

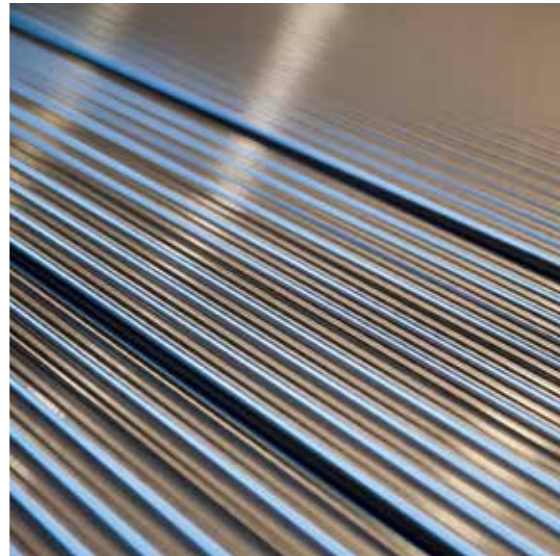


GENERAL CATALOGUE



YOUR ONLY PARTNER IN EVERY STEEL PRODUCT YOU NEED

The ORI Martin Group's constant commitment to environmental protection, health and safety at work, is an integral part of the technological development of the whole Group. Through constant investments dedicated to the reduction of polluting emissions, energy efficiency and the development of knowledge and technical skills of its staff, ORI Martin Group pursues the objective of reducing the environmental impact of its plants and the development of a wider virtuous circle of circular economy.



CONTINUOUS CASTING BILLETS AND HOT ROLLED BILLETS

ORI Martin spa sells continuous casting steel billets to rolling mills and hot forgers. The refining process with the degassing station and the casting through submerged nozzles guarantee the supply of billets of high-quality engineering steel.

To complete the offer to hot forgers in the mechanical applications, ORI Martin sells hot rolled billets with square section and radial edges.

CONTINUOUS CASTING BILLETS

Cross section side	140 x 140 mm 160 x 160 mm
Length	11.900 mm max
Length tolerance	± 100 mm
Dimensional tolerance	± 3 mm
Bending	7 mm/m max over the whole length 20 mm/m max for local bending
Twisting	≤ 3°/m
Out of square (difference between diagonals)	< 3 %
Labelling	1 metallic label with quick response "QR" code showing - Heat number - Casting strand number - Billet number in the casting strand Painting of one end to be agreed on specific request
Weight	2.400 kg max
Transport	Unstrapped piled up billets separated by wooden shim

HOT ROLLED BILLETS

Cross section side	30 ÷ 100 mm - according to EN 10031
Length	5.500 ÷ 13.000 mm
Length tolerance	-0 ÷ +200 mm
Fixed lengths	upon request
Bundle weight	4.000 kg max
Packaging	5 metallic straps - additional lifting straps upon request
Labelling	one heat, acid and weather resistant label for each bundle



- FASTENERS
- QUENCHING & TEMPERING
- SURFACE HARDENING AND CASE HARDENING STEELS
- FREE CUTTING STEELS

HOT ROLLED COILS

Rolling takes place at a controlled temperature using the very latest technology. This allows a smaller grain size to be obtained together with a more fine and even structure. Optimal characteristics for subsequent use in drawing and cold forging in addition to a higher degree of globularisation after the annealing process.

Diameter range	Ø 5,5 ÷ 21,5 mm - Stelmor Cooling
	Ø 22 ÷ 42 mm - Garret Cooling
Tolerance	Standard EN 10108 'A'
By request	EN 10108 'B', DIN 59115 'B', EN 10060 'P'
Coil internal dimension	Ø = 800 mm min
Coil external dimension	Ø = 1.350 mm max
Length	1.200 ÷ 2.100 mm
Packing	4 metallic stripes each coils and 4 to each pack of two coils
Labelling	1 Metallic label each coil
Weight	Each coil: 1.300 ÷ 2.300 kg
	Pack of 2 coils: 2.600 ÷ 4.600 kg



- FASTENERS
- ALLOY SPRING STEELS AND STABILIZER BARS
- SURFACE HARDENING AND CASE HARDENING STEELS
- MICRO-ALLOYED FORGING
- WELDING
- TOOLS
- MID-HIGH CARBON DRAWING
- FREE CUTTING STEELS



HOT ROLLED BARS

Production takes place in a rolling mill at a controlled temperature using the very latest technology which guarantees a fine grain and homogeneous structure; the calibrator finishing block allows bars with restricted dimensional tolerances.

