

PRODUCT
CATALOGUE
2024



ALFA ACCIAI



Acciaierie di Sicilia

A large customer-oriented Group

The Alfa Acciai Group, one of Europe's leading manufacturers of reinforcing steel and wire rod for 70 years, is a benchmark in terms of cutting-edge technology, mindful of the employees and with environmental awareness throughout the entire steel supply chain.

With an overall production capacity of 2.5 million tonnes of steel and rolled products and over 1,200 employees.

Focus on ethical corporate social responsibility principles, routine maintenance on installations and operations, caring and listening to stakeholders' requirements: these are the cornerstones on which the Alfa Acciai Group has grown and developed by working in the steel industry for seventy years with standards of excellence.





All-round sustainability





Unique partnerships based on a clear identity



- ✓ **Extensive range of products;**
- ✓ **The quality of our products,** which has always been ensured by ongoing technological innovation, rigorous checks and numerous certifications;
- ✓ **The immediate availability of products of various grades and sizes** to meet all customer requirements promptly;
- ✓ **Our professionalism and commitment,** making the Alfa Acciai Group a reliable partner;
- ✓ **The consolidated expertise of our technical team,** providing our customers with effective solutions;
- ✓ **Customer support,** which proves our reliability and continually maintains strong partnerships;
- ✓ **A highly efficient and flexible verticalized steel-making facility,** firmly based on respect for people and the environment, which is widely recognized as a **benchmark in circular economy.**

We want to be deserving of the trust our customers place in us, and that's why we listen carefully to their requirements every day.



A range that sets the Group as a benchmark in the EAF steel market

The Alfa Acciai Group aims to be a reference point for customers in the EAF steel industry in terms of **production efficiency, product quality and product range**, in order to meet their requirements.

The product range can satisfy demand both in the **construction industry** (with the supply of reinforcing steel in bars, coils and welded mesh, as well as artificial aggregate) and the requirements of **industrial wire rod processing**.

Our extensive and diverse product range always complies with domestic and EU standards and is able to meet customer and market requirements. Moreover, it is optimised with various features such as product traceability, tailor-made customer support, large warehouse stocks of products, and **fast, punctual delivery timescales thanks to integrated Group logistics**.

This makes the Alfa Acciai Group a valuable partner for the domestic, EU and non-EU markets.





≥99%

Our commitment to the environment is ongoing and unbending.

It reflects who we are and where we're headed.

For some time, the Alfa Acciai Group has been committed to making steel production increasingly sustainable, through an integrated approach that involves all environmental aspects, full compliance with current legislation and ongoing research into the best technical, management and organisational solutions to make consumption more efficient.

As proof of the policy focusing on ongoing improvement of environmental performance, Alfa Acciai and Acciaierie di Sicilia currently implement **ISO 14001 Environmental Management** and **ISO 5001 Energy Management Systems**.

In 2023, the Alfa Acciai Group was one of the first steel mills in Italy to obtain the **Corporate Carbon Footprint** certification for all its production sites.



All our products are awarded the following environmental certificates:

- ✔ **Content of recycled material - UNI/PdR 88:2020**, the minimum content of recycled material in Alfa Acciai and Acciaierie di Sicilia products is 99%. This is among the highest in Europe and far exceeds the Minimum Environmental Criteria for structural uses indicated by CAM-EDILIZIA, which is the most important environmental standard in the construction industry. 
- ✔ **Environmental Product Declaration (EN ISO 14025)** to meet LEED requirements and help increase the rating value of the end product.
- ✔ **ICMQ ECO Gold**
- ✔ **SUSTSTEEL**



“Our steels are outstanding in terms of uniformity and consistent reproducible mechanical characteristics. These aspects are essential for enabling our customers to optimise their process parameters and achieve enhanced production performance, especially in the processing stage.”





Alfa Acciai

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Acciaierie di Sicilia

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REBAR



Weldable, sustainable reinforcing steel featuring improved bonding and high ductility, low carbon contents, packaged in bars, available in the range of diameters 8-32 mm, hot rolled with in-line heat treatment (Tempcore).

Product characteristics

- ✓ Improved bonding;
- ✓ No axial torsion;
- ✓ Reduced surface oxidation, giving greater weight yield and enhanced cleanliness.

Distinctive elements

Optimisation of production parameters in view of obtaining all products in **class C - high ductility**, guaranteeing:

- ✓ Optimal mechanical properties for seismic and other applications;
- ✓ Improved packaging for subsequent operations.

Range of dimensions

- Diameter: **8 - 32 mm**
- Bars **packaged in bundles**
- Bar length: **6-18 m**

