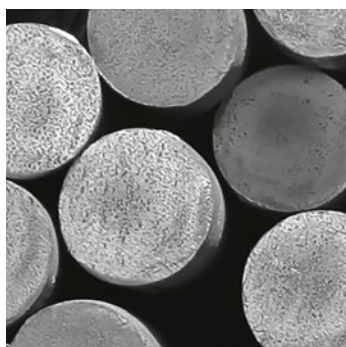
h (mm)	h ≤ 180	180 < h ≤ 400		b (mm)	b ≤ 110	110 < b ≤ 210		
	+3,0 / -2,0	+4,0 / -2,0			+4,0 / -1,0	+4,0 / -2,0		
s (mm)	s < 7	7 ≤ s < 10	10 ≤ s < 20	t (mm)	t < 6,5	6,5 ≤ t < 10	10 ≤ t < 20	20 ≤ t < 30
	±0,70	±1,00	±1,50		+1,5 / -0,5	+2,0 / -1,0	+2,5 / -1,5	+2,5 / -2,0

Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación
6 m → 25 m (-0 / +100 mm)

ACCIAI SPECIALI

**SPECIAL STEEL SBQ
QUALITÄTS UND EDELBAUSTAHL
ACIERS SPÉCIAUX
ACEROS ESPECIALES**





TONDI IN ACCIAI SPECIALI

Special Bar Quality SBQ
Qualitäts und Edelbaustahl rund
Ronds en aciers spéciaux
Redondos en aceros especiales

DIMENSIONAL CONTROL ACCORDING TO EN 10060
US TEST ACCORDING TO EN 10308
SURFACE CONTROL ACCORDING TO EN 10221

d (mm)	80	83	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155
kg/m	39,5	42,5	44,5	49,9	55,6	61,7	68,0	74,6	81,5	88,8	96,3	104	112	121	130	139	148

d (mm)	160	165	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320
kg/m	158	168	178	200	223	247	272	298	326	355	385	417	449	483	519	555	592	631

Qualità / Grades / Güten / Qualité / Calidad*

S235JR	EN 10025-2	C45E	EN 10083-2	25CrMoS4	EN 10083-3
S355J2	EN 10025-2	C45R	EN 10083-2	4130 (30CrMo4)	AISI 4130
A 105	ASTMA105/A105M	C55	EN 10083-2	42CrMoS4	EN 10083-3
LF2	secondo according nach selon según	C60	EN 10083-2	50CrMo4	EN 10083-3
C10E	ASTMA350/A350M	20MnVS6	W1.5217	34CrNiMo6	EN 10083-3
C10R	EN 10084	16MnCrS5	EN 10084	30CrNiMo8	EN 10083-3
C15E	EN 10084	20MnCrS5	EN 10084	39NiCrMo3	EN 10083-3
C15R	EN 10084	20NiCrMoS2-2	EN 10084	51CrV4	EN 10083-3
C35E	EN 10083-2	17NiCrMo6-4	EN 10084	31CrMoV9	EN 10085
C35R	EN 10083-2	18CrNiMo7-6	EN 10084	38MnVS6	EN 10267

* **Sec. Norme Europee e Specifiche Cliente** / acc. European standard and Customers specifications / Nach europäischem Standard und Kundenspezifikationen / selon Normes Européennes et spécifiques Client / Según norma europea e Especificaciones de clientes

Stato di fornitura / supply condition / Lieferzustand / condition de fourniture / condiciones de suministro

- **Grezzo laminato** / as rolled / unbehandelt / brut de laminage / bruto de lamination: Ø 80 > 320
- **Ricotto** / annealed / gegluht / recuit / recocido: Ø 80 > 320
- **Normalizzato** / normalized / normalisiert / normalisé / normalizado: Ø 80 > 320
- **Bonificato** / quenched&tempered / verguetet / trempé et revenu / temple y revenido: Ø 80 > 180

Lavorazioni a freddo / cold finishing / Kalt finishing / finition a froid / acabado en frio

