

**TATA STEEL**



## **Continuously annealed products**

The perfect choice for quality and consistency



# CONTINUOUSLY ANNEALED PRODUCTS QUALITY YOU CAN RELY ON



Tata Steel's Continuous Annealing Processing Line (CAPL) offers high-quality, homogeneous steel and is one of the widest mills in Europe. Consistent surface quality, tight gauge tolerances and exceptional flatness are hallmarks of our CAPL steels. They ensure that our products deliver both processing and end-product benefits. Available in a wide range of grades, the products are used successfully in a variety of demanding applications.

### Proven products

Tata Steel has been producing high-quality CAPL steels since 1998. Our processing line can produce continuously annealed steels in widths up to 1830mm – offering the biggest choice of CAPL product width in Europe. The speed of the process also provides scope for reduced production lead times compared with batch processing.

These products are available in a wide variety of grades. They include steels for forming, high-strength low-alloy (HSLA) grades and advanced, high-strength steels (AHSS) and ultra-high-strength steels (UHSS). Our CAPL products have been proven in a range of applications. These include automotive, industrial packaging, office furniture, radiators, racking, shelving and domestic appliances.

### The benefits are clear

Stringent control and monitoring of the continuous annealing process ensure reliable and consistent steel quality. The size and flexibility of our processing line means more customer choice. Our continuously annealed products offer a range of benefits to you and your customers. These include:

- Time and cost savings – through faster and more efficient processing
- Yield maximisation and reduced waste – through choice of product size, tight tolerances and exceptional steel flatness
- Reliable and repeatable end-product quality – through consistent steel quality and uniform mechanical properties.



# CAPL PRODUCTS IN ACTION

## Office furniture

CA200 CAPL steel has been specifically developed to meet the demands of the office furniture industry. Many office furniture products require very large steel blanks where shape is critical.

The excellent and consistent flatness of CA200 ensures efficient automatic handling, bending and folding. The steel's reliable surface quality and strength also help to ensure end-product performance.



CAPL  
products  
deliver  
reliable  
performance





### Optimised processing

The reliable consistency of Tata Steels' CAPL products ensures customers can be confident of predictable and repeatable manufacturing performance. It means fewer line stops and improved productivity.

The entire length of the coil undergoes the same thermal cycle as a single thickness of strip - ensuring uniform mechanical properties. Excellent flatness levels are achieved by a quick shape correction system in our automated temper rolling process.

### Assured quality

Our continuous annealing processing line incorporates a best-in-class automated inspection system for quality assurance. Our CAPL products are supplied to the demanding automotive industry where surface quality is a critical factor for exterior panels. Careful control and monitoring of our process ensures the optimum balance between a good surface texture for paint adhesion and smoothness for end-product appearance.

Our process route and quality assurance measure also result in product cleanliness in excess of 95 per cent. This means fewer clean-downs for customers - delivering time and cost savings for the pre-paint process. To further safeguard product quality, all CAPL steels are immediately wrapped with stretch-film following manufacture - extending the safe storage period for these products.

### Customer choice

We designed our annealing furnace to ensure flexible production and customer choice. It means we can produce complex steel grade products such as high-strength and multi-phase steels. CAPL products are available in widths up to 1830mm. The choice of dimensions - coupled with strict gauge control - means customers can match their exact requirements and cut down on waste.

The CAPL product range includes forming, HSLA, AHSS and UHSS grades. Some specific grades guarantee a tighter range of mechanical properties in comparison with standard norms. Ongoing investment in product development means that new products are being made available - offering customers even more choice and opportunity to reduce cost and weight.

Full details of our product range can be found both in the Tata Steel product catalogue and on [www.tatasteeleurope.com](http://www.tatasteeleurope.com).



**Product Range:**

Available products:	Forming grades DC01 - DC06 Grades with guaranteed mechanical properties: CA200 - CA240 HSLA grades : HC260LA - HC380LA AHSS grades: DP600 - DP800
Development products:	HSLA grades: HC420LA, HC460LA UHSS grades: DP1000, CP1000 HQ1500 (Boron 22MNB5)
Width:	700 - 1830mm (grade specific)
Thickness:	0.38 to 2.0mm (grade specific)
Surface Finish :	GP or FF (A and B)
Surface treatment :	Oiled & dry

