PRODUCT CATALOGUE

WIRE ROD

PITTINI
STEEL AHEAD

Interactive **Index**

Il GRUPPO PITTINI

Pittini Group, with an over **60-year-long experience in the steel industry**, is a leader in the production of long products for the construction and engineering industry.
Technological innovation, applied to both products and production processes, and the expertise of the Group's employees allow it to be a reliable partner in providing solutions that meet the needs of **customers worldwide**. The manufacturing system follows a strategic approach based on **verticalization**. A model that guarantees accurate quality controlling all the processing phases, from raw materials to steel down to the finished product.

1° manufacturer
of long steel products in Italy

3 mio/year
tonnes of steel produced

24
facilities

2,000
employees

For the Pittini Group, **continuous process improvement**, **health and safety at work**, **environmental protection** and **respect for the community** are fundamental principles that translate into the three **values** that guide its activities:

> reliability: which allows for objectives to be achieved by guaranteeing professionalism and quality, meeting the expectations of all Stakeholders;

> innovation: which means evolving constantly, in production methods, processes and organisation in order to anticipate and be ready for the challenges that the future holds;

> people: which means feeling part of the organisation, developing one's full potential and doing one's best to help achieve the company's results.

An INTERNATIONAL REPUTATION

The Pittini Group, with its main headquartered in Osoppo (Udine), is a steel group with a strong international focus: **30 production and distribution facilities** located in Italy and Central Europe make the Pittini Group an important player at European level.

Ferriere Nord
Osoppo (UD), Italy
- Meltshop with electric arc furnace
- Wire rod rolling mill
- Rebar rolling mill
- Jumbo® rolling mill
- Cold steel processing
- Lattice girder production
- Granella® and Siderlime® production

Siderpotenza
Potenza, Italy
- Meltshop with electric arc furnace
- Rebar rolling mill
- Granella® production

Ceprano (FR), Italy
- Distribution centre

Giammoro (ME), Italy
- Distribution centre

Acciaierie di Verona
Verona, Italy
- Meltshop with electric arc furnace
- Wire rod rolling mill
- Rebar rolling mill
- Cold steel processing

Nave (BS), Italy
- Cold steel processing

La Veneta Reti
Loreggia (PD), Italy
- Cold steel processing

SIAT
Gemona del Friuli (UD), Italy
- Cold drawn flat wire production

Majano (UD), Italy
- Cold rolled wire production

Pittarc - Division of Siat
Osoppo (UD), Italy
- Welding wires production plant

BSTG
Linz, Austria
- Sales office

Graz, Austria
- Cold steel processing

Kovinar
Jesenice, Slovenia
- Cold steel processing

STEELAG
Kralupy, Cezch Rep.
- Cold steel processing

Bánovce, Slovakia
- Cold steel processing

Drat Pro
Kralupy, Czech Rep.
- 3D bending wire

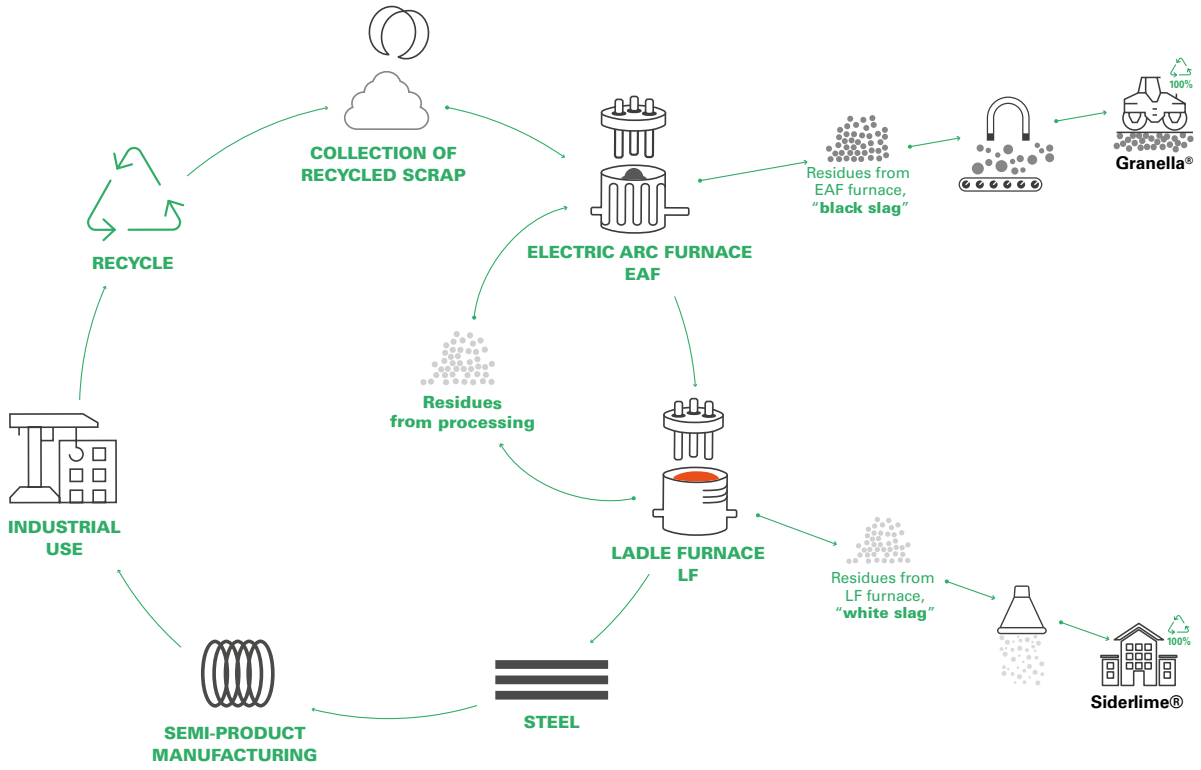
Pittini Deutschland
Aichach, Germany
- Sales office