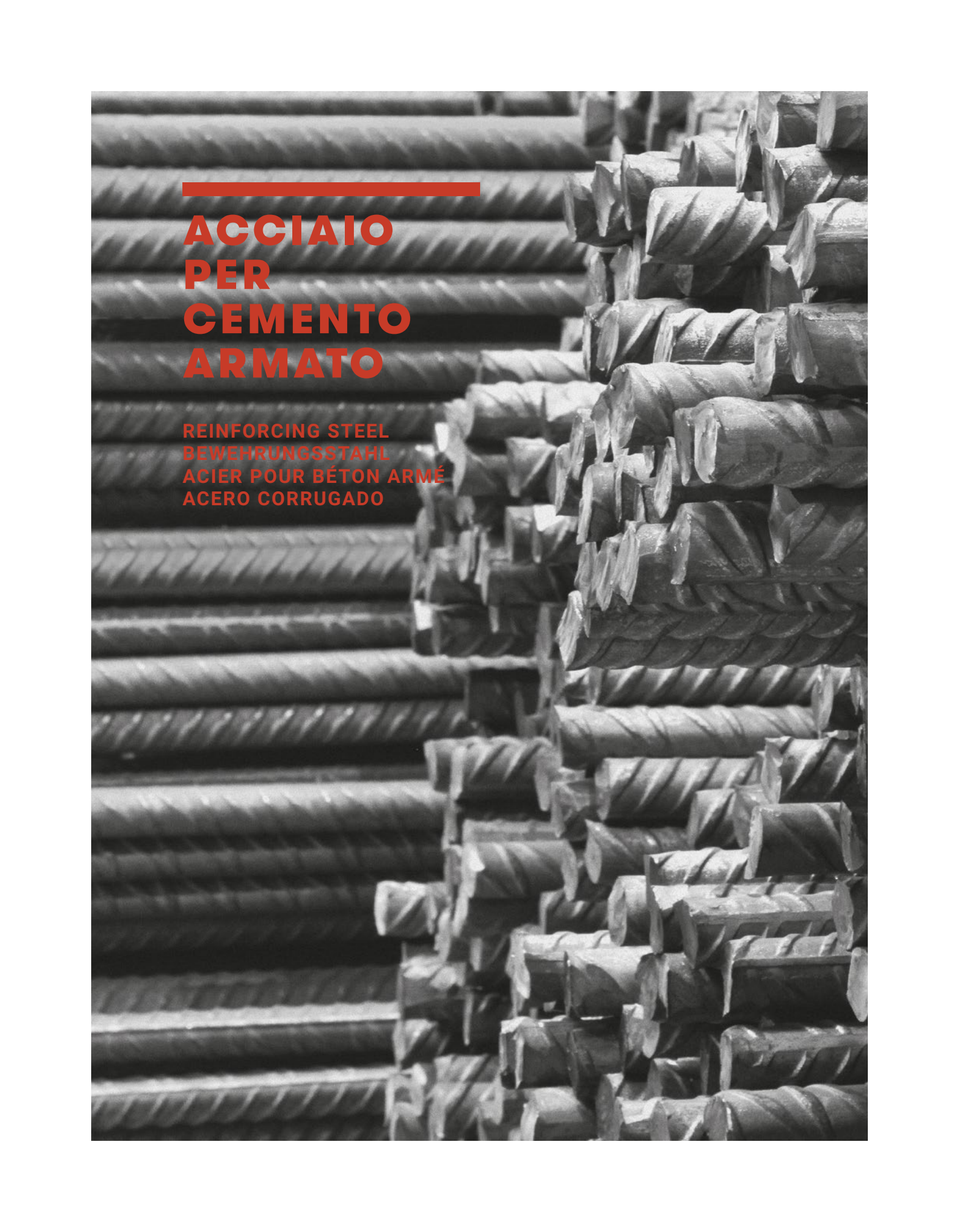
- **Raddrizzato** / straightened / gerichtet / redressé / enderezado: Ø 80 > 320
- **Bisellato** / chamfered / gefast / chanfreiné / biselado: Ø 80 > 200
- **Smussato** / deburred / entgratet / ébavuré / desbarbado: Ø 80 > 320
- **Sabbato** / shotblasted / sandgestrahlt / grenailé / arenado: Ø 80 > 300
- **Pelato** / peeled / geschält / écrouté / pelado: Ø 80 > 200

Tolleranze di fabbricazione / Process tolerances / Herstellungstoleranzen / Tolérances de fabrication / Tolerancias de fabricación

d (mm)	d = 80	80 < d ≤ 100	100 < a ≤ 120	120 < a ≤ 160	160 < a ≤ 200	200 < a ≤ 220	220 < a ≤ 250	250 < a ≤ 320
	± 1,0	± 1,3	± 1,5	± 2,0	± 2,5	± 3,0	± 4,0	± 6,0

Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación

4 m → 13 m (- 0 / + 200 mm)



ACCIAIO PER CEMENTO ARMATO

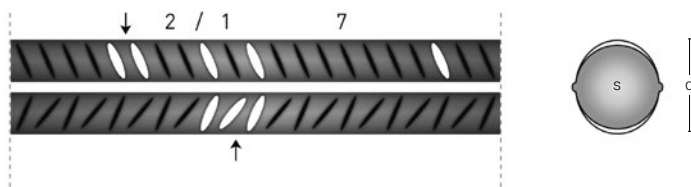
REINFORCING STEEL
BEWEHRUNGSSTAHL
ACIER POUR BÉTON ARMÉ
ACERO CORRUGADO



TONDO PER CEMENTO ARMATO IN BARRE TOPAR-S 500C

Reinforcing bars topar-S 500C
Betonstahl topar-S 500C in Stäben
Acier à béton en barres topar-S 500C
Acero corrugado en barras topar-S 500C

d (mm)	10	12	14	16	18	20	22	25	26	28	30	32	34	40
s (mm ²)	78,5	113	154	201	254	314	380	491	531	616	707	804	908	1256
kg/m	0,617	0,888	1,21	1,58	2,00	2,47	2,98	3,85	4,17	4,83	5,55	6,31	7,13	9,86



Proprietà meccaniche / Mechanical properties / Mechanische Eigenschaften / Propriétés mécaniques / Propiedades mecánicas

$R_e (f_{sk})$	$\geq 500 \text{ N/mm}^2$
Class	C
Ratio $R_m/R_e (f_t/f_{sk})$	1,15 / 1,35
A_{gt}	$\geq 7,5\%$

Approvazioni / Homologations / Zulassungen / Homologations / Aprobaciones

CH	SIA 262	B500C	(4.7)	10 - 40 mm
D	DIN 488-2	B500B		10 - 40 mm
F	NFA 35-080-1	B500B	B08/211	10 - 40 mm

Saldabilità / Weldability / Schweißeignung / Soudabilité / Soldabilidad
 $C \leq 0,22\%$ - $C_{eq} \leq 0,50\%$

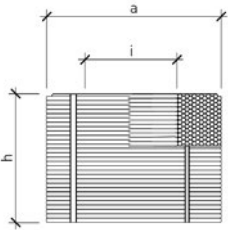
Lunghezze di fabbricazione / Product lengths / Herstellungslängen / Longueurs de fabrication / Longitudes de fabricación

20 m ($\varnothing$ 10 - 40 mm)
 24 m ($\varnothing$ 12 - 40 mm)
 11,9 m $\rightarrow$ 24 m (- 0 / + 200 mm) on request.



TONDO PER CEMENTO ARMATO IN ROTOLI RIBOBINATI TOPAR-RC

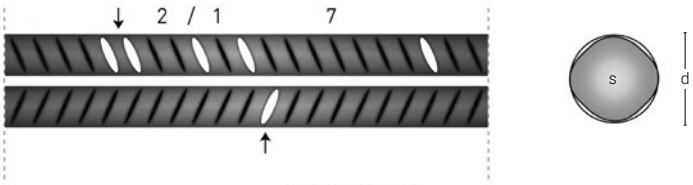
Reinforcing bars topar-Rc in compact rings
Betonstahl topar-Rc in Kompaktringen
Acier à béton topar-Rc en couronnes compactes
Acero corrugado en barras topar-Rc en rollos encarretados



Dimensioni / Dimensions / Abmessungen / Dimensions / Dimensiones

(t)	2,5	3,0	5,0
a (mm)	1050 - 1080	1100 - 1200	1200 - 1300
i (mm)	590 - 630	590 - 630	590 - 630
h (mm)	700 - 720	700 - 720	900 - 1000
ø (mm)	6 - 16	8 - 16	8 - 16

d (mm)	8	10	12	14	16
s (mm ²)	50,3	78,5	113	154	201
kg/m	0,395	0,617	0,888	1,21	1,58



Proprietà meccaniche / Mechanical properties / Mechanische Eigenschaften / Propriétés mécaniques / Propiedades mecánicas