Weight

Bundle weight:
12 m ~ 2300 kg
6 m ~ 1400 kg



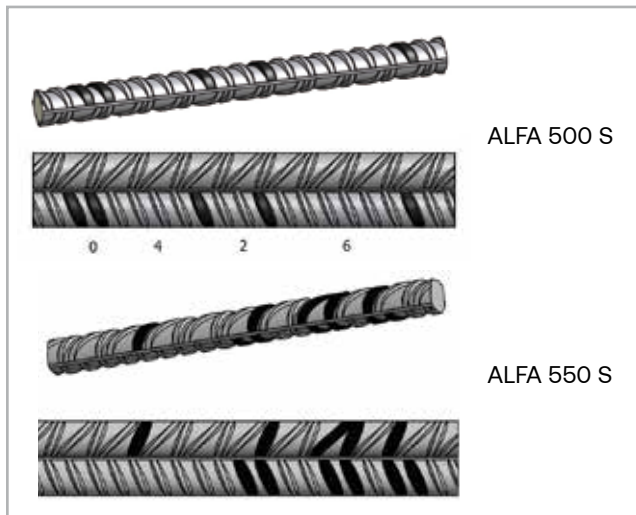
REBAR



Trade names

- ALFA 500 S
- ALFA 550 S

Rolling marking



Mechanical features*

Grade	f_y (Re)	f_t (Rm)	f_t / f_y	f_y / f_y nom.	Agt %
	N/mm ²	N/mm ²	(Rm/Re)	(Re/Re nom.)	
B450C	≥ 450	≥ 540	≥ 1.15 ≤ 1.35	≤ 1.25	≥ 7,5
B500B	≥ 500	-	≥ 1.08	≤ 1.30	≥ 5
B500C	≥ 500	-	≥ 1.15 ≤ 1.35	≤ 1.25	≥ 8
B550B	≥ 550	-	≥ 1.08	-	≥ 5

* Characteristic values

Chemical composition

C % max	P % max	S % max	Cu % max	N % max	Ceq max
0.22	0.050	0.050	0.80	0.012	0.50
(0.24)	(0.055)	(0.055)	(0.85)	(0.014)	(0.52)

The figures in brackets refer to product analysis

Qualifications

Italy	France	Germany	Switzerland	Croatia	Slovakia	
B450C	B500B	B500B	B500B	B500B	B500B	
Hungary	Romania	Czech Rep.	Slovenia	Austria	Poland	Serbia
B500B - B500C	B500C	B500B	B500B	B550B	B500C	B550B

SPOOLED COIL



Weldable, sustainable reinforcing steel featuring improved bonding and high ductility, low carbon contents, packaged in coils, available in the range of diameters 8-16 mm, hot rolled with in-line heat treatment (Tempcore).

Product characteristics

- ✓ Excellent uncoiling, even at high speed, as the result of compact packaging with coil-on-coil winding;
- ✓ Increased output in t/h thanks to reduced machine downtimes for loading and coil format changeover;
- ✓ Reduced production costs as there are no offcuts;
- ✓ Compatibility with all welding machines;
- ✓ Optimized logistics – product high density contributes to reduce handling, transport and storage costs;
- ✓ Improved bonding – excellent even after straightening;
- ✓ No axial torsion prevents bar rotation during straightening thus ensuring perfectly straight;
- ✓ Reduced surface oxidation, giving greater weight yield and enhanced cleanliness;
- ✓ No welds.

Distinctive elements

Optimisation of production parameters in view of obtaining all products in **class C - high ductility**, guaranteeing:

- ✓ Optimal mechanical properties for seismic and other applications;
- ✓ Less production energy required;
- ✓ Reduced wear of straightening rollers on pre-bending machines.

Range of dimensions

- Diameter: **8 - 16 mm**
- Coils strapped in 4 positions
- Coil dimensions:
 - Ø int. **700 mm**
 - Ø ext. **1100-1200 mm**
 - height **700 mm**

Weight

Spool weight: ~ **3000 kg**



SPOOLED COIL



Mechanical features*

Grade	f_y (Re)	f_t (Rm)	Rm/Re	Re/Re nom.	Agt %
	N/mm ²	N/mm ²			
B450C	≥ 450	≥ 540	≥ 1.15	≤ 1.25	≥ 7.5
			≤ 1.35		
B500B	≥ 500	-	≥ 1.08	≤ 1.30	≥ 5
B500C	≥ 500	-	≥ 1.15	≤ 1.25	≥ 8
			≤ 1.35		
B550B	≥ 550	-	≥ 1.08	-	≥ 5

* Characteristic values

Chemical composition

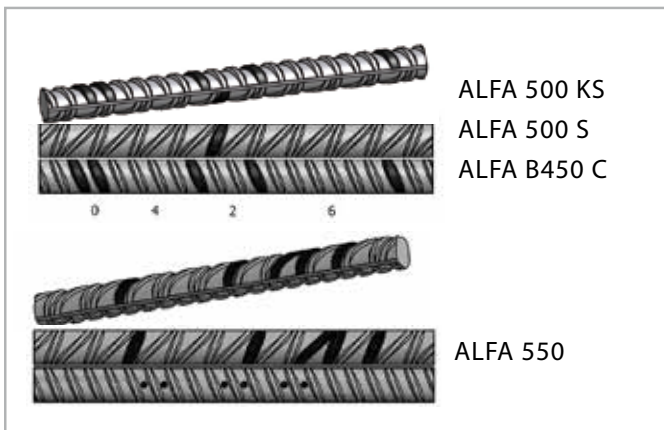
C % max	P % max	S % max	Cu % max	N % max	Ceq max
0.22	0.050	0.050	0.80	0.012	0.50
(0.24)	(0.055)	(0.055)	(0.85)	(0.014)	(0.52)

The figures in brackets refer to product analysis

Trade names

- ALFA 500 KS
- ALFA 500 S (France)
- ALFA 550 (Austria)
- ALFA B450 C

Rolling marking



Qualifications

Italy	France	Germany	Switzerland	Croatia	Slovakia	
B450C	B500B	B500B	B500C	B500B	B500B	
Hungary	Romania	Czech Rep.	Slovenia	Austria	Poland	Serbia
B500B - B500C	B500C	B500B	B500B	B550B	B500C	B550B

RECOILED WIRE



Weldable, sustainable reinforcing steel featuring improved bonding and high ductility, low carbon contents, packaged in coils, hot rolled and cold stretched.