ROUND

Diameter	Brescia plant: \varnothing 15 ÷ 65 mm
	Ospitaletto plant: \varnothing 34 ÷ 130 mm
Length	Brescia plant: 3.000 ÷ 8.500 mm
	Ospitaletto plant: 6.000 ÷ 12.000 mm
Length tolerances	Brescia plant: Standard - 0 / + 100 mm - by request \pm 20 mm
	Ospitaletto plant: Standard - 0 / + 200 mm - by request \pm 20 mm

SQUARE

Bar size	Ospitaletto plant: 32x32 mm ÷ 102x102 mm
Length	5.500 ÷ 13.000 m
Length tolerances	-0 ÷ +200 mm (fixed lengths on demand)

FLAT

Bar size	Ospitaletto plant: 52x22 mm ÷ 201x52 mm
Length	5.500 ÷ 13.000 mm
Length tolerances	-0 ÷ +200 mm (fixed lengths on demand)



- FASTENERS
- ALLOY SPRING STEELS AND STABILIZER BARS
- QUENCHING & TEMPERING
- SURFACE HARDENING AND CASE HARDENING STEELS
- MICRO-ALLOYED FORGING
- TOOLS
- HIGH & LOW TEMP RESISTANCE
- FREE CUTTING STEELS

INDUCTION TEMPERED WIRE

ORI Martin Group is proud to produce IT Wire in the Brescia plant.

For the first time, this type of product is manufactured in the same plant.

The process starts with the melting of steel and ends with induction tempered wire.

IT wire responds to the needs of cold coiled springs for high tensile strength and fatigue resistance.

Pre-tempered wire can also be used in other different critical manufacturing fields.

Diameter's range	Ø 7 ÷ 18 mm
Steel grade	54SiCr6 - SAE 9254
Tolerance	+/- 0.04 mm
Out of round	< 75% of dimensional tolerance range
Coil weight	1.500 - 2.400 kg
Outer diameter	≤ 2350 mm
Inner diameter	≥ 1700 mm
Width	450 mm max
Packaging	single coil banded with 8 straps and paper wrapping



— ALLOY SPRING STEELS
AND STABILIZER BARS

COLD DRAWN WIRES

Trafileria Lariana have a number of high-speed drawing machines where our operators control each phase in real time, in order to guarantee top quality wire that can be chromium plated, galvanized or nickel-plated.

Products we supply on customer request, as follows: as rolled or annealed pickled and phosphatized, cold-drawn, cold-drawn from annealed wire rod, annealed cold-drawn wire and cold-drawn from annealed drawn wire.

These drawn products are supplied on customer request, as follows:

- As rolled or annealed pickled and phosphatized (U) + (AC)
- Cold-drawn (U+C)
- Cold-drawn from annealed wire rod (U+AC+C)
- Cold-drawn from annealed drawn wire (U+C+AC+LC)
- Annealed cold-drawn wire (U+C+AC)

Sizes coils	ROUND	2 ÷ 22 mm
	SQUARE	2 ÷ 10 mm
	FLAT	2 ÷ 12 mm
	HEXAGON	2 ÷ 12 mm
	SEMIROUND	3 ÷ 12 mm
Packaging	COILS	100 ÷ 400 Kg
	SKEINS	500 ÷ 1.000 Kg
	PUDDINGS	600 ÷ 1.400 Kg
	REELS	1.000 ÷ 1.500 Kg



- FASTENERS
- QUENCHING & TEMPERING
- SURFACE HARDENING AND CASE HARDENING STEELS
- TOOLS
- FREE CUTTING STEELS

COLD DRAWN BARS

Cold drawn bars are cold finished products achieved by the cold deformation of the wire rod through a die that reduces the diameter and after various controls are cut into the length required. This process achieves the calibration of the wire into the diameter required. We can obtain wire in a wide range of diameters, the mechanical characteristics increase depending on the reduction carried out.

