

WireSolutions

Galvanised steel wire
for cable armouring solutions



ArcelorMittal

Galvanised steel wire for cable armouring from WireSolutions

WireSolutions is part of the ArcelorMittal Group – the largest steel manufacturing company in the world. We are global leaders in the manufacture and supply of premium quality drawn wire. From our state-of-the-art production facilities across Europe, we manufacture and supply galvanised round steel wire to cable armouring manufacturers.

Vertical integration. Unparalleled value.

Our mining, steel production, wire rod handling, galvanisation, coiling, packaging, storage and distribution operations are all undertaken by ArcelorMittal.

Our fully integrated business model gives us complete control over the quality of our raw materials and the highest levels of confidence in our production methods and processes, saving us time and resources.

This, combined with our world class technical expertise, gives our customers unparalleled value.

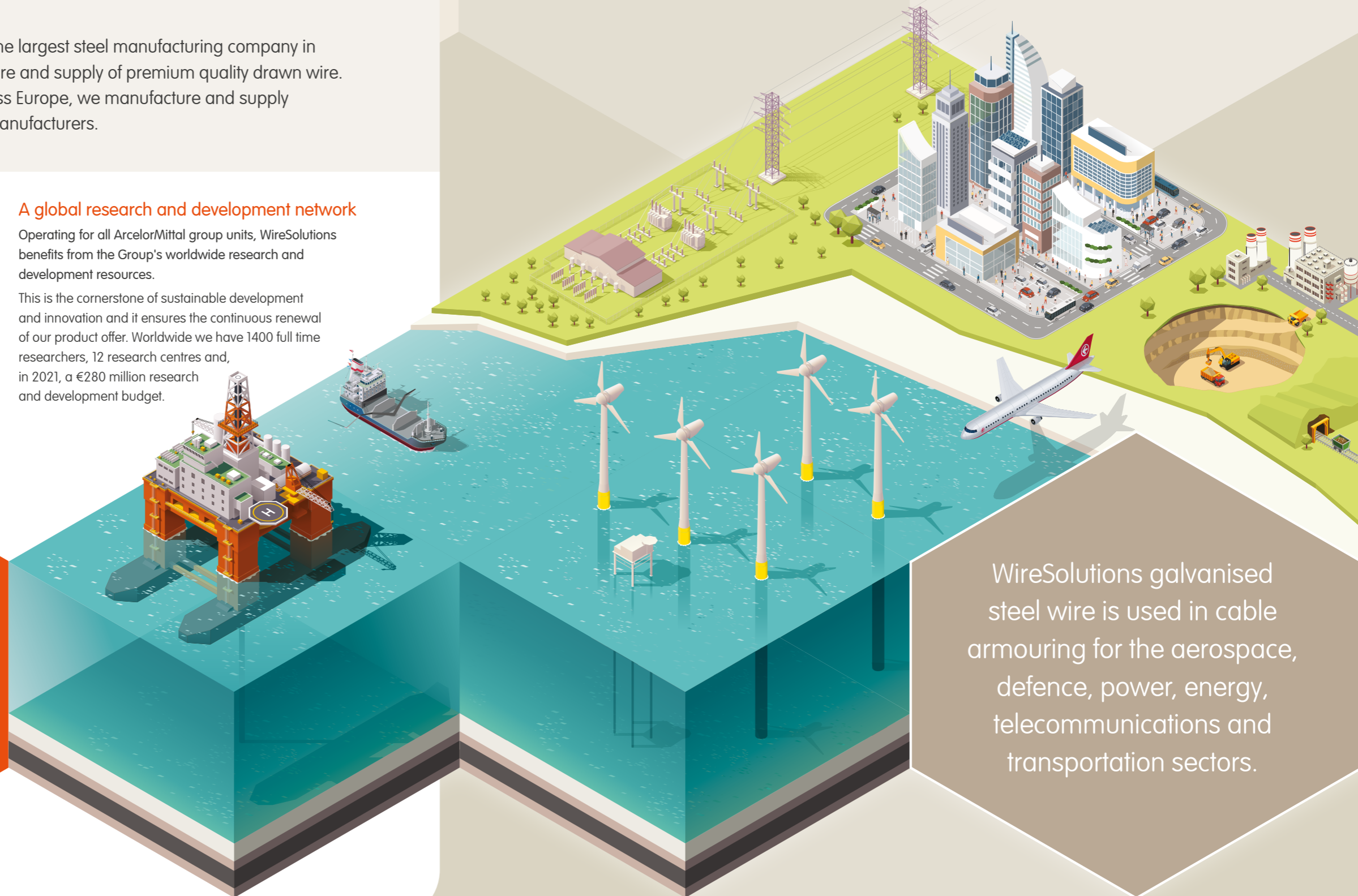
A global research and development network

Operating for all ArcelorMittal group units, WireSolutions benefits from the Group's worldwide research and development resources.