Product characteristics

- ✓ Excellent uncoiling, even at high speed, as the result of compact packaging with coil-on-coil winding;
- ✓ Increased output in t/h thanks to reduced machine downtimes for loading and coil format changeover;
- ✓ Reduced production costs as there are no offcuts;
- ✓ Compatibility with all welding machines;
- ✓ Optimized logistics – product high density contributes to reduce handling, transport and storage costs;
- ✓ Improved bonding – excellent even after straightening;
- ✓ No axial torsion prevents bar rotation during straightening thus ensuring perfectly straight;
- ✓ Reduced surface oxidation, giving greater weight yield and enhanced cleanliness.

Distinctive elements

Optimisation of production parameters in view of obtaining all products in **class C - high ductility**, guaranteeing:

- ✓ Optimal mechanical properties for seismic and other applications;
- ✓ Less production energy required;
- ✓ Reduced wear of straightening rollers on pre-bending machines.

Range of dimensions

- Diameter: **6 - 16 mm**
- Coils strapped in 4 positions
- Coil dimensions:
 - Ø int. **630 mm**
 - Ø ext. **1100 - 1200 mm**
 - height **800 - 1000 mm**

Weight

- Coil weight:~ **2500 Kg**
- Coil weight:~ **3000 Kg**
- Coil weight:~ **5000 Kg**



RECOILED WIRE



Trade names

- ALFA RB
- ALFA RB 55 (Austria)

Rolling marking



Mechanical features*

Grade	f_y (Re)	f_t (Rm)	f_t / f_y	f_y / f_y nom.	Agt %
	N/mm ²	N/mm ²	(Rm/Re)	(Re/Re nom.)	
B450C	≥ 450	≥ 540	≥ 1.15 ≤ 1.35	≤ 1.25	≥ 7.5
B500B	≥ 500	-	≥ 1.08	≤ 1.30	≥ 5
B550B	≥ 550	-	≥ 1.08	-	≥ 5

* Characteristic values

Chemical composition

C % max	P % max	S % max	Cu % max	N % max	Ceq max
0.22	0.050	0.050	0.80	0.012	0.50
(0.24)	(0.055)	(0.055)	(0.85)	(0.014)	(0.52)

The figures in brackets refer to product analysis

Qualifications

Italy	France	Germany	Switzerland
B450C	B500B	B500B	B500B
Slovenia	Austria		
B500B	B550B		

MESH ITALY



Welded mesh made from high-ductility hot-rolled welding steel **class B450C**. Suitable for use in seismic areas. Produced in standard formats.

MESH TYPE CODING	
	Sheet format
	1 = m 2.00 x 3.00 2 = m 2.25 x 4.00

Product characteristics

- Available in all formats and types.



Welded mesh according to Italian Ministerial Decree 17/01/2018 B450C - B450A

Format: 2250x4000 mm

Load information

Type	Wire Ø mm		Mesh mm		Cross-section mm ² /m		Sheet mm		No. of sheets per pack	Pack height mm	Wire projection mm		Sheet weight		No. of sheets			Total weight kg
	Long.	Transv.	Long.	Transv.	Long.	Transv.	Width	Length			Long.	Transv.	Tot. kg	kg/m ²	Pack	Hold	Load	
510/2	5	5	100	100	196	196	2250	4000	50	270	50	25	28.03	3.11	50	500	1000	28020
515/2	5	5	150	150	131	131	2250	4000	100	530	50	75	18.60	2.07	100	500	1500	27900
520/2	5	5	200	200	98	98	2250	4000	100	530	100	25	14.32	1.59	100	500	1500	21480
610/2 AD	6	6	100	100	283	283	2250	4000	50	320	50	25	40.40	4.49	50	400	700	28280
615/2 AD	6	6	150	150	189	189	2250	4000	50	320	50	75	26.80	2.98	50	400	1100	29480
620/2 AD	6	6	200	200	142	142	2250	4000	50	320	100	25	20.64	2.29	50	400	1200	24768
810/2 AD	8	8	100	100	502	502	2250	4000	25	220	50	25	71.80	7.98	25	300	400	28720
815/2 AD	8	8	150	150	335	335	2250	4000	30	280	50	75	47.69	5.30	30	300	600	28614
820/2 AD	8	8	200	200	252	252	2250	4000	50	440	100	25	36.70	4.08	50	300	800	29360
1015/2 AD	10	10	150	150	524	524	2250	4000	20	220	50	75	74.5	8.28	20	220	400	29800
1020/2AD	10	10	200	200	393	393	2250	4000	25	270	100	25	57.38	6.37	25	225	500	28692
1220/2AD	12	12	200	200	565	565	2250	4000	25	320	100	25	82.58	9.18	25	200	350	28903