Sizes range	ROUND	Ø 2 ÷ 16 mm	TRAFILERIA LARIANA
		Ø 8 ÷ 74 mm	NOVACCIAI MARTIN
		Ø 14 ÷ 36 mm	TRAFILATI MARTIN
	SQUARE	2 ÷ 10 mm	TRAFILERIA LARIANA
	FLAT	2 ÷ 12 mm	TRAFILERIA LARIANA
	SEMIROUND	3 ÷ 12 mm	TRAFILERIA LARIANA
	HEXAGON	4 ÷ 12 mm	TRAFILERIA LARIANA
Length		2.800 ÷ 7.000 mm	NOVACCIAI MARTIN
		3.000 ÷ 6.000 mm	TRAFILERIA LARIANA
		3.000 ÷ 8.500 mm	TRAFILATI MARTIN
Bundles weigth		500 ÷ 1.500 Kg	TRAFILERIA LARIANA
		500 ÷ 2.000 Kg	NOVACCIAI MARTIN
		1.000 ÷ 3.000 Kg	TRAFILATI MARTIN



- FASTENERS
- SURFACE HARDENING AND CASE HARDENING STEELS
- TOOLS
- FREE CUTTING STEELS

 **TRAFILATI**
MARTIN

 **NOVACCIAI**
MARTIN

 **TRAFILERIA LARIANA**
Drawing Steels

PEELED & REELED BARS

The peeling operation give to the bar special features in terms of shape, dimensional accuracy and surface finishing.
The removal of metal is carried out in such a way that the bright products is generally free from rolling defects and surface decarburization.

Sizes range	Ø 10 ÷ 200 mm	NOVACCIAI MARTIN
	Ø 17 : 80 mm	TRAFILATI MARTIN
Length	2.400 ÷ 18.000 mm	NOVACCIAI MARTIN
	3.000 ÷ 8.000 mm	TRAFILATI MARTIN
Bundles weigth	500 ÷ 2.000 Kg	NOVACCIAI MARTIN
	1.000 ÷ 3.000 Kg	TRAFILATI MARTIN



- FASTENERS
- ALLOY SPRING STEELS AND STABILIZER BARS
- QUENCHING & TEMPERING
- SURFACE HARDENING AND CASE HARDENING STEELS
- MICRO-ALLOYED FORGING
- TOOLS
- HIGH & LOW TEMP RESISTANCE
- FREE CUTTING STEELS

 **TRAFILATI**
MARTIN

 **NOVACCIAI**
MARTIN

GROUND BARS

Grinding operation of drawn or peeled bars, improves surface and dimensional accuracy.

Diameters	Ø 6 ÷ 200 mm
Dimensional tolerance	IT9 ÷ IT6 * EN 10278
Bars Length	3.000 ÷ 8.200 mm
Roughness	≥ 0,4 µy Max
Straightness	0,5 mm/m Max
Roundness	½ of tolerance
Surface Quality Control	according to class 4 EN 10277
Chamfering	30° / 45° depth minimum 2 mm for Ø 8 ÷ 90
Bundles Weight	500 ÷ 2.000 Kg
Packaging	according to customer requirements
Test report	EN 10204 3.1



- SURFACE HARDENING AND CASE HARDENING STEELS
- TOOLS
- FREE CUTTING STEELS

TURNED BY LATHE AND GUNDRILLED PIECES

Trafilati Martin can produce via a free cutting numeric control process, cut bars according to customer's specification. Machineries are composed by Nakamura wt 250, Nakamura wt 150 e Gildemeister sprint 32.