$R_e (f_{sk})$	$\geq 500 \text{ N/mm}^2$
Class	B
Ratio $R_m/R_e (f_t/f_{sk})$	$\geq 1,08$
A_{gt}	$\geq 5\%$

Approvazioni / Homologations / Zulassungen / Homologations / Aprobaciones

CH	SIA 262	B500B	(4.5)	6 - 16 mm
D	DIN 488-3	B500B		6 - 16 mm
F	NFA 35-080-1	B500B	B99/147	6 - 16 mm
NL	NEN 6008	B500B	K23419/02(HK)	8 - 16 mm

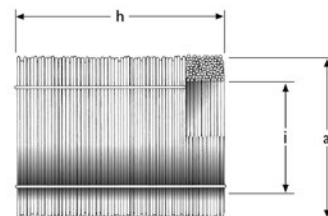
Saldabilità / Weldability / Schweißeignung / Soudabilité / Soldabilidad
 $C \leq 0,22\%$ - $C_{eq} \leq 0,50\%$



VERGELLA

Wire rod
Walzdraht
Fil machine
Alambrón

DIN 59110



Dimensioni / Dimensions / Abmessungen / Dimensions / Dimensiones

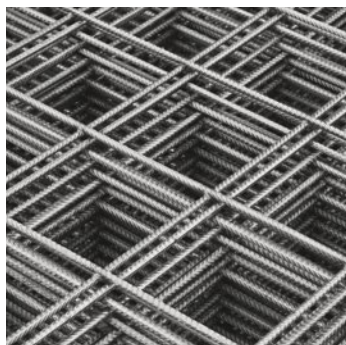
d (mm)	5,5 - 16,0
(t)	2
a (mm)	1250
i (mm)	850
h (mm)	1600 - 1800

Tipo di acciaio / Steel grade / Stahlsorten / Nuance d'acier / Grado de acero
S235 (EN 10025-2) - 1.0038

Proprietà meccaniche / Mechanical properties / Mechanische Eigenschaften / Propriétés mécaniques / Propiedades mecánicas

R _e	290 / 360 N/mm ²
R _m	410 / 480 N/mm ²
A 5	≥ 31%

Saldabilità / Weldability / Schweisseignung / Soudabilité / Soldabilidad
C ≤ 0,15% - C_{eq} ≤ 0,35%



RETI DA STOCK ACCESSORI DI COLLEGAMENTO DISTANZIATORI

Stock meshes - Connecting systems - Distance cones
Lagermatten - Anschlusssysteme - Distanzkörbe
Treillis de stock - Systèmes de raccordement - Paniers de support
Mallas soldadas estandar - Sistemas de conexión - Separadores

Produciamo numerose reti standard (Artec B500B, topar-M®, di tipo Z e di tipo K) accessori di collegamento e distanziatori. Le dimensioni complete sono disponibili nel sito internet www.stahl-gerlafingen.com

We produce many stock meshes (Artec B500B, topar-M®, Z type and K type) connecting systems and distance cones. Complete dimensions are available on website www.stahl-gerlafingen.com

Wir produzieren verschiedene Lager-Listenmatten (Artec B500B, topar-M®, Typ Z und Type K) Anschlusssysteme und Distanzkörbe. Die kompletten Abmessungsreihen sind auf unserer Homepage www.stahl-gerlafingen.com abrufbar.

Nous produisons de nombreux treillis standards (Artec B500B, topar-M®, type Z et type K), des systèmes de raccordement et des paniers de support. Les dimensions complètes sont disponibles sur le site internet www.stahl-gerlafingen.com

Fabricamos muchos tipos de malla estándar (Artec B500B, topar-M®, tipo Z y tipo K), sistemas de conexión y separadores. Las dimensiones completas están disponibles en la página web www.stahl-gerlafingen.com

Proprietà meccaniche / Mechanical properties / Mechanische Eigenschaften / Propriétés mécaniques / Propiedades mecánicas

	Artec B500B / topar-M	Type Z / Type K
$R_e (f_{sk})$	$\geq 500 \text{ N/mm}^2$	$\geq 500 \text{ N/mm}^2$
Class	B	A
Ratio $R_m/R_e (f_t/f_{sk})$	$\geq 1,08$	$\geq 1,05$
A_{gt}	$\geq 5\%$	$\geq 2,5\%$