# MANUFACTURED WITH PRECISION

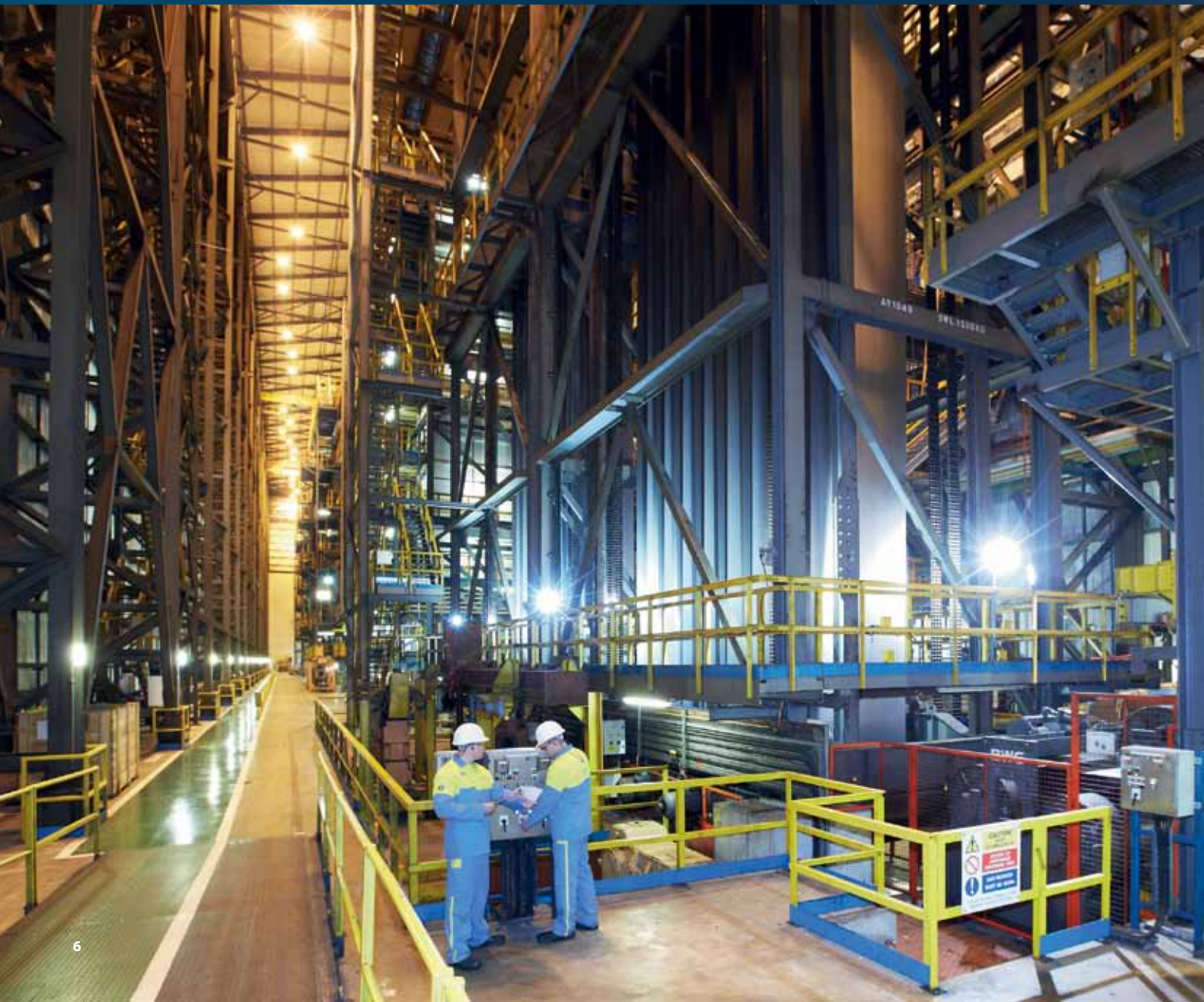
Our continuous annealing processing line was commissioned in 1998 and has benefited from ongoing investment. With a maximum mill limit of 1830mm, Tata Steel's CAPL is one of the widest in Europe. The line has an annual capacity of one million tonnes and incorporates a very flexible annealing furnace – allowing production of a wide variety of CAPL products. Precise temperature control within the furnace enables the fine-tuning of mechanical

properties and ensures uniformity throughout the coil.

Upgrades to the line's temper mill control system have contributed to improved strip flatness. Automated monitoring and inspection systems ensure stringent control of tolerances and surface quality.

We draw on many decades of steelmaking experience to manufacture steel for

the modern world. We keep pace with technological advancements in steel processing – ensuring that we produce CAPL products to meet the needs of processors and their customers. We recognise that the skills and knowledge of our people are critical to the success of our operations. We continue to invest in our people to ensure the safe, reliable and efficient production of high quality steel.







## Tata Steel

Tata Steel is one of Europe's largest steel producers. We serve many different and demanding markets worldwide. These include lifting and excavating, aerospace, automotive, construction, energy and power, rail and packaging. Our primary steelmaking operations in the UK and The Netherlands are supported by a global sales, processing and distribution network. Our European operations are a subsidiary of Tata Steel Group, one of the world's top ten steel producers.

Innovation and continuous improvement are at the heart of our performance culture. We aim to create value by offering a sustainable and value-added steel product range supported by unrivalled customer service.



## Working with you

By working in partnership with you, we find the best solutions to meet your needs and help your business to perform. Our technical services team is available at short notice to assist you and your customers. These skilled engineers can apply their knowledge of steel and its application helping customers optimise productivity, efficiency and product performance.

Customers can also take advantage of our research and development resources. Our scientists and technical experts can help resolve complex engineering issues and assist in the development of innovative products.



## Sustainability

Tata Steel's continuously annealed products are a sustainable choice. The consistent quality of these steels helps to maximise processing efficiency. The wide choice of product size enables customers to cut down on waste. HSLA grades in the CAPL range reduce the amount of steel required to manufacture strong and load-bearing components. This means a reduction in associated raw material and energy resources.

Our steel is fully traceable and produced in accordance with ISO 14001 for environmental protection. We have adopted a class-leading framework for safety across our operations. We drive sustainability in our operations by focusing on manufacturing efficiency, safety, waste minimisation, carbon dioxide reduction and energy savings.

[www.tatasteeleurope.com](http://www.tatasteeleurope.com)

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