Format: 2000x3000 mm

510/1	5	5	100	100	196	196	2000	3000	100	530	50	50	18.48	3.08	100	500	1600	29568
515/1	5	5	150	150	131	131	2000	3000	100	530	75	25	12.62	2.10	100	500	2000	25240
520/1	5	5	200	200	98	98	2000	3000	100	530	100	100	9.24	1.54	100	500	2000	18480
610/1 AD	6	6	100	100	283	283	2000	3000	50	320	50	50	26.60	4.43	50	400	1100	29260
615/1 AD	6	6	150	150	189	189	2000	3000	50	320	75	25	18.20	3.03	50	400	1600	29120
620/1 AD	6	6	200	200	142	142	2000	3000	50	320	100	100	13.32	2.22	50	400	1600	21312
810/1 AD	8	8	100	100	502	502	2000	3000	25	220	50	50	47.38	7.90	25	300	600	28428
815/1 AD	8	8	150	150	335	335	2000	3000	50	440	75	25	32.35	5.37	50	300	900	29025
820/1 AD	8	8	200	200	252	252	2000	3000	50	440	100	100	23.67	3.95	50	300	1200	28404
1015/1 AD	10	10	150	150	524	524	2000	3000	25	270	75	25	50.59	8.43	25	225	600	30354
1020/1AD	10	10	200	200	393	393	2000	3000	25	270	100	100	36.98	6.17	25	225	800	29616
1220/1AD	12	12	200	200	565	565	2000	3000	25	320	100	100	53.28	8.88	25	200	550	29304

MESH ITALY



Mechanical features*

Grade	f_y (Re)	f_t (Rm)	f_t / f_y	f_y / f_y nom.	Agt %
	N/mm ²	N/mm ²	(Rm/Re)	(Re/Re nom.)	
B450C	≥ 450	≥ 540	≥ 1.15 ≤ 1.35	≤ 1.25	≥ 7.5
B450A	≥ 450	≥ 540	≥ 1.05	≤ 1.25	≥ 2.5

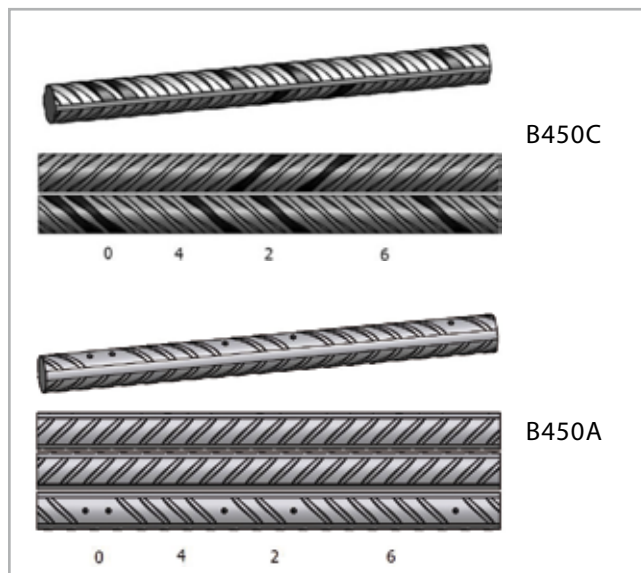
* Characteristic values

Chemical composition

C % max	P % max	S % max	Cu % max	N % max	Ceq max
0.22	0.050	0.050	0.80	0.012	0,50
(0,24)	(0,055)	(0,055)	(0,85)	(0,014)	(0,52)

The figures in brackets refer to product analysis

Rolling marking



Qualifications



MESH FRANCE



Welded mesh for structural use made from high-ductility hot-rolled welding steel class *B500B*. Suitable for use in seismic areas. Crack-proof welded mesh made of *B500A* steel. Produced in standard formats.

Product characteristics

- ✓ Available in all formats and types;
- ✓ Lifting slings available on request.