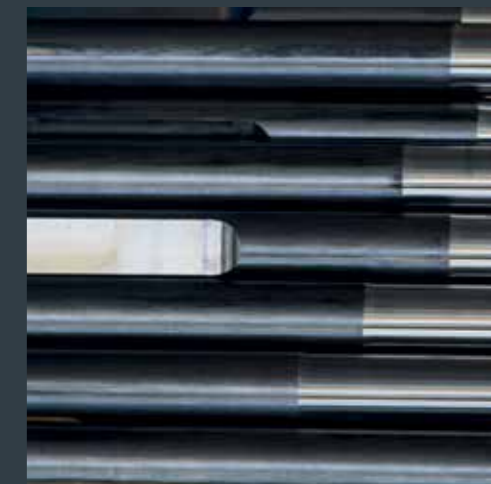
Trafilati Martin is equipped with 11 drillers with the 'gun-drilling' system and machineries multi-function (ZIMAR, VENTURA, SIG) can produce pieces in small-medium series following specific request of the client.

TURNED BY LATHE

Hole diameters	Ø 52 mm max
Length	according to customer's drawing
packaging	in metallic or wooden boxes

GUNDRILLED PIECES

Hole diameters	Ø 5 ÷ 30 mm
Length	1.200 mm max
packaging	in metallic or wooden boxes



PC STRAND - 7 WIRE

PC Strand consists of a group of seven cold drawn wires having a central wire (core wire) around which are helically spun six wires in one layer and with uniform pitch. PC Strand is mostly intended for the construction industries to produce precast concrete elements, rock & soil anchors, concrete poles as well as for pre-stressing and post-tensioning applications.

Diameter Range	Ø 6,85 ÷ 18,00 mm
Standard	prEN 10138-3- ASTM A-416; BS5896, NBN I 10-003; NEN 3868; BS 4258; Standard UNI 7676; UNE36094
Steel Grade	1570 - 1670 - 1770 - 1860 - 1960 - 2060 - 2160 Mpa
Coil internal dimension	Ø 800 ÷ 900 mm
Coil external dimension	Ø 1.550 mm max
Height coil (L)	760 mm
Weight Range	1.000 ÷ 4.500 kg
Packaging	Reelless coil, strapped with 8 radial and 1 circumferential steel straps, tagged and securely fastened onto two wooden dunnages



— MID-HIGH CARBON DRAWING



PC STRAND - 2&3 WIRE

Siderurgica Latina Martin focuses on manufacturing PC Strand (2 & 3 wires) in accordance with the most recognized international standards. Siderurgica Latina Martin turns High Carbon Wire Rod into PC Strand (2 & 3 wires) through an integrated manufacturing process starting from in-house Acid Pickling & Pre-Coating, Cold Wire Drawing, Stranding, Thermo-Mechanical Process to Rewinding & Packaging.

2 & 3 Wire Strand consists of a group of 2 & 3 high tensile strength cold drawn wires spun together in helical form over a theoretical common axis in one layer with uniform pitch.

2 & 3 Wire Strand is widely used in precast concrete elements and concrete poles.

Additional configurations of 2 & 3 wire PC Strand can be produced on demand.

Diameter Range	Ø 4 ÷ 7,50 mm
Standard	prEN 10138 - UNI 7676
Steel Grade	1770 - 1860 - 1960 - 2060 - 2160 Mpa
Coil dimensions Large coil	Ø inside (A) 800 - 900 mm Ø outside (B) 1.550 mm max Height (L) 500 - 550 - 760 mm Weight Range 1.200 ÷ 3.000 kg Length 12.900 - 19.500 - 32.000 m
Coil dimensions Small coil	Ø inside (A) 300 ÷ 310 mm Ø outside (B) 550 mm max Height (L) 185 - 190 - 200 - 210 mm Weight Range 120 ÷ 200 kg Length on demand



— MID-HIGH CARBON DRAWING

MEDIUM-HIGH CARBON WIRE

Drawn wire is produced in the SLM facility for medium to high carbon springs for applications in the mechanical spring sector.