Pittini Siderprodukte
Geroldswil, Swiss
- Sales office

Verona Servizi Logistici
Verona, Italy
- Services

CIRCULAR ECONOMY

The Pittini Group produces steel from **recycled ferrous materials** using an **electric arc furnace (EAF)**, the most sustainable and environmentally friendly technology for this type of production.



Since the 1990s, the Pittini Group has been promoting the circular economy through its **Zero Waste** initiative, an approach that transforms steel production into a virtuous cycle where nothing is wasted: processing residues do not become waste, but are valorised and recycled as new resources, reducing energy consumption and minimising environmental impact.

The Zero Waste initiative focuses primarily on the most significant materials in terms of quantity, such as electric furnace slag, ladle furnace slag, flue gas desulphurisation dust, scale and refractories. These secondary materials are now valorised within or outside the production cycle, becoming **substitutes for other raw materials**.

At the FOREFRONT OF ROLLING TECHNOLOGY

The Pittini Group is specialised in the production of high-quality carbon wire rod for **various applications in the building**, construction and mechanical engineering sectors.

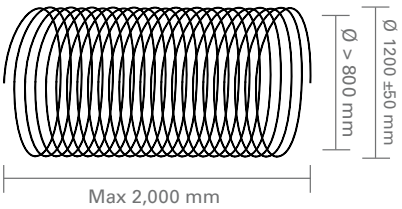
Annual production
2,000,000 ton

2 wire rod rolling mills
Osoppo
Verona

Diameters range
5.5 ÷ 21.5 mm

Wire rod production by the Pittini Group has always been characterized by the use of innovative technologies, but our real strength lies in our know-how: a unique process expertise that we have been nurturing over the years thanks to a team of technologists and product experts committed to improving production quality day after day.
The rolling mills installed in our production facilities have been designed in-house so as to obtain products with high added value using the best technologies available throughout the entire rolling process.

PACKAGING



WEIGHT UP TO 2,750 kg

- **Wire rod for concrete reinforcements**
  Is manufactured for filo cold rolled wire, electrowelded meshes and lattice girders.

- **Low carbon wire rod for drawing**
  It allows high reductions until a final diameter that could be lower than one millimeter, ensuring always a constant quality and an optimal surface suitable for galvanic treatment or coating of the wire.

- **High carbon wire rod**
  Obtained with innovative heat treatment on the entire rolling line, is used for the production of pre-stressed concrete strands, of tyre reinforcing or for mechanical springs.

EPD ITALY

Prodotto certificato
EPD - Environmental Product Declaration

PRODUCT RANGE

HIGH CARBON WIRE ROD

G3V42

Drawing and galvanizing, for cable armouring and high tensile wire.

MECHANICAL AND SIZE CHARACTERISTICS	
EN ISO 16120-4	C42D2
Rm	700 – 750 MPa
Weight (Approx.)	2,500 Kg

CHEMICAL COMPOSITION						
Limits	**C%**	**Mn%**	**Si%**	**P%**	**S%**	**Cr%**
min	0.40	0.50	0.15	-	-	-
max	0.44	0.70	0.25	0.020	0.025	0.10

G3V72

Drawing and cold rolling, for production of wire for springs and strands.

MECHANICAL AND SIZE CHARACTERISTICS	
EN ISO 16120-4	C72D2
Rm	1,020 – 1,120 MPa
Weight (Approx.)	2,500 Kg

CHEMICAL COMPOSITION						
Limits	**C%**	**Mn%**	**Si%**	**P%**	**S%**	**Cr%**
min	0.70	0.45	0.15	-	-	-
max	0.74	0.65	0.30	0.020	0.020	0.10

G3V80

Drawing of wire for pre-stressed concrete strands.