This is the cornerstone of sustainable development and innovation and it ensures the continuous renewal of our product offer. Worldwide we have 1400 full time researchers, 12 research centres and, in 2021, a €280 million research and development budget.

Our premium quality galvanised steel wire is used in armoured cables onshore, offshore, subsea and beyond.

Corrosion protection to EN 10244-2, EN 10257-1/2, ICEA 93-639 or according to customer specifications.



WireSolutions galvanised steel wire is used in cable armouring for the aerospace, defence, power, energy, telecommunications and transportation sectors.

WireSolutions: Recognised worldwide for the quality of its corrosion resistant products.

Onshore, offshore,
subsea and beyond,
WireSolutions delivers
steel wire and packaging
solutions that provide
excellent levels of
cable armouring
performance.

Expertise that is integral to steel wire armouring

With an increased focus on product development and innovation, our production and quality control teams work with cable armouring customers to deliver high performance solutions that meet their requirements.

Our manufacturing capabilities allow the production of galvanised steel wire with diameters of **0.8mm to 8.0mm** (9.0mm and 10.0mm on request).

With grades of **34 to 145** available as standard, and higher grades up to grade **200** available on request, our galvanised round steel wire for cable armouring offers corrosion protection to **EN 10244-2, EN 10257-1/2, ICEA 93-639** or according to customer specifications.

WireSolutions manufacture galvanised wire for armoured cables that are used across diverse industrial sectors including:

- › Power distribution
- › On and offshore wind farms
- › Power from shore to sea
- › Solar and Photovoltaics
- › Mining and Tunnelling
- › Nuclear
- › Oil and Gas
- › Petrochemical
- › Telecommunications
- › Aerospace
- › Automotive
- › Trains and Trams
- › Cableways
- › Marine
- › Defence



Air | Land | Sea | Subsea

High performance galvanised steel wire developed for cable armouring

› Consultation and technical support:

Our research, product design, production and quality control teams continue to add value and develop what are already superior WireSolutions products. Our relationships with our customers is best described as collaborative. We are here to work with armoured cabling manufacturers and share our product knowledge and expertise so that we can help to optimise your project solutions.

Cable armouring for onshore and based cables

› Applications:

- Interconnectors • AC and DC cable systems • Aerial and underground medium-voltage cable systems
- Low-voltage cable systems for power distribution and cabling to buildings
- HV cable solutions • Cable systems for instrumentation and automation
- Fibre optic solutions • Flexible reeling and trailing cables for use in the mining and tunnelling industries.

› Diameters:

0.9mm to 3.15mm as standard.
Other diameters can be drawn on request.

› Coating:

Zinc (Zn) or Aluzinc (AlZn).
In line waxing.
Classes A-AB-B-C-D to EN 10244-2.

› Grade:

34 to EN10257-1/2.

› Specifications:

Supplied according to standard or to customer specification.

Cable armouring for offshore and subsea cables

› Applications:

- Interconnectors • Medium voltage inter-array cables • High-Voltage Alternating Current (HVAC) cables
- High-Voltage Direct Current (HVDC) export cables/AC and DC cables for the transmission of onshore electricity to offshore platforms via submarine cable systems
- Multipurpose subsea umbilicals • Risers
- Flowlines • Shipboard cables including power, control, instrumentation, data transmission and communication cables.

› Diameters:

1.60mm to 8.00mm as standard.
Other diameters up to 10mm can be drawn on request.

› Coating:

Zinc (Zn) or Aluzinc (AlZn).
In line waxing.
Classes A-AB-B-C-D to EN 10244-2.

› Grade:

34 to 145. Additional grades up to grade 200 are available on request.

› Specifications:

Supplied according to standard or to customer specification.