Approvazioni / Homologations / Zulassungen / Homologations / Aprobaciones

Artec B500B / topar-M	CH	SIA 262	B500B	(M2.1)	6 - 12 mm / 6 - 10 mm
Type Z / Type K	CH	SIA 262	B500A	(M1.1)	5 - 10 mm

Saldabilità / Weldability / Schweißseignung / Soudabilité / Soldabilidad

Artec B500B / topar-M	$C \leq 0,22\% - C_{eq} \leq 0,50\%$
Type Z / Type K	$C \leq 0,15\% - C_{eq} \leq 0,35\%$

CONFRONTO DELLE QUALITÀ DEGLI ACCIAI RISPETTO ALLE DESIGNAZIONI PRECEDENTI

Comparison of steel grades with previous designation

Vergleich von Stahlsorten mit früheren Bezeichnungen

Comparaison des nuances d'acier avec les désignations précédentes

Comparación de grados de acero con las designaciones anteriores

Designazione attuale Current designation Aktuelle Kennzeichnung Désignation actuelle Designación actual		Designazioni precedenti Previous designation Vorherige Kennzeichnungen Désignations précédentes Designaciones anteriores		Germany		France	United Kingdom	Spain	Italy	Belgium	Sweden	Austria	Norway
EN 10025-2:2004		EN 10025:1990+A1:1993		EN 10025:1990	DIN 17100	NFA 35-501	BS 4360	UNE 36-080	UNI 7070	NBNA 21-101	SS 14	M 3116	
S185	1.0035	S185	1.0035	Fe 310-0	St 33	A 33		A 310-0	Fe 320	A 320	13 00-00	St 320	
		S235JR	1.0037	Fe 360 B	St 37-2	E 24-2			Fe 360 B	AE 235-B	13 11-00		NS 12 120
		S235JRG1	1.0036	Fe 360 BFU	Ust 37-2			AE 235 B-FU				USt 360 B	NS 12 122
S235JR	1.0038	S235JRG2	1.0038	Fe 360 BFN	RSt 37-2		40 B	AE 235 B-FN			13 12-00	RSt 360 B	NS 12 123
S235J0	1.0114	S235J0	1.0114	Fe 360 C	St 37-3 U	E 24-3	40 C	AE 235 C	Fe 360 C	AE 235-C		St 360 C	NS 12 124
												St 360 CE	
*	*	S235J2G3	1.0116	Fe 360 D1	St 37-3 N	E 24-4	40 D	AE 235 D	Fe 360 D	AE 235-D		St 360 D	NS 12 124
S235J2	1.0117	S235J2G4	1.0117	Fe 360 D2	--								
S275JR	1.0044	S275JR	1.0044	Fe 430 B	St 44-2	E 28-2	43 B	AE 275 B	Fe 430 B	AE 255-B	14 12-00	St 430 B	NS 12 142
S275J0	1.0143	S275J2G3	1.0143	Fe 430 C	St 44-3 U	E 28-3	43 C	AE 275 C	Fe 430 C	AE 255-C		St 430 C	NS 12 143
												St 430 CE	
*	*	S275J2G3	1.0144	Fe 430 D1	St 44-3 N	E 28-4	43 D	AE 275 D	Fe 430 D	AE 255-D	14 14-00	St 430 D	NS 12 143
S275J2	1.0145	S275J2G4	1.0145	Fe 430 D2	--						14 14-01		
S355JR	1.0045	S355JR	1.0045	Fe 510 B	--	E 36-2	50 B	AE 355 B	Fe 510 B	AE 355-B			
S355J0	1.0553	S355J0	1.0553	Fe 510 C	St 52-3 U	E 36-3	50 C	AE 355 C	Fe 510 C	AE 355-C		St 510 C	NS 12 153
*	*	S355J2G3	1.0595	Fe 510 D1	St 52-3 N		50 D	AE 355 D	Fe 510 D	AE 355-D		St 510 D	NS 12 153
S355J2	1.0577	S355J2G4	1.0577	Fe 510 D2	--								
*	*	S355J2G3	1.0595	Fe 510 DD1	St 52-3 N	E 36-4	50 DD			AE 355-DD			
S355K2	1.0596	S355J2G4	1.0596	Fe 510 DD2	--								
E295	1.0050	E295	1.0050	Fe 490-2	St 50-2	A 50-2		A 490	Fe 490	A 490-2	15 50-00 15 50-01	St 490	
E355	1.0060	E355	1.0060	Fe 590-2	St 50-2	A 60-2		A 590	Fe 590	A 590-2	16 50-00 16 50-01	St 590	
E360	1.0070	E360	1.0070	Fe 690-2	ST 70-2	A 70-2		A 690	Fe 690	A 690-2	16 55-00 16 55-01	St 690	
EN 10025-5:2004		EN 10155:1993		EU 155:1980	Germany	France	United Kingdom						
S355J0W	1.8959	S355J0W	1.8959	Fe 510 C2 KI	--	E 36 W B 3	WR50B						
*	*	S355J3G1W	1.8963	Fe 510 D2 KI	--		WR50C						
S355J2W	1.8965	S355J2G2W	1.8965	--	WTSt 52-3		--						
*	*	S355K2G1W	1.8966	--	--	E 36 W B 4	--						

