



ArcelorMittal

# ArcelorMittal Flat & Shaped Wire

Precision engineered  
to your exacting standards



# Precision engineered to your exacting standards

ArcelorMittal's Flat & Shaped Wire production is part of the Long Carbon Europe division of the ArcelorMittal Group. ArcelorMittal is one of the largest steel producers in the world and the manufacturer of precision engineered flat and shaped wire for diverse industrial sectors.

Recognised worldwide for the quality of its high performance, corrosion resistant products, ArcelorMittal manufactures and supplies some of the most advanced flat and shaped wire solutions in the world.

Designed and manufactured to suit the precise requirements of our worldwide customer base, ArcelorMittal Flat & Shaped Wire delivers consistent and lasting value.

ArcelorMittal Flat & Shaped Wire is the manufacturer of choice across the industries it serves:

- > Automotive
- > Mechanical engineering
- > Energy
- > Construction
- > Consumer goods



# Precision engineered

## Why work with ArcelorMittal Flat & Shaped Wire?



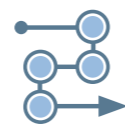
PASSIONATE EXPERTS



SOLUTIONS LED



QUALITY STANDARDS



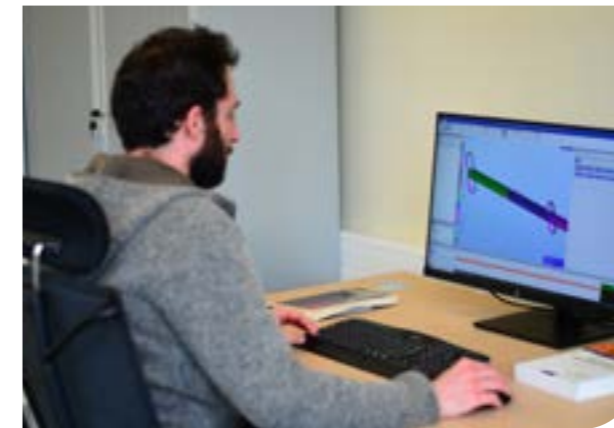
VERTICALLY INTEGRATED BUSINESS MODEL



RESEARCH & DEVELOPMENT



WORLDWIDE ACCESSIBILITY



### Unparalleled quality. Outstanding value for money.

Our mining, steel production, wire rod handling, wire drawing and flat and shaped wire processing is all undertaken by ArcelorMittal.

Our vertically 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, provides our customers with unparalleled quality and value for money.



### New levels of performance. New opportunities.

Operating for all ArcelorMittal group units, ArcelorMittal Flat & Shaped Wire benefits from the Group's worldwide research and development resources.

Worldwide we have 1500 full time researchers and 11 research centres. Research and development are the cornerstone of our commitment to innovation, ensuring the continuous renewal of our product and service offer to our worldwide customer base.

“We offer world class technical expertise, combined with complete control over the quality of our materials and production methods.”



## Increasing levels of product development and innovation

### Optimising solutions for our customers

With increasing levels of focus on new product development and innovation, our production and quality control experts work with our customers to deliver high performance solutions that meet their precise requirements.

ArcelorMittal Flat & Shaped Wire is your strategic partner. We offer much more than high quality, competitively priced flat and shaped wire. Our purpose is to work with our customers to fulfil their technical requirements quickly, safely and efficiently.

We understand that your success **is our success.**

### Unrivalled technical expertise. Made in France.

Our manufacturing facility is located in Marnaval in eastern France. Our long and successful history has led us to our market leading position, specialising in the design, manufacture and distribution of bespoke flat and shaped wire.

Our commitment to quality and the highest product performance standards is underpinned by our process of continuous improvement.

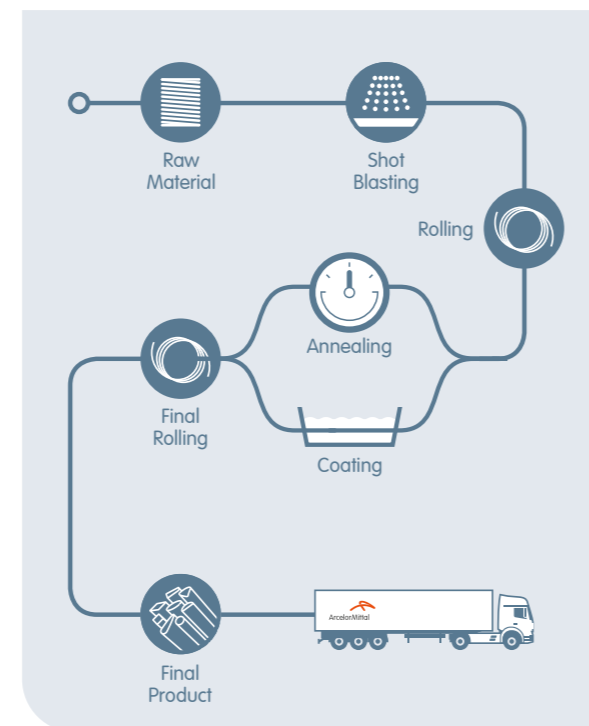


Our continuous improvement process means that we are ISO 9001, ISO 14001 and OHSAS 18001 certified. Our application for ISO 50 001 is in progress.

