

# Special surfaces

Outokumpu Deco range

outokumpu  
high performance stainless steel



[outokumpu.com/deco](https://outokumpu.com/deco)

# 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.

Stay up to date on our latest innovations, follow market trends, and get inspired by success stories – subscribe to our magazines and newsletters  
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## The inside view

Special surfaces for appliance, design, and architectural applications. All bright annealed, polished and ground, brushed or patterned finishes.

Outokumpu offers a wide variety of surface finishes for our stainless steel products, covering everything from decorative architectural cladding to attractive, hygienic surfaces for kitchens.

Due to its durability and resistance to corrosion, stainless steel does not need a protective coating. This allows the noble appearance and cool metallic touch to be fully experienced. There are several processes – such as rolling, etching, polishing, brushing, blasting, and embossing – that allow for the aesthetical modification of stainless steel's surface finish. By exploiting all of these techniques Outokumpu can offer a wide selection of individual surface finishes, in addition to standard finishes like 2B or Deco BA/2R. We have a number of patterned surfaces that can, for example, create a hard-wearing and aesthetically attractive interior in elevators or serve as a stunning, softly reflecting façade material.

Our special surfaces have exceptional properties in terms of their reflectiveness and roughness. Deco Rolled-On finish is an embossed polish pattern on a Deco BA/2R substrate that improves corrosion resistance. We offer a high-gloss surface called Deco 2R<sup>2</sup> which almost matches the qualities of a mirror polished (No. 8) finish. Deco 2R<sup>2</sup> is produced inline at our mill facilities, making this surface a cost-efficient alternative to a No. 8 finish. At the other end of the gloss spectrum we produce a dull finish called Deco Supermatt, which is a shot blasted surface with an extremely homogeneous, high-quality appearance.

Outokumpu has decades of experience producing various surface finishes for stainless steel with outstanding quality and consistency. We use state-of-the-art Sendzimir and skin-pass mills that offer better control of embossing depth and allow us to control the reflectiveness of our finish patterns. We also offer finished materials up to 1500 mm/59 in wide and in thicknesses down to 0.3 mm/0.11 in for many of our finishes.

Ask our experts to help you choose the best surface finish for your application at [outokumpu.com/contacts](https://outokumpu.com/contacts)



# Choosing the right surface finish

Choosing the right surface finish for your application is key to ensure both the cost-effectiveness and success of your project. Take a look at the individual Deco range finishes and typical applications to get an idea of your options.

## Key surface finishes

### Deco Linen

Our most popular patterned surface finish combines attractive design with functionality. To offer this pattern for a wide range of applications we produce the Deco Linen finish with four different reflectance characteristics. After embossing, a recovery annealing is applied for improved formability, while tension levelling provides a superior flatness.

#### Typical applications

Elevators, escalators, cash desks, exterior and interior architecture.

#### Available for these products

Core 304/4301, Core 304L/4307, Supra 316/4401, Supra 316L/4404, Moda 430/4016.  
Other grades available on request

#### Min/max dimensions

Thickness: 0.3–3.5 mm/0.011–0.13 in  
Width: up to 1500 mm/59 in

### Deco BA/2R

A bright and smooth surface available direct from our mills. The Deco BA/2R finish meets both functional and design requirements for many applications.

#### Typical applications

Dishwashers, sinks, washing machine/dryer drums, cookware, chimney pipes, architectural cladding, tank trailers, and automotive fenders.