Welded mesh according to NFA 35080-2-NFA 35-024*

Type		Cross-section		Mesh mm	Diameter mm	Wire projection mm/mm	No. wires	Dimensions m	Nominal mass kg/m ²	Surface area per sheet m ²	Weight per sheet kg	Sheets per pack	Pack weight kg
		cm ² /m	cm ² /m										
PAF C*	Long.	0.80	0.80	200	4.5	100/100	12	3.60	1.250	8.64	10.80	100	1080
	Transv.		0.80	200	4.5	100/100	18	2.40					
PAF 10*	Long.	1.19	1.19	200	5.5	100/100	12	4.20	1.870	9.60	18.85	70	1319
	Transv.		1.19	200	5.5	100/100	21	2.40					
ST 20	Long.	1.89	1.89	150	6	150/150	16	6.00	2.487	14.40	35.81	40	1432
	Transv.		1.28	300	7	75/75	20	2.40					
ST 25	Long.	2.57	2.57	150	7	150/150	16	6.00	3.020	14.40	43.49	40	1740
	Transv.		1.28	300	7	75/75	20	2.40					
ST 35	Long.	3.85	3.85	100	7	150/150	24	6.00	4.026	14.40	57.98	30	1739
	Transv.		1.28	300	7	50/50	20	2.40					
ST 50	Long.	5.03	5.03	100	8	150/150	24	6.00	5.267	14.40	75.84	20	1517
	Transv.		1.68	300	8	50/50	20	2.40					
ST 60	Long.	6.36	6.36	100	9	125/125	24	6.00	6.986	14.40	100.60	16	1610
	Transv.		2.54	250	9	50/50	24	2.40					
ST 15 C	Long.	1.42	1.42	200	6	100/100	12	4.00	2.220	9.60	21.31	70	1492
	Transv.		1.42	200	6	100/100	20	2.40					
ST 25 C	Long.	2.57	2.57	150	7	75/75	16	6.00	4.026	14.40	57.98	30	1739
	Transv.		2.57	150	7	75/75	40	2.40					
ST 25 CS	Long.	2.57	2.57	150	7	75/75	16	3.00	4.026	7.20	28.99	40	1160
	Transv.		2.57	150	7	75/75	20	2.40					
ST 40 C	Long.	3.85	3.85	100	7	50/50	24	6.00	6.04	14.40	86.98	20	1740
	Transv.		3.85	100	7	50/50	60	2.40					
ST 50 C	Long.	5.03	5.03	100	8	50/50	24	6.00	7.900	14.40	113.76	15	1706
	Transv.		5.03	100	8	50/50	60	2.40					
ST 65 C	Long.	6.36	6.36	100	9	50/50	24	6.00	9.980	14.40	143.71	10	1437
	Transv.		6.36	100	9	50/50	60	2.40					



MESH FRANCE



Mechanical features*

Grade	f_y (Re)	f_t (Rm)	f_t / f_y	f_y / f_y nom.	Agt %
	N/mm ²	N/mm ²	(Rm/Re)	(Re/Re nom.)	
B500A	≥ 500	-	≥ 1.05	≤ 1.30	≥ 2.5
B500B	≥ 500	-	≥ 1.08	≤ 1.30	≥ 5
B600A*	≥ 600	-	-	-	-

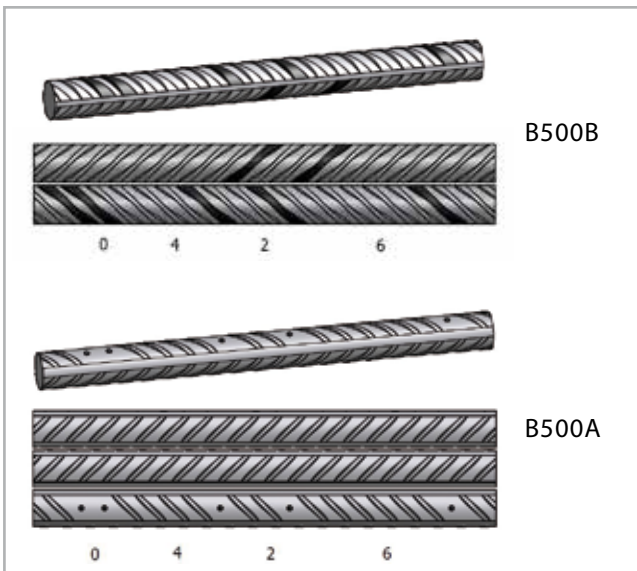
* Characteristic values

Chemical composition

C % max	P % max	S % max	Cu % max	N % max	Ceq max
0.22	0.050	0.050	0.80	0.012	0.50
(0.24)	(0.055)	(0.055)	(0.85)	(0.014)	(0.52)

The figures in brackets refer to product analysis

Rolling marking



Qualifications

France



B500B - B500A - B600A

MESH AUSTRIA



Welded mesh for structural use made from **class B550A** welding steel. Produced in standard formats.

Product characteristics

☑ Available in all formats and types.

Welded mesh according to ÖNORM B 4707

Type	Wire Ø mm		Mesh		Sheet mm		Wire projection mm		Sheet per pack	Sheet weight kg	No. of wires per sheet		Wire weight per sheet kg	
	Long.	Transv.	Long.	Transv.	Width	Lenght	Long.	Transv.			Long.	Transv.	Long.	Transv.
AQ 46	4.6	4.6	100	100	2400	6000	50	50	50	37.57	24	60	18.79	18.79
AQ 50	5	5	100	100	2400	6000	50	50	50	44.35	24	60	22.19	22.19
AQ 55	5.5	5.5	100	100	2400	6000	50	50	50	53.86	24	60	26.86	26.86
AQ 60	6	6	100	100	2400	6000	50	50	25	63.94	24	60	31.96	31.96
AQ 65	6.5	6.5	100	100	2400	6000	50	50	25	74.88	24	60	37.44	37.44
AQ 70	7	7	100	100	2400	6000	50	50	25	86.98	24	60	43.49	43.49
AQ 76	7.6	7.6	100	100	2400	6000	50	50	25	102.53	24	60	51.26	51.26
AQ 82	8.2	8.2	100	100	2400	6000	50	50	20	119.52	24	60	59.76	59.76
AQ 90	9	9	100	100	2400	6000	50	50	15	143.71	24	60	71.85	71.85
AQ 100	10	10	100	100	2400	6000	50	50	10	177.70	24	60	88.85	88.85
A 70	7	5.5	100	300	2400	6000	150	50	25	52.46	24	20	43.49	8.95
A 82	8.2	6.5	100	300	2400	6000	150	50	25	72.24	24	20	59.69	12.50





