

The fine polished look with the qualities of a Rolled-on finish **UGILINE®**

Description

- > UGILINE is a **double-sided** rolled on surface which has the look of a fine 240 grit polish. (Typical Surface Roughness Ra: 0.5 µm / 20 µinch).
- > This finish is available on select ferritic grades from our KARA range <http://www.aperam.com/kara> and on select austenitic grades. (Please refer to our dimensional range).
- > We propose a width range up to 1 500 mm depending on thickness.
- > The surface conforms to the EN 10088 norm 2J.



UGILINE Surface finish

Key strengths

- > Good corrosion resistance superior to brushed and polished finishes (on identical grades).
- > Improved resistance to surface yellowing linked to temperature, superior to brushed and polished finishes.
- > Ease of cleaning.

Applications

- > **Building: cladding, facade, etc.**
- > **Catering:** work surfaces, housing, etc.
- > **Lifts:** cabins, doors, various decorative components, etc.
- > **White Goods:** hoods, oven fascias, refrigerators, work tops, dishwasher and tumble-dryer housing, etc.
- > **Appliance :** Coffee machines, barbecues, etc.
- > **Automotive and HGV vehicle trim :** door and boot sill trims, kick-plates, etc.

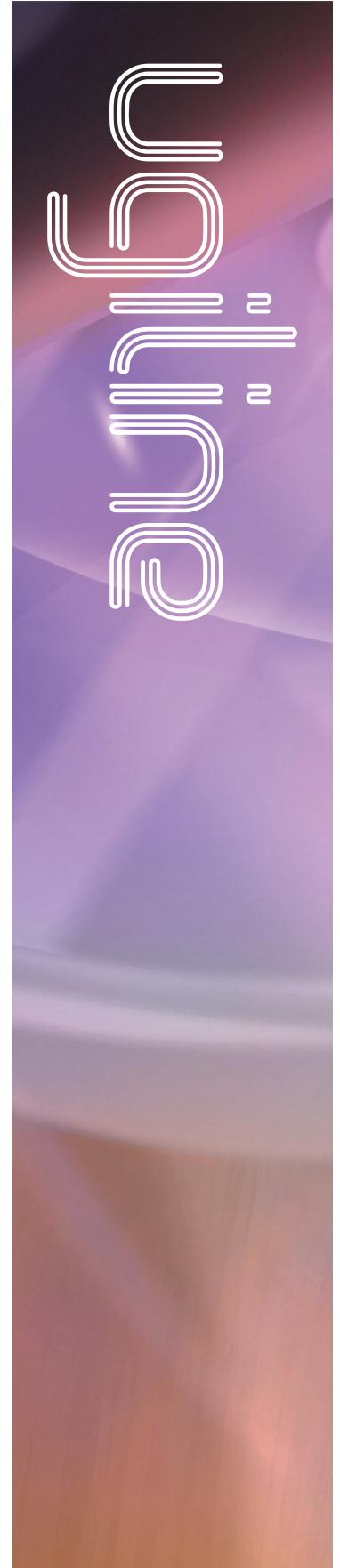
Recommendations

Coatings

- > We recommend the use of a coating to protect the surface during transport, storage and subsequent transforming operations.
- > The choice of coating is based on the requirements (ease of forming, laser cutting, ...). Please do not hesitate to consult us for specific requests.
- > If coating is not required, we suggest paper interleaving in between the coil laps or sheets.

Repairing the surface finish

- > If the need to repair arises, the techniques are similar to those for brushed finishes.



Our manufacturing Process

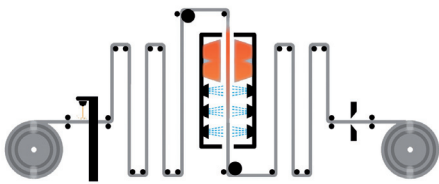
UGILINE is manufactured according to the typical stainless steel manufacturing process up to the rolling operation where the patterning process takes place.

View all of the stainless steel manufacturing process on our website:

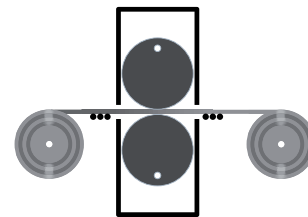
<http://www.aperam.com/stainlesseurope-manufacturing-process>.

- > This engraving operation is conducted with specially prepared cylinders on a bright annealed base (BA).
- > This engraving technique enables both a uniform and reproducible finish for the different grades and dimensions.
- > This production method is certified to ISO 14001 and is particularly clean as there is **no external depositing of dust and no pollution** as the process is dry. Also certified to ISO 9001 and ISO TS 16949:

<http://www.aperam.com/stainlesseurope-system-certificates>



- > The **bright annealing** stage returns the ductility of the metal, retains its brightness, and ensures an optimum passive layer for corrosion resistance.



- > The rolling operation at **skin pass** retains the properties of the passive layer.

Our dimensional range

Grades	Norms			Maximum width in mm	Thicknesses in mm (with standard tolerances)							
	ASTM	UNS	EN		0.4	0.5	0.6	0.7	0.8	1	1.2	1.5
K30⁽²⁾	430	S43000	1.4016	1500	1250	1500	1500	1500	1500	1500	1500	1500
K36*	436	S43600	1.4526		1250	1250	1250	1250	1250	1250	1250	1250
K41	441	S43932	1.4509		1250	1250	1250	1500	1500	1500	1500	1500
K44	444	S44400	1.4521		1250	1250	1250	1250	1500	1500	1500	1500
K45*	445	S44500	1.4621		1250	1250	1250	1250	1250	1250	1250	1250
304⁽¹⁾	304	S30400	1.4301		1250	1250	1250	1500	1500	1500	1500	1500
316L*	316L	S31603	1.4404		1250	1250	1250	1250	1250	1250	1250	1250

* 1500 mm wide in thickness $\geq 0,7$ mm - consult us.

(1) 304D/304ED/304L: consult us

(2) K30ED: consult us

Standard

The UGILINE finish is available in coil, slit coil, sheets and circles.

These grades conform to the American food-safe norms NSF/ANSI 51-2007 as well as those in Europe N°1 935/2004.

Their mechanical properties conform to the following norms EN 10088-2 et ASTM A240.

If you wish to find out more about our grades, please consult our technical data sheets on-line:

<http://www.aperam.com/technical-data-sheets>