* when a product is delivered in "N" condition "+N" shall be added to the designation

Designazione attuale Current designation Aktuelle Kennzeichnung Désignation actuelle Designación actual		Designazioni precedenti Previous designation Vorherige Kennzeichnungen Désignations précédentes Designaciones anteriores		Germany	France	United Kingdom	Spain	Italy	Sweden	Finland	
EN 10083-2:2006		ISO 683-1:1987									
C35E	1.1181	(C 35 E4)	(Ck 35)	1.1181	[XC 38 H1]	(080M36)	C35K	F1130	(C35)	1572	-
C35R	1.1180	(C 35 M2)	Cm 35	1.1180	[XC 38 H1u]	-	C35K1	F1135(1)	(C35)	-	-
C45E	1.1191	(C 45 E4)	(Ck 45)	1.1191	[XC 48 H1]	(080M46)	C45K	F1140	(C45)	1672	-
C45R	1.1201	(C 45 M2)	Cm 45	1.1201	[XC 48 H1u]	-	C45K1	F1145(1)	(C45)	-	-
C55	1.0535	(C55)	C 55	1.0535	[AF70C55]	-	-	-	(C55)	-	-
C60	1.0601	(C60)	C 60	1.0601	-	-	-	-	(C60)	-	-
EN 10083-3:2006		ISO 683-1:1987		Germany	France	United Kingdom	Spain	Italy	Sweden	Finland	
25CrMoS4	1.7213	25CrMoS4	25CrMoS4	1.7213	25 CD 4 u	-	-	-	(25CrMo4)	-	-
42CrMoS4	1.7227	42CrMoS4	42CrMoS4	1.7227	42 CD 4 u	-	40CrMo41	F1257(1)	(42CrMo4)	-	-
50CrMo4	1.7228	50CrMo4	50CrMo4	1.7228	-	-	-	-	-	-	-
34CrNiMo6	1.6582	(36CrNiMo6)	(34CrNiMo6)	1.6582	-	(817M40)	-	-	-	2541	-
30CrNiMo8	1.6580	(31CrNiMo8)	30CrNiMo8	1.6580	30 CND 8	[823M30]	-	-	-	-	-
39NiCrMo3	1.6510	-	-	1.6510	-	-	-	-	(39NiCrMo3)	-	-
51CrV4	1.8159	(51CrV4)	51CrV4	1.8159	(50CV 4)	[735A50]	51CrV4	F1430	(50CrV4)	-	-
EN 10084:2008		ISO 683-11:1987		Germany	France	United Kingdom	Spain	Italy	Sweden	Finland	
C10E	1.1121	C10	Ck10	1.1121	XC10	045M10	C10k	C10			
C10R	1.1207	-	-	-	-	-	-	-	-	-	-
C15E	1.1141	C15E4	Ck 15	1.1141	-	-	C16K	C15	-	-	505
C15R	1.1140	C15M2	Cm15	1.1140	-	-	C16K-1	-	SS1370		
16MnCrS5	1.7139	16MnCrS5	16MnCrS5	1.7139	-	-	16MnCrS5-1	-	SS2127	-	
20MnCrS5	1.7149	20MnCrS5	20MnCrS5	1.7149	-	-	-	-	-	-	
20NiCrMoS2-2	1.6526	20NiCrMoS2	21NiCrMoS2	1.6526	-	-	20NiCrMoS2-1	20NiCrMoS2	SS2506	-	
17NiCrMo6-4	1.6566	17NiCrMo6	-	-	18NCD6	815M17	-	18NiCrMo5	SS2523	-	
18CrNiMo7-6	1.6587	18CrNiMo7	18CrNiMo6	1.6587	-	-	-	-	-	-	511