MESH AUSTRIA



Mechanical features*

Grade	f_y (Re)	f_t (Rm)	f_t / f_y	f_y / f_y nom.	Agt %
	N/mm ²	N/mm ²	(Rm/Re)	(Re/Re nom.)	
B550A	≥ 550	≥ 620	≥ 1.05	-	≥ 2.5

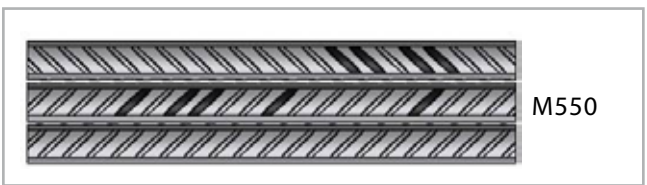
* Characteristic values

Chemical composition

C % max	P % max	S % max	Cu % max	N % max	Ceq max
0.22	0.050	0.050	0.80	0.012	0.50
(0.24)	(0.055)	(0.055)	(0.85)	(0.014)	(0.52)

The figures in brackets refer to product analysis

Rolling marking



Qualifications

Austria

M550



MESH GERMANY-SWITZERLAND



Welded mesh for structural use made from **class B500B** high-ductility hot-rolled welding steel. Suitable for use in seismic areas.

MESH GERMANY

Welded mesh according to DIN 488 – B500B

Type	Wire Ø mm		Mesh		Sheet mm		Wire projection mm		Sheets per pack	Sheet weight kg	No. of wires per sheet		Wire weight per sheet kg	
	Long.	Transv.	Long.	Transv.	Width	Length	Long.	Transv.			Long.	Transv.	Long.	Transv.
Q 188 B	6	6	150	150	6000	2300	75	25	50	41.736	16	40	21.312	20.424
Q 257 B	7	7	150	150	6000	2300	75	25	40	56.776	16	40	28.992	27.784
Q 335 B	8	8	150	150	6000	2300	75	25	30	74.260	16	40	37.920	36.340
Q 424 B	7 - 9	9	150	150	6000	2300	75	25	30	84.356	8 Ø 7 - 8 Ø 9	40	38.448	45.908
Q 524 B	7 - 10	10	150	150	6000	2300	75	25	20	100.876	8 Ø 7 - 8 Ø 10	40	44.112	56.764
Q 636 B	7 - 9	10	125	100	6000	2350	62.5	25	20	131.998	8 Ø 7 - 16 Ø 9	48	62.400	69.598
R 188 B	6	6	250	150	6000	2300	125	25	50	33.566	16	24	21.312	12.254
R 257 B	7	6	250	150	6000	2300	125	25	50	41.246	16	24	28.992	12.254
R 335 B	8	6	250	150	6000	2300	125	25	40	50.174	16	24	37.920	12.254
R 424 B	8 - 9	8	250	150	6000	2300	125	25	30	67.212	4 Ø 8 - 12 Ø 9	24	45.408	21.804
R 524 B	8 - 10	8	250	150	6000	2300	125	25	30	75.708	4 Ø 8 - 12 Ø 10	24	53.904	21.804

Product characteristics

- ✓ Available in all formats and types.



MESH SWITZERLAND

Welded mesh according to SIA 262 – B500B

Type	Wire Ø mm		Mesh		Sheet mm		Wire projection mm		Sheets per pack	Sheet weight kg	No. of wires per sheet		Wire weight per sheet kg	
	Long.	Transv.	Long.	Transv.	Width	Length	Long.	Transv.			Long.	Transv.	Long.	Transv.
K 283	6	6	100	100	2000	5000	50	50	50	44.4	20	50	22.22	22.22
K 188	6	6	150	150	2000	5000	100	25	50	30.2	14	33	15.54	14.65
K 335	8	8	150	150	2000	5000	100	25	30	53.7	14	33	27.62	26.04

MESH GERMANY-SWITZERLAND



Mechanical features*

Grade	f_y (Re)	f_t (Rm)	f_t / f_y	f_y / f_y nom.	Agt %
	N/mm ²	N/mm ²	(Rm/Re)	(Re/Re nom.)	
B500B	≥ 500	-	≥ 1.08	≤ 1.30	≥ 5

* Characteristic values

Chemical composition

C % max	P % max	S % max	Cu % max	N % max	Ceq max
0.22	0.050	0.050	0.80	0.012	0.50
(0.24)	(0.055)	(0.055)	(0.85)	(0.014)	(0.52)

The figures in brackets refer to product analysis

Rolling marking



Qualifications

Germany	Switzerland
B500B	B500B

WIRE ROD



Quality wire rod made of low/medium-carbon steel for cold rolling and drawing.

Product characteristics

Various grades are produced for the following applications:

- ✓ Drawn wires for general use;
- ✓ Thin drawn wires;
- ✓ Wire for galvanisation, chrome-plating and nickel-plating;
- ✓ Cold-rolled strip and sections;
- ✓ Ribbed wire for welded mesh fencing and lattices;
- ✓ Production of cold-drawn bars.



Distinctive elements

- ✓ Optimised surface oxidation for all types of picking;
- ✓ Coil shape suitable for high-speed uncoiling;
- ✓ Wide range of grades and diameters always available.

