



**DEVELOP NOW**  
Premium Wire Solutions  
with reduced  
carbon footprint

# WHERE PREMIUM QUALITY MEETS ECO-FRIENDLY EXCELLENCE 2027





Our research steelworks “TechMet” combines a tireless pioneering spirit with the vision of a sustainable future. Here, amidst innovation and passion, a new era is unfolding: the era of greentec steel based premium wire solutions.

It’s not just wire. It’s not just steel. It’s a commitment to a sustainable future. Every wire developed in our research facilities and brought to industrial standards tells a story of excellence. Our researchers, engineers and craftsmen are working on a vision in which the highest quality and environmental awareness go hand in hand.

From 2027, our greentec steel design will be available for your demanding applications. We invite you to join us on this journey right now.

Develop with us, test with us, increase your cost efficiency, and lower your carbon footprint. Thanks to premium wire solutions, which allow reduced process steps and optimized processing times.

Welcome to wire solutions of the next generation –  
with voestalpine greentec steel.



# WORKING WITH voestalpine WIRE TECHNOLOGY

**until 2027 and beyond**

- 1** PREMIUM QUALITY WITH  
REDUCED CARBON FOOTPRINT
- 2** PROCESS AND COST OPTIMIZATION  
THROUGH TAILORED MATERIAL DESIGN
- 3** GREEN TRANSFORMATION  
INSTEAD OF GREENWASHING

## PREMIUM QUALITY WITH REDUCED CARBON FOOTPRINT

Thanks to our flexible mix of high-quality input materials, scrap and high-quality alloy elements we offer a consistent premium, carbon reduced quality for all types of steel and therefore also for your premium wire-based applications.



## PREMIUM QUALITY AND REDUCED CO<sub>2</sub> FOOTPRINT

Flexible use of high-grade input materials such as HBI (Hot Briquetted Iron), pig iron and scrap to produce premium steel products can ensure that you will receive the desired consistent premium quality also for special grades. At the same time we reduce the CO<sub>2</sub> footprint by 60 % starting with 2027.

## CONSISTENT QUALITY

- » Smart sorted scrap for high quality steel grades reduces the CO<sub>2</sub> footprint
- » Use of dynamic alloying models allows uniform product properties with high scrap usage
- » Use of process models for automated adjustment of various process parameters (e.g. cooling after rolling, or heat treatment) depending on the chemical composition for uniform properties
- » Supply Reliability

Even if scrap or other raw materials might become scarce, we can ensure a consistent supply as customer partners as we are flexible.

## PROCESS & COST OPTIMIZATION THROUGH TAILORED MATERIAL DESIGN

Make use of our unique research facilities TechMet (technical center for metallurgy), MetLab (metallurgy laboratory) & Wire Technology Center to tailor your next generation wire solution to your needs now.

- » **Your advantages:** for new or optimized steel grades of amounts starting from 50 kg are possible in the MetLab and cost-effective lab samples can be produced for analyses. Following that, further tests can be conducted in the TechMet with near production heats of 3 tons, prior to going into series production.

**Fast, cost-effective and at the same time results can be transferred to large-scale facilities.**

## MAKE USE OF OUR RESEARCH FACILITIES

Make use of our research facilities MetLab, TechMet & Wire Technology Center with substantially reduced development times, considering material and process development from greentec steel to the drawn wire. Benefit from our expert know-how!

## DEVELOP YOUR APPLICATION OPTIMIZED MATERIAL FROM A BATCH SIZE OF 50 KG

greentec steel material design is available from TechMet in small-scale formats, starting with 50 kg melts in our MetLab.

Our commitment to innovation is evident in the unique testing facilities TechMet and MetLab, along with the one-of-a-kind Wire Technology Center. These facilities enable us to stand by our customers and provide continuous support and solutions to the most difficult challenges.



## SOME OF OUR SUCCESS STORIES

**Virtual product development of a brand-new wire alloy in TechMet/MetLab with reduced carbon footprint and several advantages**

- » Economical alternative to conventional Cr,Mo- alloyed QT steels 34CrMo4 and 42CrMo4
- » Improved processability and high strength in quenched and tempered (QT) condition through microalloying with Nb, Ti and B and thermomechanical rolling
- » Reduction of CO<sub>2</sub> during the drawing process through reduced number of annealing steps (200 kg CO<sub>2</sub>/to)
- » Designed for screws in the 12.9 range

**Use of thermo-mechanical rolling and optimized cooling in the most modern wire rod mill**

- » Optimized wire quality and best forming abilities by reducing the tensile strength makes the elimination of energy-intensive production steps possible
- » Reduction of CO<sub>2</sub> emissions

## GREEN TRANSFORMATION INSTEAD OF GREENWASHING

In addition to the conversion of production technology, this also includes the conversion of energy supply, sustainable logistics, material design, process re-engineering and much more.

- » Gradual switch to CO<sub>2</sub>-neutral logistics concepts
- » Conversion of energy procurement from entirely renewable energy sources
- » Optimization of our production steps



## SOME OF OUR SUCCESS STORIES

### Highly homogeneous material properties optimize your processes and save CO<sub>2</sub>

- » Thanks to our own steel base, we optimize the material properties from steel production through to the rolling and drawing processes. This ensures outstanding quality while at the same time conserving resources.
- » With our possibilities for thermomechanical rolling in the most modern wire rod mill further heat treatment steps can be omitted, thus saving resources, and reducing the carbon footprint.

### 100% green transport of wire products

Green transportation of wire products within Austrian and German Wire Technology facilities.

“Performance in Wire” ensures green wire transportation – now a joint development of a new wagon with Inno-freight, Deutsche Bahn and voestalpine Wire Rod Austria GmbH is also providing support here with the clear aim of optimizing the transport of wire rod coils.

The optimized wagons were also designed in a special lightweight construction, enabling better wagon utilization and gentler wire transport in general.

### 100% green transport already implemented

Within Austria, green transport of the wire rod from St. Peter/Freienstein for further processing in the wire drawing mill of voestalpine Wire Austria, about 20 km away, has been relied on for a long time. Here, nearly 100% of the delivered wire material has always rolled on rails downstream to Bruck an der Mur.

In addition, the transport within the value chain at the Donawitz site is also green – for example, the billet supply within the site there is carried out exclusively by rail and is therefore CO<sub>2</sub>-neutral.

### Use of 100% climate-friendly energy at our Austrian sites

At our Austrian sites we use 100% green electricity. With the motivation to supply our plants with green energy, numerous photovoltaic projects have already been implemented or are currently being implemented. We produce electricity from the recycling of residual materials, participate in wind farms and have always had two hydropower plants in Bruck/Mur in operation.

