PROCESS SHEET · POWDER COATING

Powder coating of aluminum castings

We powder coat aluminum castings in the full RAL palette – after degreasing, abrasive blasting or grinding, neutralization, passivation and primer application. The paint is applied electrostatically and cured in an oven. The paint shop operates at the same plant as the foundry and machining.

full RAL palette
shade matched to the project

matte · gloss · satin
also metallic and textured

4 stages
of surface preparation before coating

solvent-free
electrostatic application, oven curing

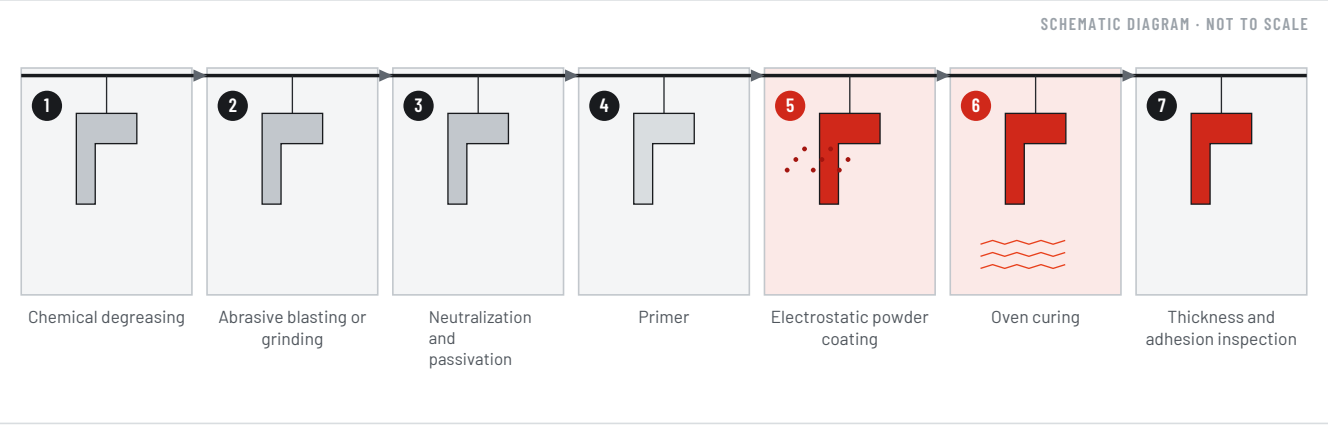

Fig. 1. Process flow on the coating line – from degreasing to coating inspection.

01 · Process parameters

Pretreatment	chemical degreasing; abrasive blasting or grinding; neutralization and passivation; primer
Application	electrostatic; oven curing
Colors and finishes	full RAL palette; matte, gloss, satin, metallic, textured
Powder coatings	powder coatings from renowned global manufacturers, meeting international quality standards (including Qualicoat) and ASTM resistance standards
Coating inspection	layer thickness, adhesion, resistance to mechanical and environmental factors
Castings	aluminum – from high-pressure die casting, permanent mold casting and sand casting; small precision parts and larger components
Dimensions	depend on the specification of the coating line – for non-standard dimensions, please inquire before preparing your design
High-silicon alloys	special coatings and pretreatment procedures for optimal coating adhesion

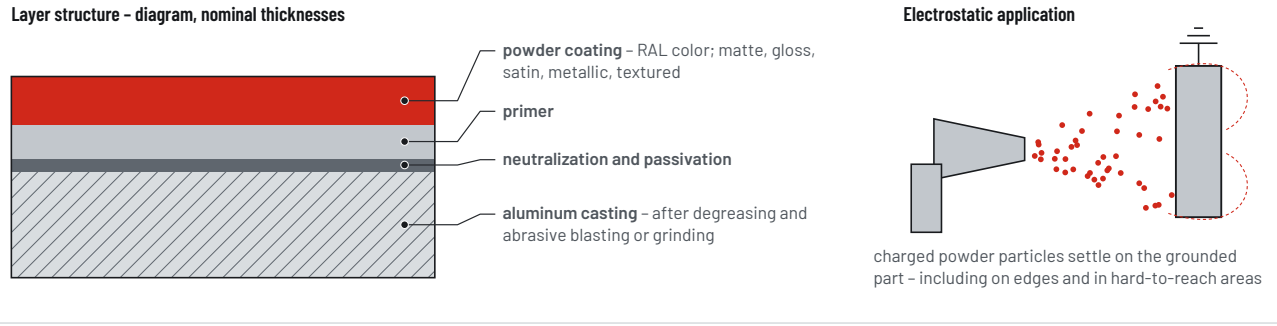

Fig. 2. Coating layer structure and principle of electrostatic application (diagram, nominal layer thicknesses).

02 · Coating properties and requirements for castings

Powder coating	Casting intended for coating
even coating without runs; resistant to corrosion, abrasion, UV radiation and moisture; solvent-free process; good coverage of smooth and complex surfaces, including hard-to-reach areas	surface free of significant porosity, process contamination and excessive irregularities; for high-silicon castings – special coatings and pretreatment

Powder coating quotation

- dimensions and number of castings
- RAL color
- finish: matte, gloss, satin, metallic or textured

You can order coating together with the casting, CNC machining and grinding – a finished, coated part from a single facility in Janikowo near Poznań.

Contact and quotation

FOUNDRY
Mikołaj Kosicki
tel. +48 531 541 171
m.kosicki@adjatech.pl
permanent mold, sand and high-pressure die castings, patterns and molds

OFFICE · MON–FRI 8:30–16:30
Odlewnia Poznań
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requests for quotation, orders and documents

MACHINING
Rafał Wojtkowiak
tel. +48 531 541 003
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CNC milling and turning, machining of castings – series and one-off production

Plant and office: ul. Gnieźnieńska 26, Janikowo, 62-006 Kobylnica (near Poznań) · Registered office: ul. Piotra Ściegiennego 139, 60-304 Poznań

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