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We believe in a world that lasts forever

The world needs and deserves innovations that pass the test of time and are able to be recycled and used again at the end of their lifecycle. Outokumpu stainless steel is durable in the most challenging of conditions delivering ever longer project lifecycles. The recycled content of Outokumpu advanced materials varies between 70% and 90% depending on the grade and Outokumpu stainless steel is also fully recyclable. The properties of Outokumpu advanced materials, also make them an economically sustainable solution.

Our vision of a world that lasts forever not only reflects these properties but also our ongoing commitment to innovation and the development of lasting customer relationships.
Stainless steels add real value to the final product with their aesthetic surface appearances and excellent manufacturing properties. Besides being an aesthetically attractive material for kitchen appliances and catering equipment, stainless steel delivers real functional benefits. Stainless steel resists corrosion by most food and beverages and no flavor or discoloration is imparted to the food and drink.

Stainless steel helps our customers to meet the most demanding hygienic requirements. The smooth stainless surface is robust in daily use, easy to clean, durable, and not sensitive to temperature. Stainless steel is also strong and can be readily formed into a variety of shapes.

Outokumpu offers the complete range of stainless steel grades. From austenitics and ferritics to duplex and martensitics; in a large variety of surface finishes and product forms such as coils, sheets, blanks and discs. The high quality of the mechanical properties and the uniform surface ensure a high productivity at the automatic lines of our customers.

Our Mills supply stainless steel directly for our customers manufacturing high volumes of mass market home appliances when only a few dimensions are needed. Stainless steel with multiple dimensions, smaller production quantities and short delivery times are supplied from our network of Service Centers worldwide.
Product offering

Table 1. Selected stainless steel grades for the major home appliance and catering industry

<table>
<thead>
<tr>
<th>Steel name</th>
<th>EN No.</th>
<th>ASTM</th>
<th>C</th>
<th>Cr</th>
<th>Ni</th>
<th>Other</th>
<th>Rp 0.2 MPa</th>
<th>Rm MPa</th>
<th>A 5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4301</td>
<td>1.4301</td>
<td>304</td>
<td>0.04</td>
<td>18.1</td>
<td>8.1</td>
<td></td>
<td>210</td>
<td>520</td>
<td>45</td>
</tr>
<tr>
<td>4307</td>
<td>1.4307</td>
<td>304L</td>
<td>0.02</td>
<td>18.1</td>
<td>8.1</td>
<td></td>
<td>200</td>
<td>500</td>
<td>45</td>
</tr>
<tr>
<td>4016</td>
<td>1.4016</td>
<td>430</td>
<td>0.05</td>
<td>16.2</td>
<td></td>
<td></td>
<td>320</td>
<td>450</td>
<td>20</td>
</tr>
<tr>
<td>4520</td>
<td>1.4520</td>
<td></td>
<td>0.02</td>
<td>16.2</td>
<td></td>
<td>Ti</td>
<td>200</td>
<td>380</td>
<td>24</td>
</tr>
<tr>
<td>4510</td>
<td>1.4510</td>
<td>439</td>
<td>0.02</td>
<td>17</td>
<td></td>
<td>Ti</td>
<td>240</td>
<td>420</td>
<td>23</td>
</tr>
<tr>
<td>4509</td>
<td>1.4509</td>
<td></td>
<td>0.02</td>
<td>18</td>
<td></td>
<td>Ti, Nb</td>
<td>250</td>
<td>430</td>
<td>18</td>
</tr>
</tbody>
</table>

Other grades for special requirements on request.

Certified products, quality control and documentation
Safety and hygiene are of paramount importance in the Catering and Home Appliances sector. Our advanced production plants not only comply with the strictest national and international standards, but also deliver products with industry-leading tolerance accuracies. Every batch we produce is documented down to the smallest detail.

For more information, please visit steelfinder.outokumpu.com

Typical applications

- Cookers and grills
- Commercial ovens
- Washing machines and dryers
- Dish washers
- Refrigerators and freezers
- Microwave ovens
- Sinks and washbasins
- Work surfaces
Surface Finishes

The most popular surface in this segment is the bright annealed 2R. Beside 2R we offer 2B and a variety of special finishes such as polished, brushed and patterned. GritLine, which is a new rolled look like a polished surface, demonstrates higher corrosion resistance.

Patterned Finishes

Great looks are ensured with a range of patterned finishes for wall panels, refrigerators and similar applications. With patterning we are able to achieve an enhanced combination of design and function. We offer you a large variety of patterned surfaces, each with different gloss and reflection effects. As a standard we emboss on the 2R surface, and by special request on 2B. The most popular designs are Linen, Leather Grain, Micro Linen, Haze, Diamond, Square and Laser. We can also develop individual patterns according to your needs. Patterned decorative finishes are rolled with an imprinted roll on one side, producing a decorative surface with high resistance to wear and scratching.

Coated and fingerprint resistant surfaces

Stainless steel surfaces in hot kitchens are often exposed to the touch of oily hands which can leave the surface looking dirty and unhygienic. Outokumpu can provide you with a fingerprint resistant, easy to clean surface. By applying a microscopically thin clear coat layer, the surface becomes more resistant not only to fingerprints but also to a multitude of other common stains in comparison to uncoated stainless steel. If coated products are desired, we can deliver by co-operating with our partners, the leading companies in clear and colored stainless steel coatings.
Beyond simply material supply

Our Service Centers worldwide work closely with you to deliver tailor-made parts, and a wide range of options for polished and brushed surface finishes.

Materials testing for optimal grade selection
We have extensive experience in testing and recommending stainless steels in many major home appliance and catering environments. A team of highly skilled experts in forming, joining and corrosion provides solutions for demanding applications. Handbooks of stainless steel, welding and corrosion are available at outokumpu.com.

In specific cases, we can also offer testing of different stainless steel grades in your own processes at your premises, supported by testing and evaluation by our specialists in our own corrosion laboratory. These tests, together with our long experience in the catering industry, ensure that the grade you finally choose is the optimal solution.

We study your needs on the spot, delivering professional help not only in material selection but also in planning, logistics advice and adapted service for optimal products, cost-efficient operations, and well-planned deliveries.

We are where you are

All our operations are geared to maintain close contact with our customers and make the process of purchasing stainless steel as simple as possible.

We are the world’s leading producer of stainless steel and also in technical support, research and development. We serve our customers from our main production facilities in Finland, Germany, Sweden, UK, Mexico and USA, supported by operations in some 30 countries around the world. Wherever in the world you may be, we are just around the corner.

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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.

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