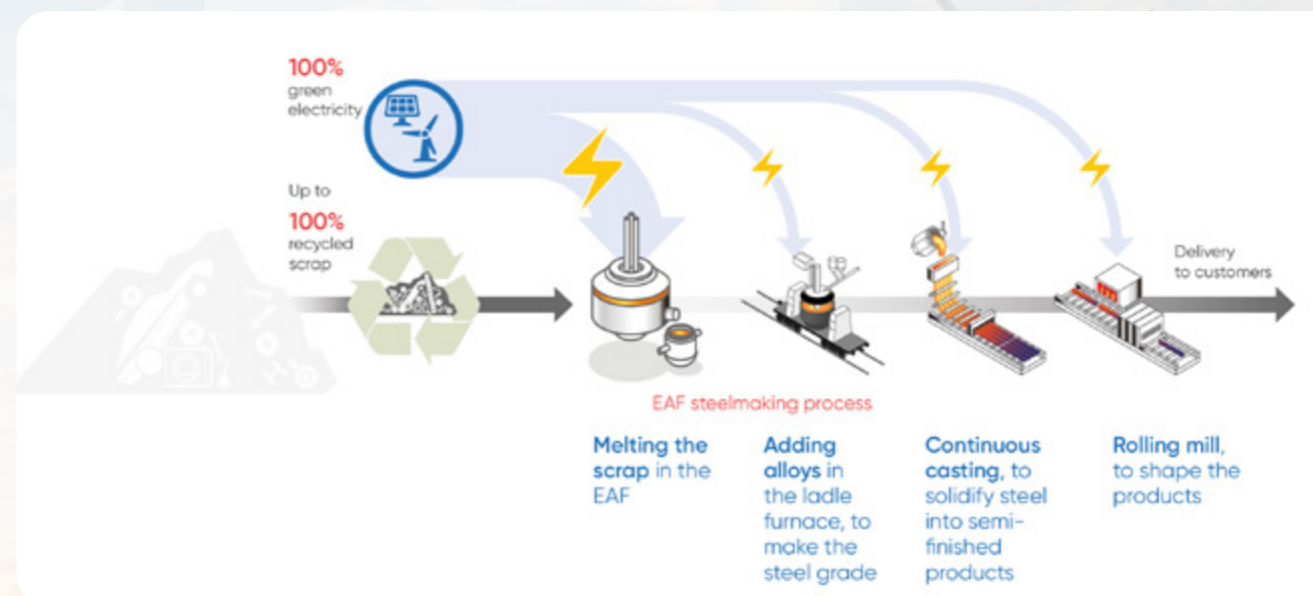
XCarb®
Recycled and renewably produced

Carbon Neutral by 2050

What is XCarb® renewably and recycled produced?

XCarb®
Recycled and renewably produced

Our XCarb® recycled and renewably produced steel is made in the Electric Arc Furnace (EAF) using both scrap and certified renewable energy, enabling it to reach very low levels of embodied CO₂e.



Our planet is at a crossroads and our future depends on how we act today.

ArcelorMittal is changing the wire solutions industry and sustainability standards globally.

We are using our research, development, production and logistics expertise to challenge the ways in which we do things. **These challenges involve looking at the ways we source and process raw and recycled materials**, and how we package and distribute our wire products.

Our ambition is to significantly reduce our carbon footprint and achieve our goal of becoming carbon neutral in Europe by 2050.

We are working with our customers and our partners to challenge the status quo, developing new and innovative processes and transforming tomorrow.

ArcelorMittal Europe

An Environmental Product Declaration (EPD) is available for heavily galvanized quality, Crapal® 4, Crapal®Optimum, Crapal®Premium.

www.ibu-epd.com | <https://epd-online.com>



CARBON NEUTRAL BY 2050

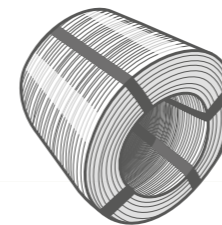
Our vertically integrated business model enables us to efficiently track and trace the origins of the materials we use, improving quality controls and reducing costs.

From the sourcing of raw materials to the manufacture of our wire rod; From the drawing of our steel wire to the galvanisation, coiling, packaging, storage and distribution of our products, we guarantee full traceability every step of the way.

Packaging

Specifications

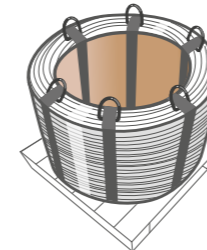
- › Each unit is secured with at least 4 steel straps with lifting eyes (optional)
- › We can supply on request: formers, on pallets, cardboard centres, shrink wrapped, cardboard sleeve for handling protection
- › Pallet marking to ISPM available on request



Standard Coils (pattern laid/orbit wound)*

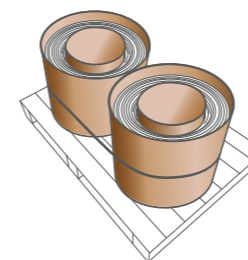
Range Ø (mm)	Inside Ø (mm)	Outside Ø (mm)	Weight (kg)	Height (mm)
0.80 – 1.60	±350	±570	±430	±700
0.80 – 2.00	±450	±750	±800	±800
2.50 – 3.15	±450	±750	±900	±800
2.50 – 8.00	±450	±850	±1000	±800
5.00 – 8.00	±500	±950	±1500	±1000
5.00 – 10.00	±850	±1300	±2000	±1000

*Please consult us for other sizes (ID / OD / height and weight)



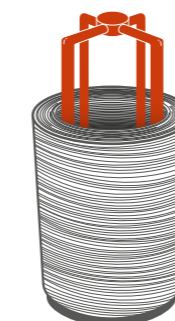
Z-Spools

Range Ø (mm)	Spool type	Inside Ø (mm)	Outside Ø (mm)	Weight (kg)	Height (mm)
2.6 – 10.0	Z	550	950	800 – 1500	550
2.6 – 3.1	Z2	350	700	400 – 500	280
2.6 – 6.0	Z3	500	950	< 1500	570
2.6 – 6.0	Z3 – small	500	950	< 900	360