Wire can be delivered in a variety of packagings and lengths, on spiders, with carton or metal inner frame.

Diameter Range	Ø 1,30 ÷ 12 mm
Tolerance	Standard UNIEN 10270-1:2003
Steel Grade	from 1180 to 2060 MPa
Coil internal dimension	Ø 400 ÷ 800 mm
Coil external dimension	Ø 600 ÷ 1000 mm
Length	300 ÷ 760 mm
Weight - each coils	300 ÷ 1100 Kg
Packaging	0, 4, 4+1, 6, 6+1 metallic stripes each coil
Labelling	1 Label per coil



— MID-HIGH CARBON DRAWING

PC WIRE

PC Wire is supplied either smooth or indented and it is packed and delivered either in coils or in bundle of straight cut-to-length bars. PC Wire in straight cut-to-length bar is used to produce railroad sleepers whereas PC Wire in coils is mostly used as reinforcement in concrete pre-stressed elements.

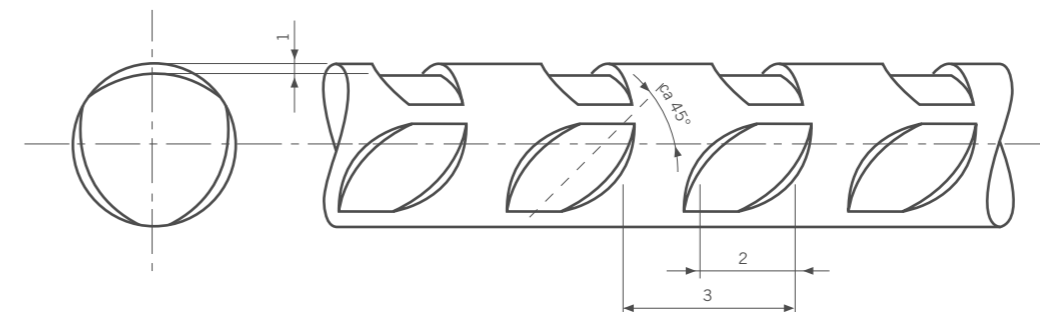
PC WIRE IN BUNDLE (CUT TO LENGTH BAR)

Diameter Range	Ø 7,00 ÷ 10,00 mm
Standard	UNI 7675 - PrEN10138/2
Steel Grade	1570 ÷ 1620 Mpa
Bundle Weight Range	1.000 ÷ 4.500 kg
Bar Length	On demand

PC WIRE IN COIL

Diameter Range	Ø 4,00 ÷ 10,00 mm
Standard	UNI 7675 - PrEN10138/2
Steel Grade	1570 ÷ 1620 Mpa
Coil Weight Range	1.250 ÷ 2.500 kg
Coil Dimensions	Ø inside (min) 1.200 mm Ø outside (max) 2.500 mm

INDENTED STRAND & PC WIRE



3-WIRE STRAND AND 7-WIRE STRAND - Reference UNI 7676 - According to DM 17.01.2018

Nominal strand diameter d	Indentation depth (1) ^a max	Length (2) l	Spacing (3) c
≤ 12	0,06 ± 0,03	3,5 ± 0,5	5,5 ± 0,5
> 12	0,07 ± 0,03	3,5 ± 0,5	5,5 ± 0,5

PC WIRE - Reference UNI 7675 - According to DM 17.01.2018

Nominal strand diameter d	Indentation depth (1) ^a max	Length (2) l	Spacing (3) c
d ≤ 5	0,03 ≤ ^a max ≤ 0,16	3,5 ± 0,5	5,5 ± 0,5
5 < d ≤ 8	0,05 ≤ ^a max ≤ 0,20	5,0 ± 0,5	8,0 ± 0,5
8 < d ≤ 11	0,05 ≤ ^a max ≤ 0,25	5,0 ± 0,5	8,0 ± 0,5



