Grinding & Brushing

Various high-class grinding and brushing types which can be customized individually. Finishing is done in required roughness depth.

Processeeable materials

Sheets

Stainless steel sheets in the materials:
- **AISI 304** / **AISI 314** / **AISI 316 L** / **AISI 316 Ti** / **AISI 321** / **AISI 430** / **AISI 904 L** / **AISI 926**
- aluminium
- brass
- titanium
- non-ferrous metal

Other materials and material grades on request

Dimensions

**Sheets**

- Longitudinal grinding
  - max. 2000 x 8000 mm
  - Thickness from 0.5 to 15 mm

- Cross grinding
  - max. 2000 x 6000 mm
  - Thickness from 0.5 to 15 mm

- Non-directional polishing
  - max. 2000 x 6000 mm
  - Thickness from 0.5 to 6 mm

- Hairline finish
  - max. 2000 x 6000 mm
  - Thickness from 0.5 to 6 mm

- Special grinding:
  - hot-rolled sheets
  - up to 50 x 3000 x 8000 mm

**Longproducts**

- length:
  - 1000 up to max. 8000 mm

- Thickness:
  - 5 up to 15 mm

- width:
  - 30 up to 100 mm
Processeable products

Sheet surfaces
- flat material
- pattern-milled and textured sheets

Longproducts
- flat steel
- square steel
- hexagonal steel

Grinding and Brushing surface finishing types

**Non-directional polishing**
In non-directional polishing (also called non-directional finish, Angel Hair, rotation polishing, sunray finish, Wirbelfinish), a regular, non-directional polishing pattern is achieved on the metal surface. Using various grit grades, line widths, and rotation varieties we achieve a huge variability in polishing patterns and interesting light refraction effects.

**Hairline finish**
In hairline finishing, long, continuous lines aligned in the same direction are ground onto the metal surface.

**Criss-cross grinding**
In criss-cross-grinding, material is processed twice. For the second run, material is turned by 90°, and is then processed through the equipment. Angles may be varied as well.

**Brushed**
During brushing we achieve a regular matte surface with directional finish. The rougher the grain, the more matte and rough the finished product will be. When using a more fine-grained grit, the finished look becomes only slightly roughened and appears smoother.

*Brushed fleece grain 100 - 500*

**Ground**
Similar to brushing, directional grinding achieves a regular, matte surface look. The rougher the grinding belt, the rougher the surface will be.

Grinding with ground grain 36 - 3000 in your selected roughness depth (Ra, Rz).

**Cross / longitudinal grinding**
In cross / longitudinal grinding, the sheet is inserted into the equipment so as to create continuous lines parallel to the edge. Depending on the grade, lines will become either rather delicate or more pronounced.

Additional grinding types upon request
Standard A-side processed. May be done on both sides.
Easy2Clean
After brushing or grinding we can apply a transparent coating with thickness 1-2 μm to provide long-term surface protection and easy cleaning. Coating is UV and heat resistant. It wears well in the salt spray test and is therefore suitable for both interior and outdoor applications.

Stainless steel colour options
With PVD/TiN coating, stainless steel can be provided with various metal colour options after grinding or brushing. Coating is food safe, non-fading, UV & corrosion resistant. Colour options include: gold, bronze, copper, brass, champagne and black. Additional colours upon request.

Processing of ground and brushed sheets and planar parts.
After grinding and brushing, a laser-compatible film is applied, permitting further processing steps such as lasering, bending or punching w/o damage to the surface.

Applications
yacht construction
lifts
architecture / facade construction
shop/fair construction
furniture industry
metal construction
Semiconductor industry
aerospace industry
medical engineering
specialized products
miscellaneous