Qualità fra parentesi significa che la composizione chimica differisce solo leggermente - qualità fra parentesi quadre significa che la composizione chimica differisce in modo significativo / steel grade given in round brackets means the chemical composition differs only slightly - steel grade given in square brackets means the chemical composition differs significantly / stahlbezeichnung in runden Klammern die chemische Zusammensetzung unterscheidet sich nur geringfügig- stahlbezeichnung in eckigen Klammern die chemische Zusammensetzung unterscheidet sich deutlich / nuance d'acier entre parenthèses la composition chimique ne diffère que légèrement - nuance d'acier entre crochets la composition chimique diffère de façon significative / grado de acero entre paréntesis la composición química difiere ligeramente - grado de acero entre corchetes la composición química difiere significativamente.

CERTIFICAZIONI

Certifications
Zertifikate
Certifications
Certificaciones

Il sistema di gestione del Gruppo Beltrame, certificato secondo le norme ISO 9001, ISO 14001 e OHSAS 18001, assicura affidabilità, efficienza, rispetto dell'ambiente, della sicurezza e della salute del personale e il pieno rispetto delle aspettative della clientela, impegnandosi al miglioramento continuo di tutti i processi. I prodotti sono certificati da enti riconosciuti nell'ambito internazionale. In particolare forniamo dei laminati con marcatura CE, incluse la Dichiarazione di Prestazione DoP e la Dichiarazione ambien-

Beltrame Group management system, certified as ISO 9001, ISO 14001 e OHSAS 18001, assures reliability, efficiency, respect for environment, safety and health of employees and fully respecting customer expectations, undertaking a continuous improvement of all processes. All products are certified by international recognized authorities. More specifically we supply hot rolled products with CE marking, included the Declaration of Performance DoP and

tale di Prodotto EPD, in linea con i requisiti del Regolamento Europeo per i prodotti da costruzione (UE) 305/2011 e dei prodotti in acciaio per cemento armato qualificati nei principali paesi europei. I prodotti rispettano le caratteristiche per i collaudi navali delle principali società di classificazione operanti nel mondo e possono quindi essere impiegati nella cantieristica navale. La nostra produzione in acciaio speciale è controllata mediante ultrasuoni e soddisfa anche le utilizzazioni più esigenti.

the Environmental Product Declaration EPD, as required by European Regulation for construction products (EU) 305/2011 and reinforcing steel products accredited in all the main European countries. The products respect the characteristics of the naval inspections of the main classification societies around the world and can therefore be used for ship building. The production of special steels using U.S. methods satisfy many different applications.



Le système de gestion du Groupe Beltrame, certifié selon les normes ISO 9001, ISO 14001 e OHSAS 18001, assure fiabilité, efficacité, respect de l'environnement, de la sécurité et de la santé du personnel et le respect absolu des attentes des clients, en s'engageant à l'amélioration continu de tous les processus. Les produits sont certifiés par des organismes reconnus au niveau international. En particulier nous fournissons des laminés avec marquage CE, incluses la Déclaration de Performance DoP et la Déclaration

environnementale de Produit EPD, conformément aux exigences du Règlement européen pour les produits de construction (UE) 305/2011 et des produits en acier pour béton armé qualifiés dans les principaux pays européens. Les produits respectent les caractéristiques des réceptions navales des principales sociétés de classification dans le monde et peuvent donc être utilisés pour la construction navale. Notre production en acier spécial est contrôlée par ultrasons et satisfait même les utilisations les plus exigeantes.

Das Managementsystem der Beltrame-Gruppe ist zertifiziert nach ISO 9001, ISO 14001 und OHSAS 18001 und versichert somit Zuverlässigkeit, Effizienz, Umweltschutz, Arbeitsschutz und die Gesundheit der Mitarbeiter, sowie die vollkommene Beachtung der Kundenerwartung, bei ständig kontinuierlicher Verbesserung aller Prozesse. Alle Produkte sind zertifiziert durch international anerkannte Behörden oder deren Bevollmächtigten. Wir liefern warmgewalzte Stahlprodukte mit dem CE-

Zeichen, inklusive der Leistungserklärung und der EPD / Umwelt-Produktdeklaration, wie nach der europäischen Bauproduktenverordnung (EU) 305/2011 gefordert und Betonstahl wie er in allen europäischen Ländern zugelassen ist. Die Stahlprodukte können ebenfalls im Schiffsbau verwendet werden und erfüllen die Ansprüche der wichtigsten weltweiten Schiffsbau-Klassifizierungsgesellschaften. Die Produktion von Spezialstählen nach den U.S. Sicherheitsvorschriften gewährleisten ebenfalls vielfältige Anwendungsmöglichkeiten.

