

Stainless steel long products



outokumpu

working towards a world that lasts forever



[outokumpu.com/longproducts](https://www.outokumpu.com/longproducts)

We believe in a world that lasts forever

Outokumpu is a global leader in the advanced materials business, creating stainless steels that are efficient, long lasting, and recyclable. A strong customer focus, sustainability, and technical excellence are at the heart of everything we do.

As an open and approachable company, our customers rely on our advice to help them select products that will deliver the best long-term performance for their needs.

With over a century of innovation behind us and some of the best minds in the business, we continue to develop pioneering materials to meet the demands of tomorrow.

The durability of stainless steel means that it is not only the best, but also the most economically sustainable choice for a wide range of applications. All of our products are made from an average of 85% recycled material and are fully recyclable at the end of their lifecycles.

Together with our customers and partners, we are building a world that lasts forever.

High performance stainless steel long products

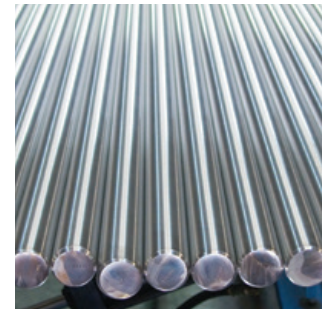
Outokumpu has been producing stainless steel for over a century. This legacy of innovation and consistent quality means that we have the right product for every application.

Outokumpu's global offering contains the full range of stainless steel long products, including bloom, billet, slab, ingot, wire rod, bar, and rebar. Our product program covers a wide range of special grades, dimensions, and shapes (round, square, hexagon). The Prodec range of stainless steel grades offers improved machinability with longer tool life and enhanced quality.

“ Our long products production sites are located in the UK, Sweden, and the US. We're present in over 70 countries through our local Outokumpu sales offices.

Our end-to-end approach from melting and rolling to finishing and testing ensures the highest quality according to customer specifications. Delivery reliability, competitive lead times, and advanced technical support are the cornerstones of our customer promise. Our sales and technical teams have in-depth knowledge of customer applications and can help you choose the most suitable material for different environments.

Our manufacturing program is supported by intensive in-house product inspection and testing, and is accredited to meet all widely recognized international standards, including ISO 9001.



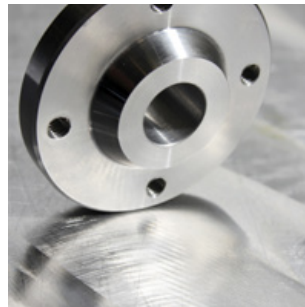
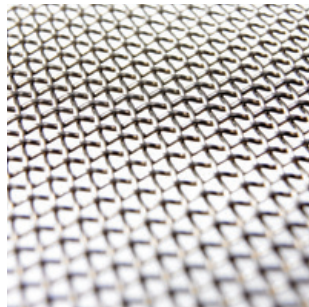
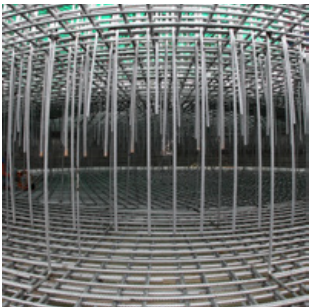
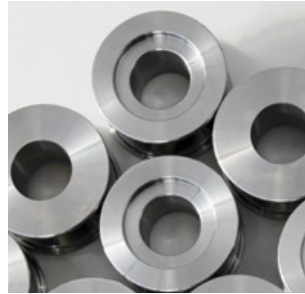
Applications

Typical applications for Outokumpu long products

- Shafts, valves, fittings, and components
- Seamless tubes, flanges
- Wire, springs, bolts, and fasteners
- Forgings

Typical industry sectors that use Outokumpu long products

- Chemical and petrochemical processing
- Oil and gas
- Pulp and paper
- Automotive
- Machinery and electrical
- Food and beverage
- Construction



Contact us at outokumpu.com/contacts to find out which of our products is right for your next project.

A wide range of stainless steel grades

Outokumpu is a leader in specialized stainless steel grades. In addition to the most commonly used ferritic and austenitic stainless steels in our Moda, Core, and Supra ranges, we manufacture a wide range of products for applications such as extremely corrosive environments and demanding fastener applications, as well as components machined from bar.

Forta range

Outokumpu is one of the world's largest producers of duplex stainless steels. Duplex steels offer increased strength and greatly enhanced resistance to stress corrosion cracking. Key products include the low-nickel Forta LDX 2101 and the super duplex Forta SDX 2507, which is designed for demanding applications.

Ultra range

Ultra 254 SMO provides longer material life in extremely corrosive environments (PRE >27).

Dura range

Dura 17-4PH is the most widely used precipitation hardening steel. It has high strength and hardness, good corrosion resistance, and is widely used in the aerospace, chemical, oil and gas, food processing, paper, and general metalworking industries.