#### Available for these products

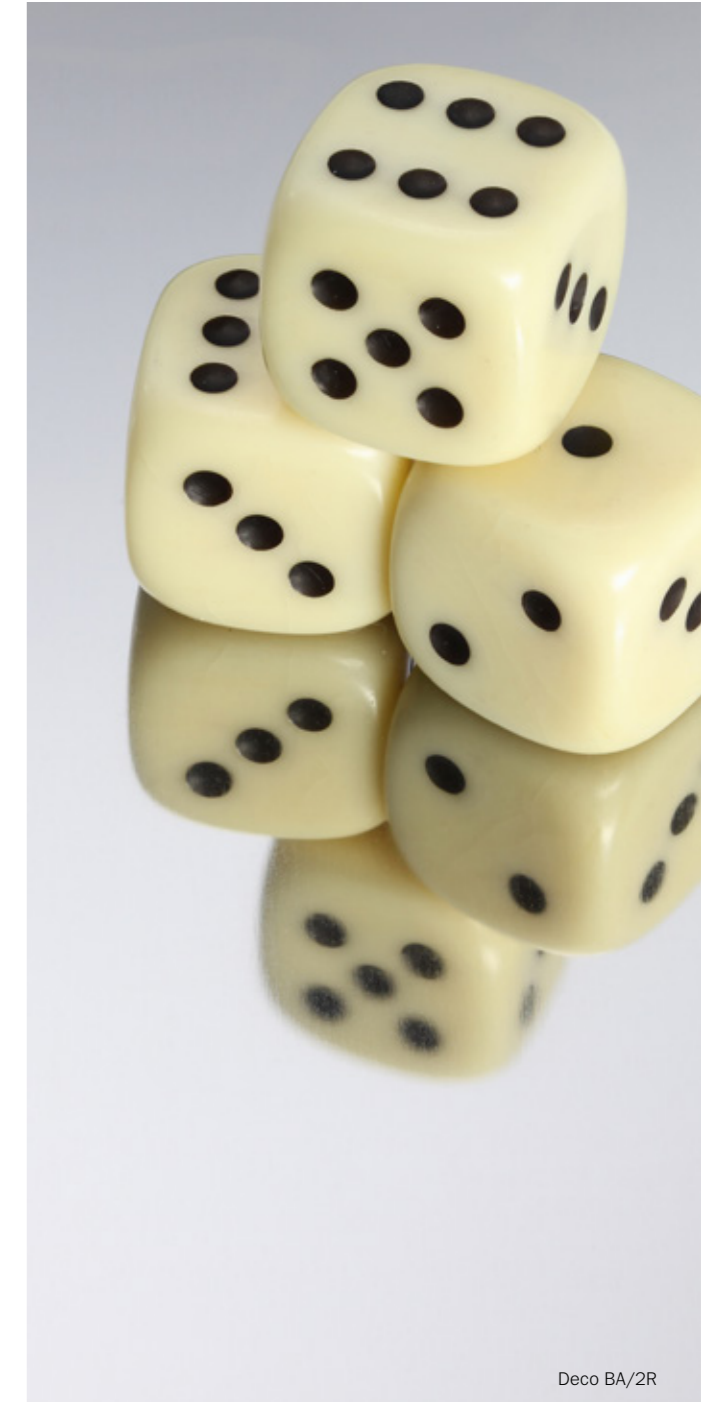
All ferritic and austenitic stainless steels in Moda, Core, and Supra ranges.

#### Min/max dimensions

Thickness 0.25–3.50 mm/0.009–0.13 in  
Width: up to 1500 mm/59 in



Deco Linen



Deco BA/2R

Contact us at [outokumpu.com/contacts](https://www.outokumpu.com/contacts) for more information on the dimensions available in your area.

## Polished/brushed finishes

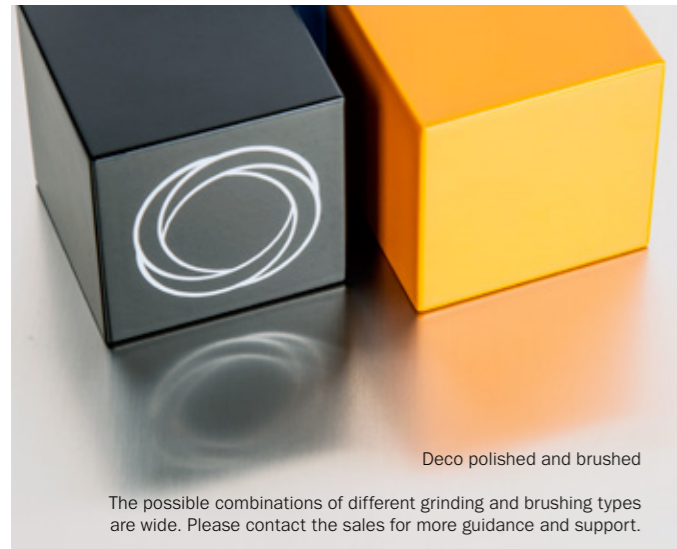
### Coarse/fine (#3 or #4 polish), polished, brushed, Deco duplo (polished and brushed)

Polishing a stainless steel surface with an abrasive belt of a certain grain size leads to a homogeneous, satin-like and highly decorative surface finish.

By optimizing the grain of the belt the surface finish can be fine-tuned to meet specific application requirements. A finer grain of the abrasive belt results in a higher gloss and more even finish. Using successively finer grit belts, an almost mirror-like surface can be produced. We offer a minimum grit size of 60 and maximum of 400.