Manufacturing standards, ensuring performance, quality and excellence

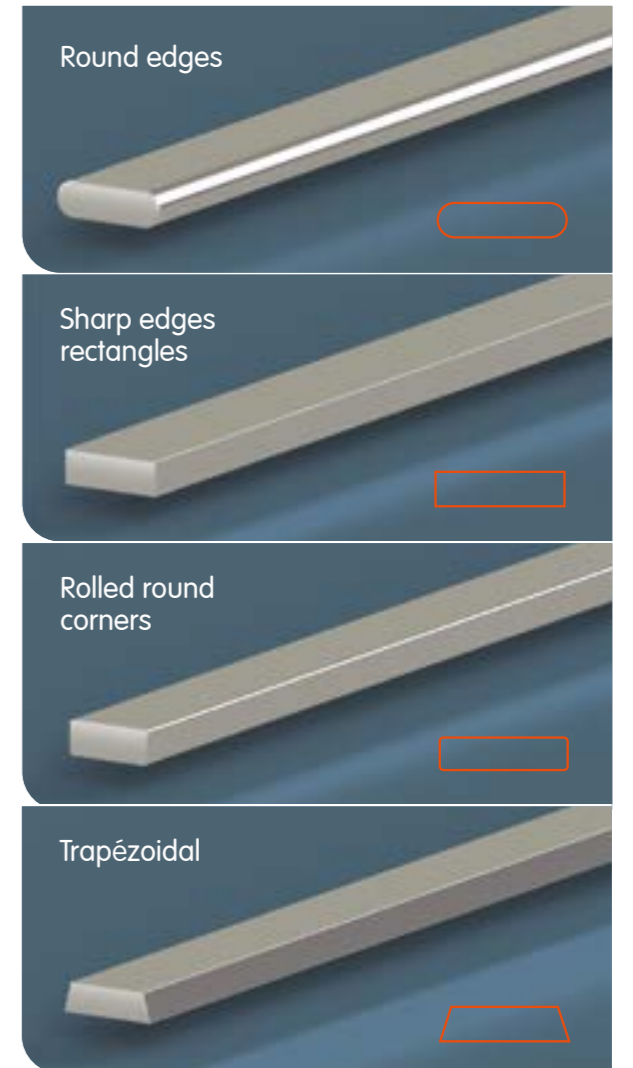
Standard and bespoke profiles for demanding applications

Our process



Our flat and shaped wire, with cross sections of approximately 2.5mm<sup>2</sup> to 280mm<sup>2</sup>, meet the very highest quality standards. We also manufacture bespoke profiles for many different applications across automotive, mechanical engineering, energy, construction and consumer goods sectors.

We are committed to working with our customers to develop practical solutions that are optimised for their requirements. Our long-term partnerships with our customers, across all the different sectors we serve, continue to gain momentum as we discover, together, even more innovative solutions.



# Applications

ArcelorMittal is a leading manufacturer of flat and shaped wire for many diverse applications. Our products are used in the automotive, energy, construction and mechanical engineering industries. We are technical wire solutions providers for a global customer base with very demanding requirements.

Our flat and shaped wire solutions are used in many different applications including:

- > Wiper arms and blades
- > Window and door fasteners
- > Gratings/duckboards
- > Cable armouring
- > Consumer goods



## Recognised worldwide for our corrosion resistant coatings

The flat and shaped wire solutions that are manufactured for your applications require long term protection.

On land, offshore, subsea and beyond, some of the most innovative anticorrosive coatings are factored into the design process from the onset, ensuring that our commitment to quality and precision is never compromised and that we deliver flat and shaped wire solutions that provide excellent levels of performance.



### Galvanised

Our galvanised flat and shaped wire is produced on continuous hot dip galvanising line by passing prepared coils through a bath of molten zinc. The zinc coating, available in various thicknesses, resists corrosion by providing sacrificial barrier protection.

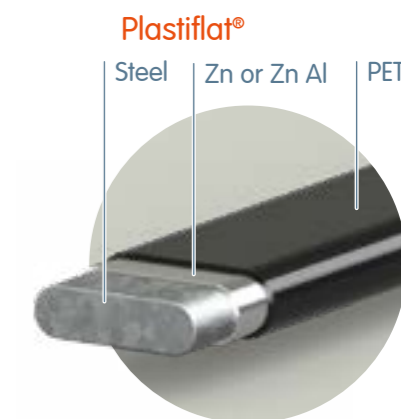
- > Protects against aggressive corrosion
- > Consistent and even coating
- > Perfect coating adherence, even after bending



### Corzal®

Corzal® is a high performance, durable alloy offering superior corrosion resistance.

- > 95% Zinc and 5% Aluminium alloy coating. The addition of aluminium to the zinc only galvanising coating provides corrosion resistance which protects 3 times longer than a zinc only coating.
- > Requires a thinner coating than a galvanised coating to give the same corrosion protection
- > Outstanding corrosion performance
- > No alteration of the wire product after bending
- > Perfect coating adherence, even after bending



### Plastiflat®

Plastiflat® is a high performance, durable PET coating offering excellent resistance to corrosion.