Therma range

The Therma range comprises high-temperature austenitic grades designed for temperatures exceeding 550 °C/1020 °F. Therma 310S/4845 can be used at temperatures up to 1050 °C/1920 °F, while Therma 253 MA is best employed in temperatures up to 1150 °C/2100 °F.

Prodec range

Prodec stainless steel products are optimized for improved machinability, resulting in longer tool life and enhanced quality. Key products include Prodec 304L/4307 and Prodec 316L/4404.



outokumpu
classic

outokumpu
pro

Moda

Mildly
corrosive
environments

Core

Corrosive
environments

Supra

Highly
corrosive
environments

Forta

Duplex
& other
high strength

Ultra

Extremely
corrosive
environments

Dura

High
hardness

Therma

High
service
temperatures

Prodec

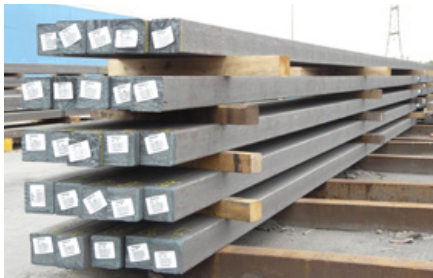
Improved
machinability

Deco

Special
surfaces

Melting and casting – billets, blooms, ingots, and slabs

Our continuously cast slabs, blooms, and billets are supplied in the ground or black condition. The offering covers a wide range of ferritic, austenitic, martensitic, heat resistant, duplex, and precipitation hardening stainless steels.



Continuously cast billet

Billets can be supplied in the ground or unground condition.

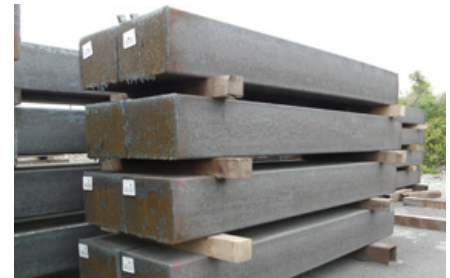
Cross-section	Length
127 x 127 mm	3800–12000 mm
140 x 140 mm	3800–12000 mm
150 x 150 mm	3800–12000 mm
180 x 180 mm	3800–12000 mm
200 x 200 mm	3800–12000 mm



Continuously cast slab

Slabs can be delivered in the ground or unground condition with a maximum weight of 30 tonnes.

Thickness	Width	Length
170 mm	960–1575 mm	4000–12000 mm
200 mm	960–1575 mm	4000–12000 mm
300 mm	700–1575 mm	3200–6600 mm



Continuously cast bloom

Blooms are delivered in the unground condition.

Cross-section	Length
300 x 400 mm	2000–12000 mm



Ingot casting

Our ingots are normally square. Contact us to find out about other shapes and sizes.

Weight, tonnes	Upper size	Lower size
5.6	629 x 629 mm	452 x 452 mm
19.6	765 x 1773 mm	621 x 1632 mm

SMACC

Outokumpu's UK meltshop in Sheffield, SMACC (Stainless Melting and Continuous Casting), is a global supplier of semi-finished stainless long and flat products. With the flexibility to produce billet, bloom, ingot, and slab in a wide range of sizes and stainless steel grades – coupled with experience and expertise – SMACC is well known for its excellent level of service.

Rolled or forged billets and heavy bars

Our rolled and forged billets are produced with a round or square cross section and can be supplied in the unground, fully ground, spot/corner ground, peeled, or turned condition.

Our portfolio covers standard stainless steel grades as well as grades with tailored microstructures, and highly alloyed grades for demanding applications.

Tailored to customer requirements

All products can be post-production heat treated to meet your requirements. We work with our customers to tailor our production tolerances to their exact specifications.

Route	Shape	Size	Length
Rolled	Round	75–270 mm	3–12 m
Rolled	Square	75–250 mm	3–12 m
Forged	Round	150–400 mm	3–12 m
Forged	Square	150–300 mm	3–12 m




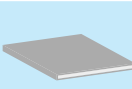
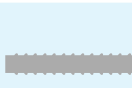


Degerfors Stainless

Outokumpu's hot rolling mill in Degerfors, Sweden is a global supplier of high quality rolled and forged billets and bars in a wide range of stainless steel grades. The products are used globally across various quality-critical industries. Our manufacturing program is supported by intensive product inspection and testing, and is accredited to meet all widely recognized international standards, including ISO 9001.

Wire rod

Our wire rod product program includes round, square, hexagon, flat, and rebar materials. The normal coil weight is ~1000 kg.