The ground or polished surface has more or less clearly visible scoring, which also makes scratches from daily wear and tear less visible. A polished surface is also easier to recreate and blend, for example after repairs or welding work, compared with a 2B or Deco BA/2R surface.

Because of Outokumpu's ability to provide both wet and dry polishing, we have an exceptionally wide range that can meet any demands or requirements.



Deco polished and brushed

The possible combinations of different grinding and brushing types are wide. Please contact the sales for more guidance and support.

### Brushing

The use of brushing (with Scotch Brite®, for example) provides a silky-matt finish without clear grinding scores.

### Deco Microlon

The very fine grinding texture of Deco Microlon leads to an elegant, dark gray surface appearance that gives interior and exterior claddings a sophisticated look.

#### Typical applications

Elevators, escalators, refrigerators, handrails, store counters and shelves, cookware, kitchen goods, architectural cladding.

#### Available for these products

All austenitic and ferritic stainless steels in the Moda, Core, and Supra ranges.

#### Min/max dimensions

Thickness: 0.5–4.0 mm/0.019–0.15 in  
Width: up to 1500 mm/59 in



Deco Microlon

The very fine grinding texture makes the surface appear in an elegant dark gray. Microlon gives interior and exterior claddings a classy appearance.

EN designation	Description
BA/2R	<b>Bright annealed</b> BA/2R is the standard bright annealed smooth and reflective surface finish with good workability.
2G	<b>Ground</b> Grade of grit or surface roughness can be specified. Unidirectional texture, not very reflective.
2J	<b>Brushed or dull polished</b> Grade of brush or polishing belt or surface roughness can be specified. Unidirectional texture, not very reflective.
2K	<b>Satin polish</b> Additional specific requirements to a "J" type finish, in order to achieve adequate corrosion resistance for marine and external architectural applications. Transverse Ra < 0.5 µm with clean cut surface finish.
2P	<b>Bright polished</b> This finish is achieved by mechanical polishing. The process or surface roughness can be specified. It is a non-directional finish, reflective with a high degree of image clarity.
ASTM designation	Description
No. 3	<b>Intermediate polished finish</b> This is a linearly textured finish that may be produced by either mechanical polishing or rolling. Average surface roughness (Ra) may generally be up to 40 micro-inches. A skilled operator can generally blend this finish.
No. 4	<b>General purpose polished finish</b> This is a linearly textured finish that may be produced by either mechanical polishing or rolling. Average surface roughness (Ra) may generally be up to 25 micro-inches. A skilled operator can generally blend this finish. There may also be overlap in measurements of surface roughness for both No. 3 and No. 4 finishes.
No. 6	<b>Dull satin finish</b> This finish has a soft, satin appearance and has a reflectivity that is lower than a No. 4 finish. It is used for architectural applications and ornamentation where high luster is undesirable. It is also used effectively to contrast with brighter finishes.

Contact us at [outokumpu.com/contacts](https://outokumpu.com/contacts) for more information on the dimensions and roughness levels available in your area.

You can check the latest revisions of standards at [steelfinder.outokumpu.com](https://steelfinder.outokumpu.com)

## Patterned finishes

Patterning of stainless steel leads to an enhanced combination of design and function. Outokumpu offers a large variety of patterned surface finishes, and each pattern can have different reflection properties.

Our most popular designs are Deco Linen, Deco Haze, Deco Laser, Deco Microlinen, Deco Diamonds, Deco Square, Deco Microchecker, and Deco Leather Grain. Individual patterns can also be developed according to specific needs. After embossing, a recovery annealing is applied for improved formability and, due to tension leveling, an extremely high flatness can be achieved.

### Double sided pattern

Patterned sheet is produced by means of extra rolling of cold-rolled coils between special imprinted rolls. In this way, a waffle-type pattern can be obtained on both sides of the sheet. At the same time, the rigidity and strength of the material is increased by almost 50%. This means that it is possible to use a thinner sheet, and thus obtain a lower weight.

### Typical applications

Elevators, escalators, interior architecture, anti-slip surfaces, sinks, claddings, facades, cash desks, refrigerated display cases, scratch-resistant housing for various machines.

