SERVICE SHEET · SURFACE FINISHING

Grinding, polishing and electroplated coatings

We cut off gating systems and risers, grind castings manually and at robotic stations, polish them and apply electroplated coatings – copper plating, chrome plating and nickel plating. We process aluminum, cast iron and steel castings.

band saws and circular saws
cutting off gating systems and risers

manual and robotic
rough and finish grinding

copper · chrome · nickel
electroplating and protective coatings

Al · cast iron · steel
materials of processed castings

01 · Scope of service

Cutting off	of gating systems and risers with band saws and circular saws – without damaging the casting structure
Grinding	manual and automatic at robotic grinding and polishing stations; rough and finish
Polishing	in selected cases – gloss or satin finish
Coatings	copper plating, chrome plating, nickel plating, protective coatings, patination
Materials	aluminum castings (after permanent mold, sand and high-pressure die casting), cast iron and steel castings
Tools	grinding discs, grinding wheels (including ceramic), endless belts, diamond cutters and heads
Inspection	of dimensions, roughness and surface quality

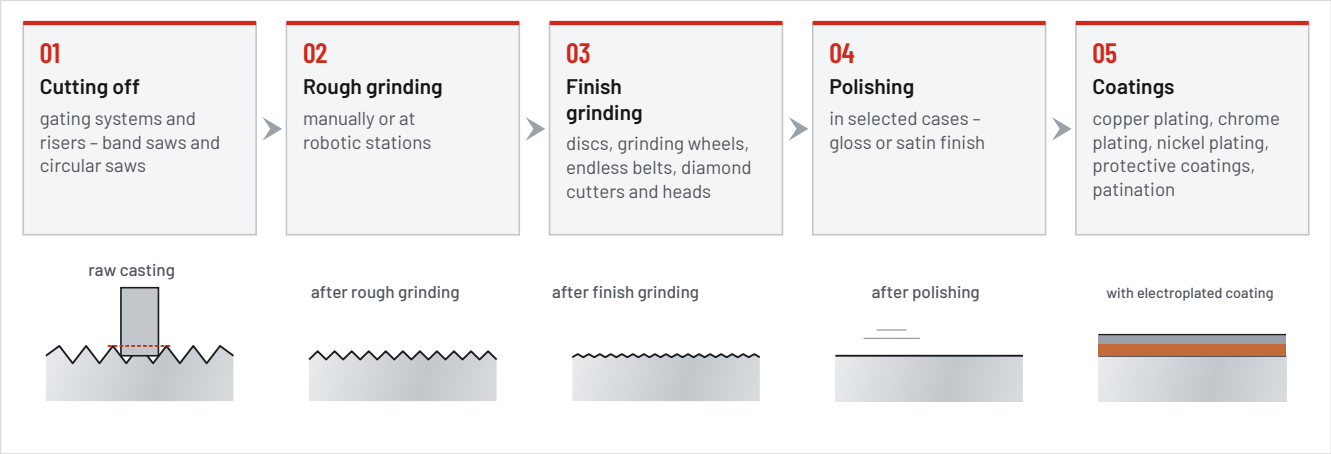

Fig. 1. Successive stages of surface finishing and the surface condition after each of them (schematic profile).

02 · Sequence of operations

We grind before CNC machining – removing gating system residues – or after it, as a finishing step before polishing and powder coating. We select the process parameters, grinding wheel type and sequence of operations to suit the material: grinding aluminum, which is soft and easily clogs the wheel, differs from grinding hard cast iron or steel.

Manual grinding	Automatic (robotic) grinding
precise finishing of hard-to-reach areas and parts with complex geometry; full control over part quality in demanding projects	repeatability and high efficiency in series production; uniform surface finish and elimination of micro-irregularities

03 · Electroplated coatings and decorative castings

Copper, chrome and nickel plating increase the corrosion resistance of castings, improve their mechanical strength and give them a high gloss or satin finish. We apply these coatings in the automotive, machinery, electrical and construction industries, among others. Decorative cast aluminum panels – with a geometric or organic pattern or a relief – are ground, polished, electroplated or patinated, and on request protected with a protective coating.

Quote for grinding and polishing

- 2D drawing in PDF or 3D model in STEP format, or photos of the casting
- casting material and quantity
- required roughness or surface effect: gloss, satin, patina or electroplated coating

In reply, we will send a process proposal and a quote. You can order grinding together with the casting and the remaining stages: CNC machining and powder coating.

Contact and quotation

FOUNDRY
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permanent mold, sand and high-pressure die castings, patterns and molds

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MACHINING
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CNC milling and turning, machining of castings – series and one-off production

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