Cardboard Drum

Range Ø (mm)	Inside Ø (mm)	Outside Ø (mm)	Weight/Drum (kg)	Height (mm)
0.80 – 1.25	330	500	150 – 250	< 700
1.30 – 1.60	330	500	150 – 250	< 700



Formers / tophat*

Range Ø (mm)	Inside Ø (mm)	Outside Ø (mm)	Weight/Former (kg)	Height (mm)
0.80 – 1.25	450	750	400 – 800	< 850
1.30 – 1.60	450	750	400 – 800	< 850
1.70 – 2.50	450	750	400 – 800	< 850

*Return of formers organised by Transport ArcelorMittal Bissen S.A.

Wooden reels on demand. (Please contact us for more information)

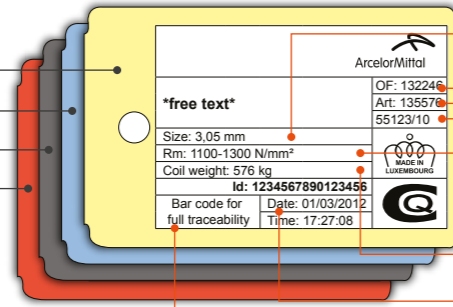
Labels

Standard

Coating

- Commercially galvanised wire
- Heavily galvanised wire
- Crapal2 (Aluzinc Class B)
- Crapal4 (Aluzinc Class A)

Label colour



Label legend

- Size – Nominal diameter (mm)
- OF – Production order (internal)
- Art – Item code number (internal)
- OV – Order number (internal)
- Rm – Tensile (N/mm²) min-max
- Coil weight – Weight (kg)
- Date/time – Production date/time
- # – Coil number (traceability)

Certificates

According to EN 10204

Number	Type	Order conformity	Diameter	Tensile	Coating weight	Steel quality Standard analysis	Steel quality Real analysis	Heat number
0	WITHOUT CERTIFICATE							
1	2.1	x	-	-	-	-	-	-
2	2.2	x	1/5	1/5	1/5	x	-	-
3	2.2	x	1/2	1/5	1/5	x	-	-
4	2.3	x	1/1	1/1	1/1	-	-	-
5	2.3	x	1/1	1/1	1/1	x	-	-
6	2.3	x	1/1	1/1	1/1	-	x	-
7	3.1B	x	1/1	1/1	1/1	-	x	-
8*	3.2	x	1/1	1/1	1/1	x	x	x

- *Certificate 8 is Third Party Inspection. We are an open plant and welcome outside inspections.

Traceability is our guarantee

- Fully conforming product
- Traceability throughout the total production process
- ISO certified production for optimised process control
- Wide range of low and high carbon grades
- Several packaging options
- Integrated IT-system for logistic service
- EDI connection
- International back office service.

Traceability

- Full traceability of each batch from wire rod to galvanisation thanks to integration in the ArcelorMittal supply chain
- Data is recorded in an integrated system for at least 10 years
- Production to ISO 9001 / 14001 and ISO 45001.



Labels

- Each unit is identified with an ID number for full traceability
- Weather proof quality labels.

Test certificate

- Inspection documents according to EN 10204.

Stocks

- Safety stock for standard specification (EN 10257-1/2)
- Consignment stock agreement.

Logistics

- Safety first regulations
- Load secured for stability during transport
- Delivery follow-up by integrated system for exact ETA service
- Ethics code is respected.

ArcelorMittal is committed to adopting environmentally responsible policies.

We recognise the need for sustainable development and we continually aim to reduce our CO₂ emissions and carbon footprint, and improve the environmental effect of our activities.

To help achieve our aims we:

- Meet, and wherever possible, improve upon relevant legislative, regulatory and environmental codes of practice
- Develop objectives that target environmental improvements
- Consider environmental issues in our decision-making processes
- Develop our relationships with suppliers and contractors so that we all understand and recognise our environmental responsibilities
- Educate employees so that they can carry out their activities in an environmentally responsible manner
- Promote our environmental performance and achievements amongst customers, employees, suppliers, contractors and the public.

We make sure that we use resources efficiently by:

- Advising staff on how best to use energy and other utilities
- Promoting waste minimisation, recycling and the creation of by-products
- Promoting the efficient use of resources, energy and fuel throughout our manufacturing, processing, packaging, sales and distribution operations.

We are active participants who co-operate with:

- The communities in which we operate
- The government, regulatory bodies and other interested parties who share our vision of being a responsible and trusted neighbour.

For more information:

<https://corporate.arcelormittal.com/about/our-values>



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