### Available for these products

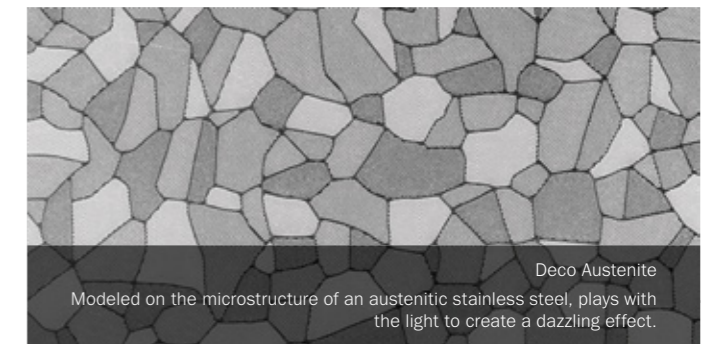
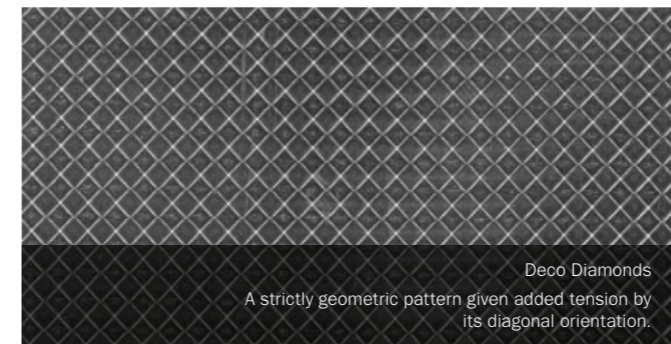
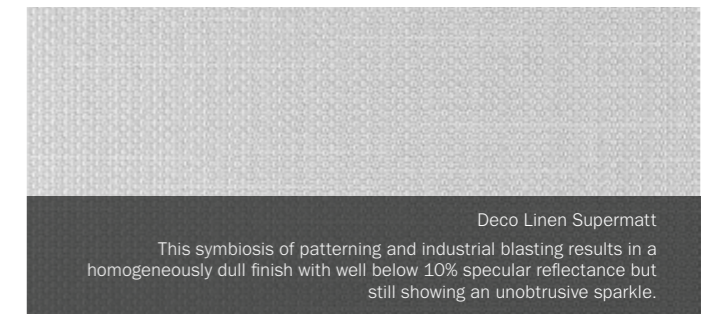
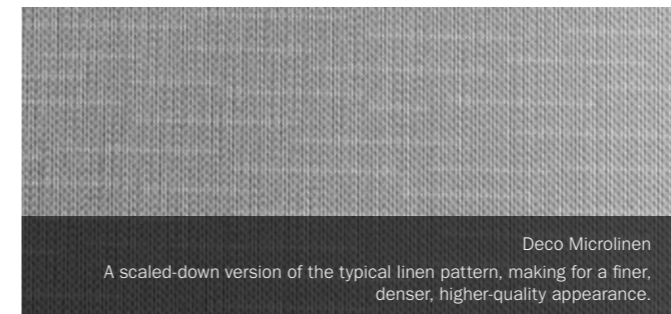
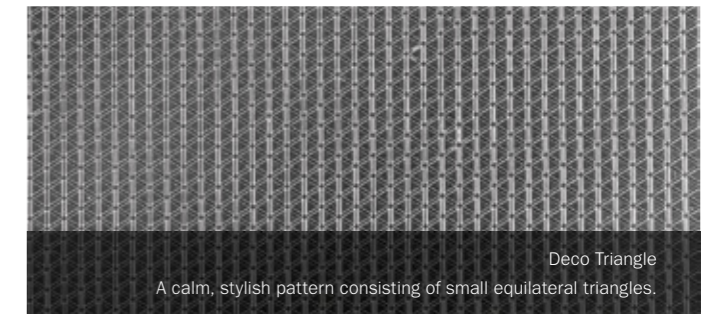
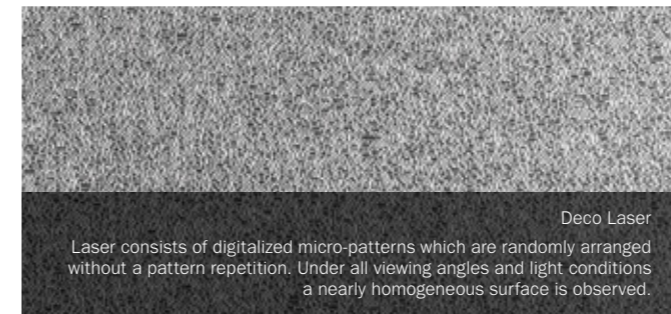
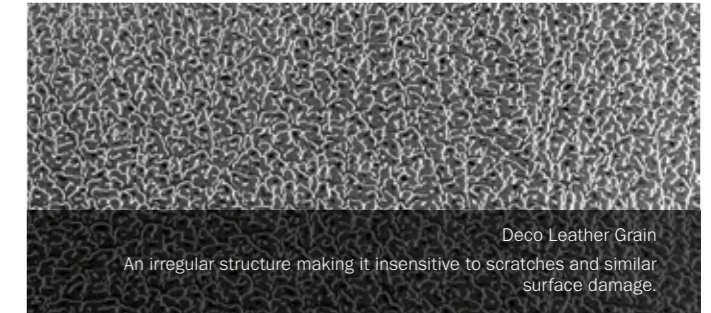
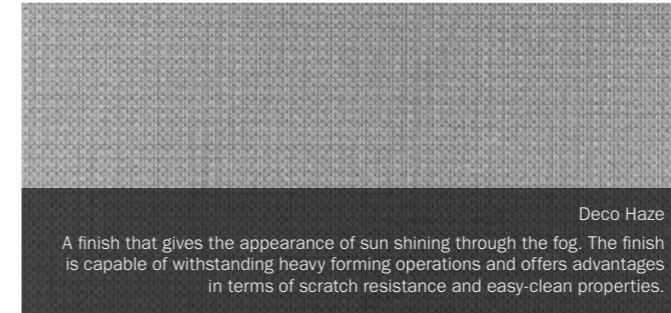
Core 304/4301, Core 304L/4307, Supra 316/4401, Supra 316L/4404, Moda 430/4016. Other grades available on request.