MECHANICAL AND SIZE CHARACTERISTICS	
EN ISO 16120-4	C80D2
Rm	1,140 – 1,230 MPa
Weight (Approx.)	2,500 Kg

CHEMICAL COMPOSITION						
Limits	**C%**	**Mn%**	**Si%**	**P%**	**S%**	**Cr%**
min	0.78	0.60	0.15	-	-	-
max	0.82	0.80	0.30	0.020	0.025	0.20

G3V82

Drawing of wire for pre-stressed concrete strands and for railway.

MECHANICAL AND SIZE CHARACTERISTICS	
EN ISO 16120-4	C82D2
Rm	1,140 – 1,230 MPa
Weight (Approx.)	2,500 Kg

CHEMICAL COMPOSITION						
Limits	**C%**	**Mn%**	**Si%**	**P%**	**S%**	**Cr%**
min	0.80	0.60	0.15	-	-	-
max	0.84	0.80	0.30	0.020	0.025	0,25

NOTA: Material according to EN ISO 16120-4. Chemical elements not listed above and permissible deviations of product analysis according to EN ISO 16120-2.
Other specification on request.

WIRE ROD FOR CONCRETE REINFORCEMENT

FE41 STA
(SAE 1008 Mesh Quality)
GVD/A

Drawing and cold rolling for production of concrete reinforcing.

MECHANICAL AND SIZE CHARACTERISTICS FE41 STA	
Standard	ASTM A 510M - SAE 1008
Rm	≤ 480 MPa
Weight (Approx.)	2,700 Kg

MECHANICAL AND SIZE CHARACTERISTICS GVD/A	
Standard	EN ISO 16120
Rm	≤ 470 MPa
Weight (Approx.)	2,500 Kg

CHEMICAL COMPOSITION							
		C%	**Mn%**	**Si%**	**P%**	**S%**	**Ceq%**
FE41 STA	**max**	0.10	0.50	0.15	0.040	0.050	0.30
GVD/A	**max**	0.09	0.55	0.15	0.050	0.050	0.30

SAE 1010
(Mesh Quality)

Drawing and cold rolling for production of concrete reinforcing.

MECHANICAL AND SIZE CHARACTERISTICS	
EN ISO 16120-4	SAE 1010
Rm	≤ 500 MPa
Weight (Approx.)	2,500 Kg

CHEMICAL COMPOSITION						
Limits	**C%**	**Mn%**	**Si%**	**P%**	**S%**	**Cu%**
max	0.13	0.60	0.20	0.040	0.050	0.50

REMARK: Ceq = C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15; material according to EN ISO 16120. Other specification on request.

WIRE ROD FOR DRAWING

FE34 + B | G3V5/B

Deep drawing and cold rolling.

MECHANICAL AND SIZE CHARACTERISTICS	
Standard	ASTM A 510M SAE 1005 - SAE 1006 - EN ISO16120-3 C4D1
Rm	≤ 370 MPa
Weight (Approx.)	2,500 Kg

CHEMICAL COMPOSITION						
Limits	**C%**	**Mn%**	**Si%**	**P%**	**S%**	**B%**
max	0.05	0.35	0.10	0.025	0.025	0.010

FE37 + B | G3V8/B

Drawing and cold rolling, suitable for hot dip galvanizing.

MECHANICAL AND SIZE CHARACTERISTICS	
Standard	EN ISO 16120-2 C4D
Rm	≤ 400 MPa
Weight (Approx.)	2,500 Kg

CHEMICAL COMPOSITION						
Limits	**C%**	**Mn%**	**Si%**	**P%**	**S%**	**B%**
max	0.06	0.60	0.20	0.025	0.025	0.010

FE36 | SAE 1006 (S235JR)

Drawing and cold rolling, suitable for steel structures according to EN 10025.

MECHANICAL AND SIZE CHARACTERISTICS	
Standard	ASTM A 510M SAE 1006 - EN ISO 16120-2 C4D - EN 10025-2 S235JR
Rm	≤ 430 MPa
Weight (Approx.)	2,500 Kg

CHEMICAL COMPOSITION					
Limits	**C%**	**Mn%**	**Si%**	**P%**	**S%**
min	-	0.30	-	-	-
max	0.06	0.45	0.12	0.030	0.030

G3V20

Drawing and cold rolling.

MECHANICAL AND SIZE CHARACTERISTICS	
Standard	EN ISO 16120-4 C20D2
Rm	480 - 540 MPa
Weight (Approx.)	2,500 Kg

CHEMICAL COMPOSITION					
Limits	**C%**	**Mn%**	**Si%**	**P%**	**S%**
max	0.23	0.55	0.20	0.020	0.025

REMARK: Material according to EN ISO 16120-1 up to EN ISO 16120-4.
Wire rod Fe36 and SAE 1006 according to standard EN 10025-2 S235JR is suitable for mechanical sector and steel structures.

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