El sistema de gestión del Grupo Beltrame está certificado según las normas ISO 9001, ISO 14001 y OHSAS 18001, que aseguran fiabilidad, eficiencia, respeto al medio ambiente, la seguridad y salud del personal y el pleno respeto a las expectativas de los clientes, comprometiéndose a mejorar en todos los procesos. Los productos se certifican por organismos reconocidos a nivel internacional. En particular, nosotros suministramos laminados con marcado CE, incluido la declaración de prestaciones DoP y la Declaración ambiental

de Producto EPD, conforme con los requisitos del Reglamento Europeo de productos de construcción (UE) 305/2011 y productos de acero para hormigón armado cualificado en los principales países europeos. Los productos cumplen con las características para certificación naval de las sociedades de clasificación líderes en el mundo y por lo tanto pueden ser utilizados en la construcción naval. Nuestra producción de acero especial está controlada por ultrasonidos, satisfaciendo también, los requisitos más exigentes.



PRODUZIONI SPECIALI

Special productions
Sonderproduktionen
Productions spéciales
Producciones especiales

Il Gruppo Beltrame è in grado di realizzare, su richiesta della clientela, prodotti con qualità, dimensioni e tolleranze diverse da quelle già riportate in questo catalogo. Inoltre è possibile produrre nuove forme di profili e reti elettrosaldate secondo le Vostre indicazioni. Vi invitiamo a contattare la nostra rete commerciale per valutarne la fattibilità.

The Beltrame Group is capable of supplying other qualities, sizes and tolerances products in addition to those already listed in this brochure and we also can produce new sections and stock meshes following your indications. Please refer to our sales office for feasibility.

Die Beltrame Gruppe liefert auf Anfrage zusätzlich zu den in diesem Katalog beschriebenen Artikeln alle Produkte auch in abweichenden Qualitäten, Maßen und Toleranzen. Die Produktion komplett neuer Profilformen und Lagermatten nach Ihren Spezifikationen ist ebenfalls möglich. Für Fragen zur Machbarkeit bitten wir Sie, sich mit unserem Handelsbüro in Verbindung zu setzen.

Le groupe Beltrame est capable, sur demande, de réaliser des produits avec des qualités, des dimensions et des tolérances différentes de celles déjà mentionnées dans ce catalogue. En outre, selon vos indications, nous pouvons réaliser de nouvelles formes de profilés et de treillis électrosoudés. Nous vous invitons à contacter notre réseau commercial pour en évaluer la faisabilité.

El Grupo Beltrame está capacitado para fabricar los productos en calidades, dimensiones y tolerancias diferentes a las indicadas en este catálogo. Pudiendo fabricar otros perfiles y mallas electrosoldadas bajo consulta. Rogamos diríjase a nuestro departamento comercial para evaluar cualquier posibilidad.

AVVERTENZE

Warnings
Vorbehalt
Réserve
Reserva

I dati contenuti in questo catalogo sono stati controllati con la massima cura per assicurare la loro correttezza. Tuttavia non si assume alcuna responsabilità per eventuali inesattezze o mancanze. Il Gruppo Beltrame persegue una politica di continuo miglioramento del proprio prodotto. Pertanto le informazioni illustrate in questo catalogo potranno variare senza preavviso.

The technical information in this catalogue has been carefully checked in order to ensure accuracy. However no liability can be assumed for any incorrect or incomplete data. Continuous product improvement is a key policy of the Beltrame Group. All technical information contained in this catalogue can be changed without notice.

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Les informations contenues dans ce catalogue ont été contrôlées avec le plus grand soin. Néanmoins nous n'assumons aucune responsabilité pour d'éventuels inexactitudes ou manquements. Le Groupe Beltrame poursuit une politique d'amélioration continue de ces produits. Par conséquent les informations reportées dans ce catalogue pourront être modifiées sans préavis.

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