### Min/max dimensions

Thickness: 0.3–3.5 mm/0.011–0.13 in

Width: up to 1500 mm/59 in

Contact us at [outokumpu.com/contacts](https://outokumpu.com/contacts) for more information on the dimensions available in your area.



## Special surface finishes

### Deco 2R<sup>2</sup>

A cost-effective finish available straight from the mill with high smoothness and reflectivity. A Deco 2R<sup>2</sup> finish almost matches the gloss and roughness figures of a mirror-polished (No. 8) surface finish.

#### Typical applications

Interior and exterior architecture, design products, technological components, and products which require high reflectivity or low surface roughness.

### Deco GritLine

Deco GritLine is a rolled-on finish with similar properties and appearance to a polished surface but is easier to clean and provides improved corrosion resistance.

#### Typical applications

Interior architecture, escalators, elevators, store counters and shelves, cash desks, display cases, handrails, commercial kitchens, chimney pipes.

### Deco Rolled-On

Deco Rolled-On finish is an embossed polished pattern on a BA substrate that offers improved corrosion resistance.

#### Typical applications

Interior architecture, escalators, elevators, store counters and shelves, cash desks, display cases, handrails, commercial kitchens, chimney pipes, grills, beverage equipment.

### Deco Supermatt

A cost competitive, industrially shot-blasted surface finish characterized by a dull, extremely homogeneous and high-quality appearance.

#### Typical applications

Facades, roofing.



#### Available for these products

Core 304/4301, Core 304L/4307, Supra 316/4401, Supra 316L/4404, Moda 430/4016. Deco Rolled-On is available for all ferritic and austenitic stainless steels. Other grades available on request.

#### Min/max dimensions

Thickness: varies by application  
Width: up to 1500 mm/59 in

Contact us at [outokumpu.com/contacts](https://outokumpu.com/contacts) for more information on the dimensions available in your area.

# One World Trade Center, New York

Deco Laser, a bright-surfaced pattern finish, was developed specifically as cladding material for the landmark One World Trade Center in New York City. The original twin towers had prominent corners, and architects wanted this feature echoed in the new building. To realize this vision, they required a stainless steel finish that would appear very bright from all angles.

Deco Laser is produced with an embossing process in rolling mills. It was developed as an alternative to the Deco Linen finish to offer more brightness for some architectural applications. Two hundred tons of Deco Laser finished cladding was delivered to the One World Trade Center site.



Let our experts help you choose the best surface finish for your application.  
Contact us at [outokumpu.com/contacts](https://outokumpu.com/contacts)

# 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						
<b>Moda</b> Mildly corrosive environments	<b>Core</b> Corrosive environments	<b>Supra</b> Highly corrosive environments	<b>Forta</b> Duplex & other high strength	<b>Ultra</b> Extremely corrosive environments	<b>Dura</b> High hardness	<b>Therma</b> High service temperatures	<b>Prodec</b> Improved machinability	<b>Deco</b> Special surfaces	

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**outokumpu**  
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