Range of dimensions

- Diameter: **5.5 - 6 - 6.5 - 7 - 7.6 - 8 - 8.7 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16**
- Bundle strapped in 4 positions
- Bundle dimensions:
 - ∅ int. **850 - 900 mm**
 - ∅ ext. **1100 - 1200 mm**
 - height **1000 - 1100 mm**

Weight

Bundle weight: ~ **1420 Kg**

Wire rod dimensions and tolerances to UNI EN ISO 10017



WIRE ROD

APPLICATION		ALFA ACCIAI BRAND NAME	REFERENCE STANDARD	STANDARD DESCRIPTION
For cold drawing and rolling, galvanizing and hot coating	For general use	A34	EN ISO 16120	C4D - C7D
		AC8		C7D - C9D
		AC10 - AC10B		C9D - C10D - C12D
		AC15 - AC15B - AC15AL		C12D - C15D - C18D
		AC20 - AC20B		C15D - C18D - C20D
		AC30		C26D - C32D
		AC35		C32D - C38D
		AC40 - AC40B		C38D - C42D
		AC45		C42D - C50D
		AC55		C52D - C56D
		AC60		C58D - C60D - C62D
		AC65		C62D - C66D
	AC68	C66D - C68D - C70D		
	AC72	C70D - C72D - C76D		
	AC80	C80 D		
Bright wire	A34L	C4D - C7D		
Thin wire	A34B	C4D - C7D		
Wire for galvanizing	A6Zn	C4D - C7D		
Thin wire for galvanizing	A5Zn	C4D - C7D		
Thin wire for galvanizing and/or welded mesh, nails	SAE1006	ASTM A510-A510M	1006	
	SAE1007		1007	
	SAE1008		1008	
	SAE1010		1010	
	SAE1015		1015	
	SAE1018		1018	
Non-alloy steels for structural applications	S355J2	EN ISO 10025	S355J2	
	S235JR - S235JO - S235J2		S235	
	S275JR - S275JO - S275J2		S275	
High corrosion resistance	COR-A		COR-A	
Non-alloy case-hardening steels	C15E	EN ISO 683	C15E	
	C15R		C15R	
Non-alloy steels for quenching and tempering	C35E		C35E	
	C35R		C35R	
	C45E		C45E	
	C45R		C45R	
Medium strength chains	A15Mn3	DIN 17115	15Mn3	
For electrodes	AS1	EN ISO 14171	S1	
	AS2		S2	
	AS2Si		S2Si	



Acciaierie di Sicilia

Acciaierie di Sicilia: Group capability right in the heart of the Mediterranean Sea

Acciaierie di Sicilia, based in Catania, is the only steel mill in the heart of the Mediterranean Sea and a major industrial hub in the Region. The company is a key exporter thanks to its proximity to port infrastructure.

This production facility enables the Alfa Acciai Group to provide the international market with products and services that meet the needs of the construction industry in particular, ensuring quality, timeliness and the collaborative relationship that underpins the Group's identity.

Through heavy investment in technological innovation, Acciaierie di Sicilia is able to guarantee high production and quality standards while safeguarding the environment and wellbeing of company employees.



REBAR



Weldable, sustainable reinforcing steel featuring improved bonding and high ductility, low carbon contents, packaged in bars, available in the range of diameters 8-32 mm, hot rolled with in-line heat treatment (Tempcore).

Product characteristics

- ✓ Improved bonding
- ✓ No axial torsion;
- ✓ Reduced surface oxidation, giving greater weight yield and enhanced cleanliness.

Distinctive elements

- Optimisation of production parameters in view of obtaining all products in **class C - high ductility**, guaranteeing:
- ✓ Optimal mechanical properties for seismic and other applications.

Range of dimensions

- Diameter: **8 - 32 mm**
- Bars **packaged in bundles**
- Bar length: **6-15 m**

Weight

Bundle weight:
12 m ~ 2400 kg
6 m ~ 1300 kg





Mechanical features*

Grade	f_y (Re)	f_t (Rm)	f_t / f_y	f_y / f_y nom.	Agt %
	N/mm ²	N/mm ²	(Rm/Re)	(Re/Re nom.)	
B450C	≥ 450	≥ 540	≥ 1.15 ≤ 1.35	≤ 1.25	≥ 7.5
B500B	≥ 500	-	≥ 1.08	≤ 1.30	≥ 5
B500C	≥ 500	-	≥ 1.15 ≤ 1.35	≤ 1.25	≥ 8

* Characteristic values

Chemical composition

C % max	P % max	S % max	Cu % max	N % max	Ceq max
0.22	0.050	0.050	0.80	0.012	0.50
(0.24)	(0.055)	(0.055)	(0.85)	(0.014)	(0.52)

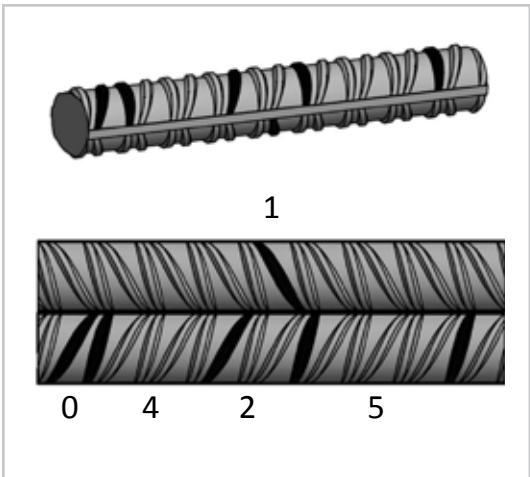
The figures in brackets refer to product analysis

Qualifications

Italy	Greece	Germany	Romania	Bulgaria
B450C	B500C	B500B	B500C	B500C



Rolling marking



SPOOLED COIL



Weldable, sustainable reinforcing steel featuring improved bonding and high ductility, low carbon contents, packaged in coils, available in the range of diameters 8-16 mm, hot rolled with in-line heat treatment (Tempcore).