— MID-HIGH CARBON DRAWING



— MID-HIGH CARBON DRAWING

GEOTECHNICAL GROUND ANCHORS

T.T.M. S.r.l. produces permanent and temporary ground anchors in compliance with the Ministerial Decree 14.01.2008 and Presidential Decree no. 12391 as of 22.12.2011 (guideline for the certification of the technical suitability for ground anchors for geotechnical applications). All the products also comply with the standard EN 1537-2013.

All the ground anchors can be installed with TTR-E and TTM anchorages and are made of wire strands in harmonic steel produced according to prEN 10138.

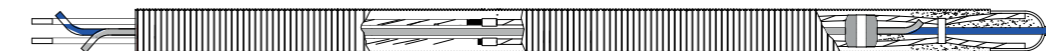
In order to guarantee a constant production over time and a quick service to customers, highly automatic plants were implemented to achieve a high level of production ensuring quality at the same time.

The production of ground anchors is developed over four lines. The whole production system has a daily capacity of cutting of about 80.000 meters of strands by means of extremely high productiveness numerical control plants.



TEMPORARY GROUND ANCHORS

The Temporary ground anchors are usually used in the construction of bulkheads and diaphragms, where the type of ground does not have any particular geotechnical problems and where temporary ground anchors are needed. Normally the design life is not more than two years.



PERMANENT GROUND ANCHORS

The Permanent ground anchors are defined as those which are to have a design life of more than two years.

The minimum corrosion protection surrounding the tendon(s) of the anchor shall be a single continuous layer of corrosion preventive material which does not degrade during the design life of the anchor.



POST-TENSION SYSTEMS MULTISTRAND/MONOSTRAND ANCHORAGES

T.T.M. S.r.l. proposes to the construction and design of the various system solutions for post tension, bridges/viaducts, tanks and slabs.

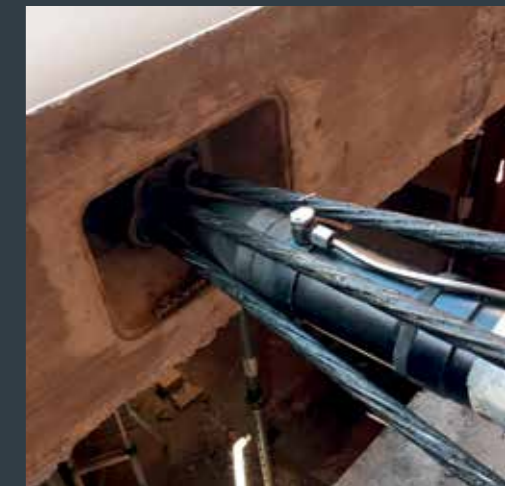
All Bonded and Unbonded systems are produced in compliance with the guideline ETAG013, guaranteed over time and to ensure safe use in prestressed concrete structural elements and are in accordance with ETA.

The anchorages are tested and qualified to provide high fatigue resistance and durability.

The production of post tension anchors protected against corrosion is one of the main products offered today to structural engineering. These solutions are designed to offer high protection anchors over time, ensuring it by infiltrations or corrosive environments.

The system includes the use of the strand 7-wire in three types, Normal, Super and Compact. The use of the strand T15C (Compact) with diameter and section respectively of 15.2 mm and 165 mm², allows to reduce the dimensions, by applying anchorages of smaller dimensions thus also reducing the size of the tensioning jacks.

The availability of steel strand is guaranteed by the ability of the Group, with two manufacturing facilities with an annual capacity of 150,000 tons.