Form	Dimensions
	Round: 5.0–27.0 mm 0.5 mm steps to 13.5 mm; 1.0 mm above 14 mm
	Square: 9.0–24.0 mm
	Hexagon: 9.0–27.0 mm
	Flat: 13.0–35 mm x 5.0–14.0 mm Not all combinations available — 2:1 min. ratio as a guide
	Rebar: 6/8/10/12/16/20/25 mm



ASR Sheffield

Outokumpu's wire rod mill in Sheffield, UK is a global wire rod supplier in a broad range of stainless steel grades, sizes, and shapes. ASR strives to be the most responsive specialist rod supplier, with industry-leading customer service backed by a flexible, high quality manufacturing program.

Bar

Our bar product program includes round, square, hexagon, and rebar materials, all in the drawn, hot rolled, peeled, and centerless ground condition.



Round bar

Metric sizes	
6–32 mm	Cold drawn
20–170 mm	Peeled
175–400 mm	Rough turned
75–400 mm	Black bar

Imperial sizes	
3/16–1 in	Cold drawn
1/2–3 ^{3/4} in	Peeled
2–15 in	Rough turned



Hexagon and square bar

Metric sizes	
8–32 mm	Hexagon
8–22 mm	Square

Imperial sizes	
1/4–1 in	Hexagon
1–1 ^{1/2} in	Hexagon
3/8–7/8 in	Hexagon

Rebar

We offer rebar in hot rolled and descaled condition, and it can be supplied as coils or straight lengths, or cut and bent.



Rebar

Metric sizes	
6–40 mm	Hot rolled

Imperial sizes	
ASTM A955 #3–10 (0.375 to 1.270 in)	Hot rolled

Sheffield Stainless Bar

Sheffield Stainless Bar is a specialist stainless bar provider based in Europe. The product range covers all shapes, including round, square, hexagon, and rebar forms – including key stainless steel grades.

Outokumpu Stainless Bar

Outokumpu Stainless Bar is a leading stainless bar provider in the USA. It offers a full range of standard and special grades bar, in sizes from 3/16" to 15" round, 3/8" to 7/8" CD squares, and 1/4" to 1 1/2" hex.

Inside view

Long Products is a central part of Outokumpu's stainless steel offering and over the years we have built long-lasting relationships with hundreds of customers around the world.

Our Long Products manufacturing program is supported by in-house inspection and testing, as well as the extensive experience of our technical team. Our experts are committed to achieving high standards in chemical composition and mechanical properties to ensure consistent product quality. We work closely with our customers to provide the world-class technical support they deserve.

We take pride in our work and are committed to continuously improving our customer service. In Outokumpu our customers have a partner they can rely on for technical expertise and high quality standards.



Dr. Stephen Jones, Long Products Head of R&D, Outokumpu

“ We take pride in our work and are committed to continuously improving our customer service.”

Outokumpu is accredited to recognized international standards, including:

- ISO 9001 & 14001 – TÜV Nord
- BS OHSAS 18001 – TÜV Nord
- AD 2000 – Merkblatt WO/TRD 100 – TÜV Nord
- PED 97/23/EC
- ASME MO QSC 713
- Approvals from DNV, Germanischer Lloyd, and Lloyd's Register

For the full list of approvals by mill, see [outokumpu.com/certificates](https://www.outokumpu.com/certificates)

Environmental responsibility

At Outokumpu we want to minimize the environmental burden of our operations as much as is economically and technically possible.

Tackling environmental issues is an essential part of the management system we employ in our mills and units, and the functioning of these systems is monitored by both internal and external audits, where we are accredited to ISO 14001. We also report to the relevant authorities on our operations in all the countries where we operate.

In the production of our stainless steel we use an average of 85% recycled stainless steel. We are also committed to reducing global carbon dioxide emissions as well as reducing our energy consumption by improving energy efficiency and enhancing the use of renewable energy, together with reducing the amount of waste generation of waste we generate.

Health and safety

Health and safety is a key concern at Outokumpu. All employees are encouraged to actively participate in the maintenance and improvement of health, safety, and environmental systems and procedures. Our comprehensive safety management system is certified to BS OH SAS 18001.

Technical support

Our technical team has a wealth of experience in both the manufacture and application of stainless steel. They can assist you in selecting the most appropriate product to suit your application, making sure you benefit from maximum efficiency and performance. We are also able to manufacture stainless steels to your individual specifications.



Working towards forever.

We work with our customers and partners to create long lasting solutions for the tools of modern life and the world's most critical problems: clean energy, clean water, and efficient infrastructure. Because we believe in a world that lasts forever.

outokumpu classic			outokumpu pro						
Moda Mildly corrosive environments	Core Corrosive environments	Supra Highly corrosive environments	Forta Duplex & other high strength	Ultra Extremely corrosive environments	Dura High hardness	Therma High service temperatures	Prodec Improved machinability	Deco Special surfaces	

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high performance stainless steel

