## **PAINT TREATMENT**

## The aim of POWDER BLAST is to ensure:

**Sineu Graff,** in tandem with professionals from the surface treatment and paint industry, has developed a surface treatment and finishing process intended for metal parts in steel, cast iron and aluminium.

#### Electrogalvanisation

This is a zinc coating produced by the electrolysis of a solution containing Zn<sup>2</sup>+ ions. This process is used to protect metal parts against corrosion.

#### Powder Blast

This process is installed in our factory and incorporates various applications done in a continuous process in order to guarantee optimum protection and optimum resistance of the paint on urban furniture.

## The various steps of POWDER BLAST:

- Alkaline degreasing, followed by rinsing and meticulous drying
- Systematic powder blasting of all parts, followed by air blowing treatment
- Deposit of 90 µm of anticorrosion powder on an Epoxy base using an automated electrostatic process
- Polymerisation of this first coat of antirust protection by gelification at 140°C
- Deposit of 90 µm of polyester-based finishing powder according to the SINEU GRAFF colour wheel
- Polymerisation by infrared baking of this finishing coat followed by thermal convection at 200°C



Washing, degreasing, drying and blasting of parts



Automated electrostatic application



Oven baking the paint



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## The aim of POWDER BLAST is to ensure:

**Enhanced paint adhesion** by faultless surface preparation, obtained by mechanical stripping of parts, incorporating degreasing immediately followed by blasting, which results in:

An optimum state of cleanliness:

- No dust, calamine, oil or grease, acid residues
- No micro-fissures on welds
- Degassing of parts from foundries

Mechanical adhesion of the paint by obtaining a surface condition of homogenous rugosity for every part.

# A very resistant antirust treatment is applied to the parts by:

The **double coat of powder**, antirust and finishing, applied to all parts, following surface preparation. Enhanced adhesion of the finishing coat thanks to the gelification of the first epoxy-based coat, allowing interpenetration and therefore excellent adhesion of the polyester finishing coat to the epoxy polyester.

#### An excellent finish quality by:

The electrostatic powder application processes, checked by computer, guaranteeing:

- A homogenous paint thickness
- Extremely smooth surfaces

# Performance over time and respect for the environment:

#### An excellent performance over time:

- Tests performed in saline mist (ISO 7253 with surface damage) demonstrate excellent performance of the paint over time (1,000 hours with no notable propagation of corrosion).
- Quick drawing tests (ISO 6272-1) confirm the excellent adhesion of the paint even when seriously distorted.



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#### A treatment that respects the environment:

- Our POWDER BLAST process does not use any products harmful to the environment or to our employees. Treatment is free of acids and heavy metals.

Powder residues are recovered by approved bodies that recycle them to be re-used in other activities.

#### "Coastal treatment":

This surface treatment consists in galvanising the furniture and then applying two coats, the first being a primer, the second a finishing coat. NB: no guarantees are given on this type of treatment.