- > Protects against aggressive corrosion
- > Superior corrosion resistance
- > Consistent and even coating
- > Galvanised core
- > Corzal® core on request

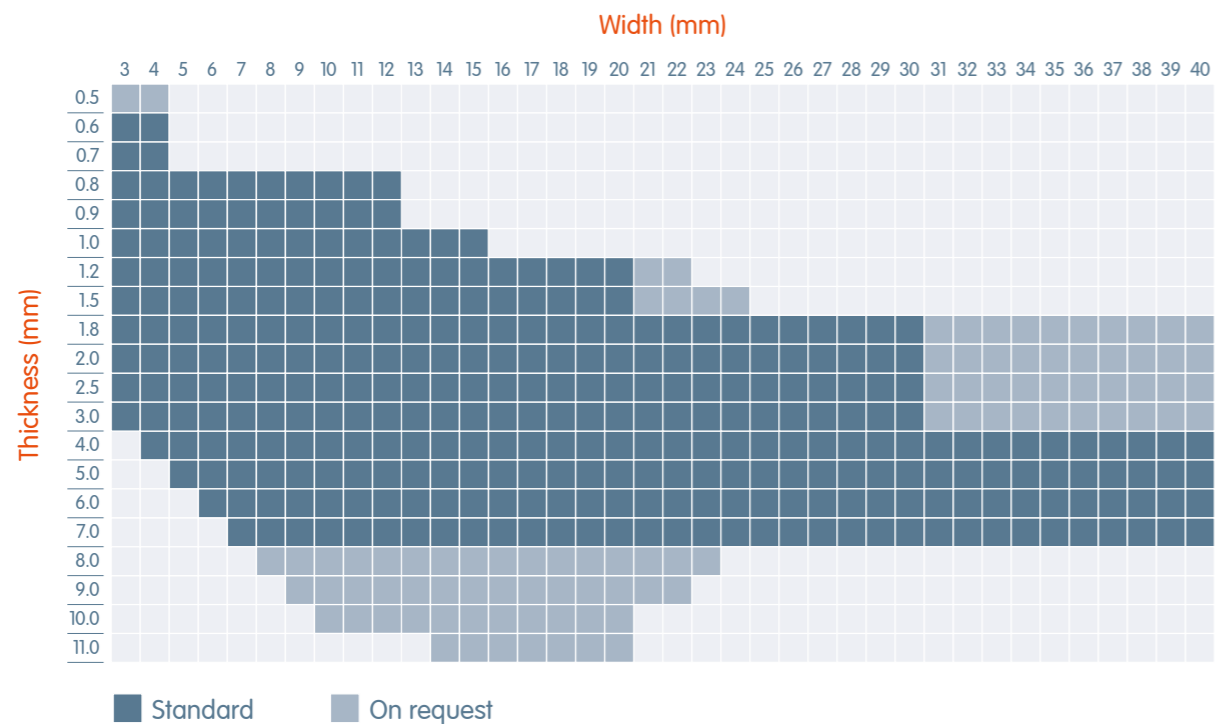
### Uncoated

ArcelorMittal Flat & Shaped Wire uncoated is also suitable for electrolytic coating and enamelling.

“Our commitment to ensuring the quality of our base materials and coatings is never compromised.”

## Product range

- › Our flat and shaped wire is produced according to EN 16120-1 to 4 and customer specifications. Please contact us for details.



## Tolerances

- › Width  $\pm 0.10\text{mm}$
- › Thickness  $\pm 0.025\text{mm}$
- › Length  $\pm 5.00\text{mm}$
- › Please consult us for any additional information and specific requirements

## Coating

- › Uncoated
- › Galvanised (Zn), 60 to 300g/m<sup>2</sup>
- › Corzal® (95% Zn+5% Al) 60 to 300g/m<sup>2</sup>
- › PET 5 to 15 $\mu\text{m}$

## Technical characteristics

Process:

- › Cold rolling
- › Annealing
- › Tensile strength 300 to 2300 MPa (+/- 50MPa)
- › Grades C2 to C72

## Packaging

- › Packaging units are individually identified with labels referring to type.
- › Packaging options include delivery on pallets, protected with plastic wrapping or export paper wrapping.
- › Bespoke packaging can also be provided. Please contact us for further details.

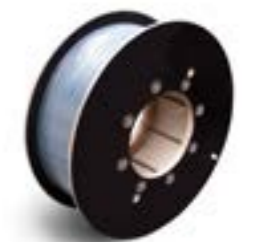
### Coils

Internal diameter	400, 480, 550, 600, 650mm
External diameter	500 to 1200mm
Width	200, 250, 300, 400mm
Weight	300 to 2400kg
Characteristics may change according to the section of the wire	



### Wooden reels

Internal diameter	400mm
External diameter	750 to 1200mm
Width	300mm payload, 340mm overall load
Weight	200 to 900kg



### Container

Length	1150 mm
Width	1000 mm
Height	1200 mm



## Certificate

Certification compliant with EN10204 type 3.1 is provided.





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