HOT AND COLD FORGING, MACHINING PROCESS

HOT FORGING PROCESS

Sapes S.p.A. is a company specialized in open-die forging of components with special steel grade for the automotive, agricultural and construction machinery markets. Thanks to various automated production lines and to a solid internal organization, we ensure the highest quality standards to fulfill the customer's requirements. Our partnership with customers and our ability to listen to their needs have fostered and strengthened our continuous search for improvement in quality and organization.

COLD FORGING PROCESS

Sapes S.p.A. is equipped with cold forging lines for the production of steering components, as tie rods and ball pins, and of engine components, as pushrods. Many years of experience and a solid internal organization ensure the highest quality standards on the production of driving safety cold forged components. Sapes is able to supply tie rods with rolled groove and thread. The product conformity to the customer requirements is guaranteed by a highly sensitive control device integrated in the production line. The company complies with the UNI EN ISO 9001:2015 and the requirements of IATF 16949:2016.

MACHINING

In 1994 Sapes S.p.A. made the strategic choice to invest in the machining with the purpose of meeting the customer's needs for a more flexible and integrated service. Today we can supply a highly integrated production cycle which – starting from a steel bar – can provide a completely finished component ready to be assembled into the vehicle. A dedicated production department allows us to carry out the centering, the turning, the gear cutting, the cold spline rolling, the drilling, the induction hardening and the grinding on our hot forged parts. Thanks to various automated production lines and to a solid internal organization, we ensure the highest quality standards to fulfill the customer's requirements of the automotive, agricultural and construction machinery markets.





- CONTINUOUS CASTING BILLETS
- WIRE ROD
- HOT ROLLED ROUND BARS
- HOT ROLLED SQUARE BARS
- HOT ROLLED FLAT BARS

O.R.I. Martin
 Acciaieria e Ferreria di Brescia S.p.A.
 Via C. Canovetti, 13
 25128 Brescia - Italia
 T. +39 030 39991
 info@orimartin.it
 www.orimartin.it



O.R.I. Martin Ospitaletto
 Via Domenico Ghidoni, 169
 Ospitaletto 25035 (BS) - Italy
 T. +39 030 6841411
 ospitaletto@orimartin.it
 www.orimartin.it



- COLD DRAWN BARS
- PEELED BARS
- TURNED BY LATHE BARS
- GUNDRILLED BARS
- IT WIRE

Trafilati Martin S.p.A.
 Production and offices:
 Via Kennedy, 64
 25033 Cologne (BS) - Italy
 T. +39 030 7058311
 info@trafilatimartin.com
 www.trafilatimartin.com



- DRAWN BARS
- GROUND BARS
- PEELED BARS

Novacciai Martin Spa
 Via Verdi, 26
 28060 S. Pietro Mosezzo (NO) - Italy
 Tel. +39 0321530611
 info@novacciaimartin.com
 www.novacciaimartin.com



- PC STRAND - 7 WIRE
- PC WIRE
- UNBONDED PC STRAND
- PC STRAND - 2&3 WIRE
- MEDIUM-HIGH CARBON

Siderurgica Latina Martin SpA
 Via Oger Martin, 21
 03024 Ceprano (FR) - Italy
 T. +39 0775 91991
 info@slmspa.com
 www.slmspa.com



- GEOTECHNICAL GROUND ANCHORS
- POST-TENSION SYSTEMS

Tension Technology Martin S.r.l.
 Via Oger Martin, 21
 03024 Ceprano (FR) Italy
 T. +39 0775 91.99.1
 www.ttmlsrl.it
 www.orimartin.it



- HOT AND COLD FORGING
- MACHINING PROCESS

SAPES S.p.A.
 Via E. Miglio, 11
 38089 - Storo (TN) - Italy
 T. +39 0465 686100
 sapes@sapes.eu
 www.sapes.eu



- COLD DRAWN COIL
- COLD DRAWN BARS

Trafileria Lariana Drawing Steels S.p.a.
 Via Giuseppe Parini, 1T
 23890 Barzago LC
 T. +39 031 850438
 info@trafilerialariana.com
 www.trafilerialariana.com

www.orimartingroup.com