Product characteristics

- ✓ Excellent uncoiling, even at high speed, as the result of compact packaging with coil-on-coil winding;
- ✓ Increased output in t/h thanks to reduced machine downtimes for loading and coil format changeover;
- ✓ Reduced production costs as there are no offcuts;
- ✓ Compatibility with all welding machines;
- ✓ Optimized logistics – product high density contributes to reduce handling, transport and storage costs;
- ✓ Improved bonding – excellent even after straightening;
- ✓ No axial torsion prevents bar rotation during straightening thus ensuring perfectly straight;
- ✓ Reduced surface oxidation, giving greater weight yield and enhanced cleanliness;
- ✓ No welds.

Distinctive elements

Optimisation of production parameters in view of obtaining all products in **class C – high ductility**, guaranteeing:

- ✓ Optimal mechanical properties for seismic and other applications;
- ✓ Less production energy required;
- ✓ Reduced wear of straightening rollers on pre-bending machines.

Range of dimensions

- Diameter: **8 - 16 mm**
- Coils strapped in 4 positions
- Coil dimensions:
 - Ø int. **700 mm**
 - Ø ext. **1100 - 1200 mm**
 - height **700 mm**

Weight

Spool weight:
1450 kg



SPOOLED COIL



Mechanical features*

Grade	f_y (Re)	f_t (Rm)	Rm/Re	Re/Re nom.	Agt %
	N/mm ²	N/mm ²			
B450C	≥ 450	≥ 540	≥ 1.15	≤ 1.25	≥ 7.5
			≤ 1.35		
B500C	≥ 500	-	≥ 1.15	≤ 1.25	≥ 8
			≤ 1.35		

* Characteristic values

Chemical composition

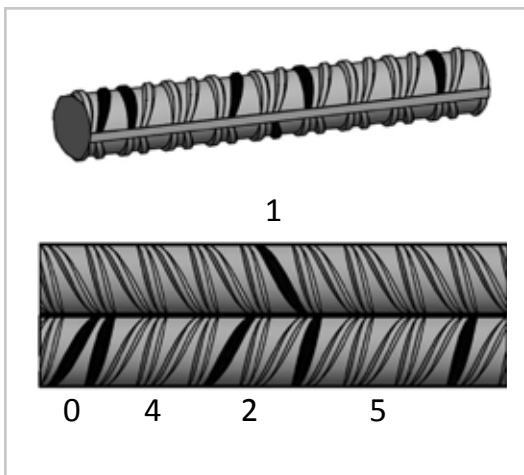
C % max	P % max	S % max	Cu % max	N % max	Ceq max
0.22	0.050	0.050	0.80	0.012	0.50
(0.24)	(0.055)	(0.055)	(0.85)	(0.014)	(0.52)

The figures in brackets refer to product analysis

Qualifications

Italy	Greece	Romania	Bulgaria
B450C	B500C	B500C	B500C

Rolling marking





REFERENCE TABLE

CROSS-SECTIONAL AREA AND MASS PER METRE

Diameter mm	CROSS-SECTIONAL AREA mm ²	MASS PER METRE kg/m
5	19.63	0.154
5.5	23.76	0.187
6	28.27	0.222
6.5	33.18	0.260
7	38.48	0.302
7.5	44.18	0.347
8	50.27	0.395
8.5	56.75	0.445
9	63.62	0.499
9.5	70.88	0.556
10	78.54	0.617
11	95.03	0.746
12	113.10	0.888
13	132.73	1.042
14	153.94	1.208
15	176.71	1.387
16	201.06	1.578
17	226.98	1.782
18	254.47	1.998
19	283.53	2.226
20	314.16	2.466
21	346.36	2.719
22	380.13	2.984
23	415.48	3.261
24	452.39	3.551

Diameter mm	CROSS-SECTIONAL AREA mm ²	MASS PER METRE kg/m
25	490.87	3.853
26	530.93	4.168
27	572.56	4.495
28	615.75	4.834
29	660.52	5.185
30	706.86	5.549
31	754.77	5.925
32	804.25	6.313
33	855.30	6.714
34	907.92	7.127
35	962.11	7.553
36	1017.88	7.990
37	1075.21	8.440
38	1134.11	8.903
39	1194.59	9.378
40	1256.64	9.865
41	1320.25	10.364
42	1385.44	10.876
43	1452.20	11.400
44	1520.53	11.936
45	1590.43	12.485
46	1661.90	13.046
47	1734.94	13.619
48	1809.56	14.205
49	1885.74	14.803



All-round Sustainability

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