



PAINT IMPERFECTIONS

MANUAL



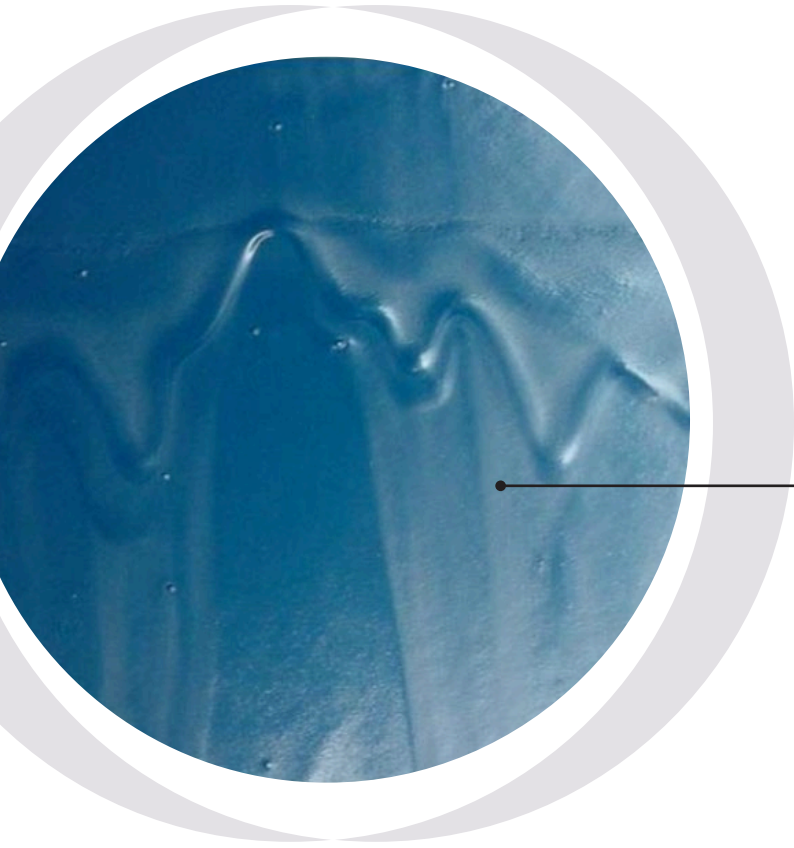
PAINT IMPERFECTIONS

MANUAL

Paint defects are sometimes unavoidable
but manageable and solvable.

There might be several causes, such as incorrect
film thickness, incorrect drying and/or crosslinking
times and temperatures, or suboptimal conditions
of the substrate to be painted.

Here below are listed potential coating defects
with possible suggestions for their resolution
and prevention.



SAGGING

CAUSES:

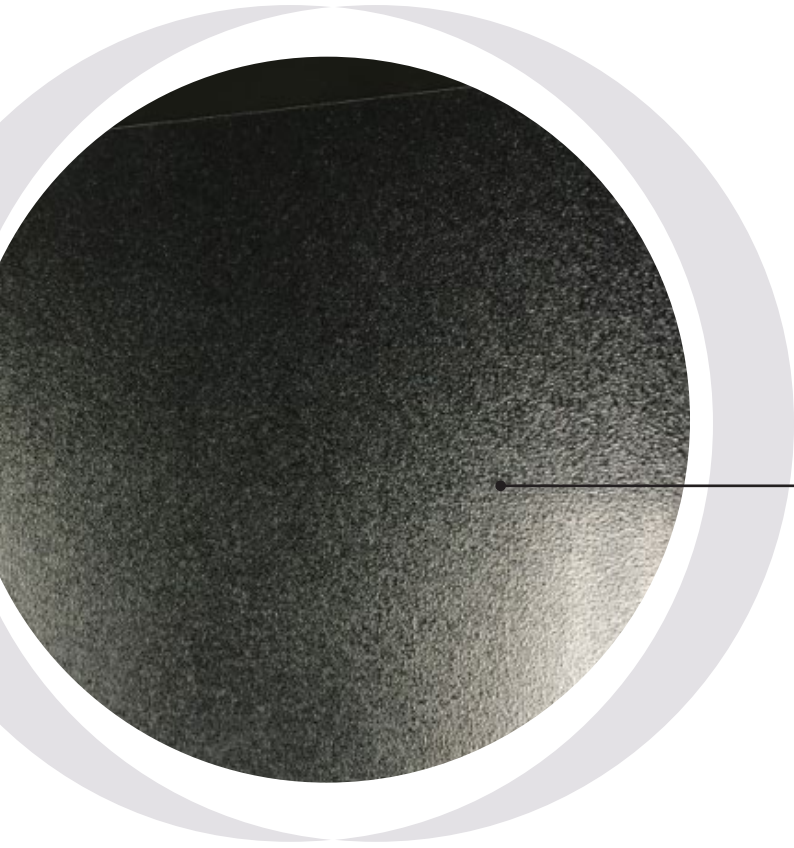
- incorrect application technique: too much thickness applied, insufficient drying time/ temperature, incorrect positioning of the spray gun and incorrect spray pressure
- too low paint viscosity (paint not thick enough)
- too low temperatures of painting environment as well as substrate and paint
- use of inappropriate thinners and thickeners

PREVENTION:

- adopt the application techniques stated in the technical data sheet:
especially check the operation of the spray gun and the spray pressure
- bring substrate and coating temperature to 20°C
- use recommended thinners and thickeners to achieve optimum paint viscosity

RESTORATION:

- remove the coating, clean the substrate and repaint it



DRY SPRAY

CAUSES:

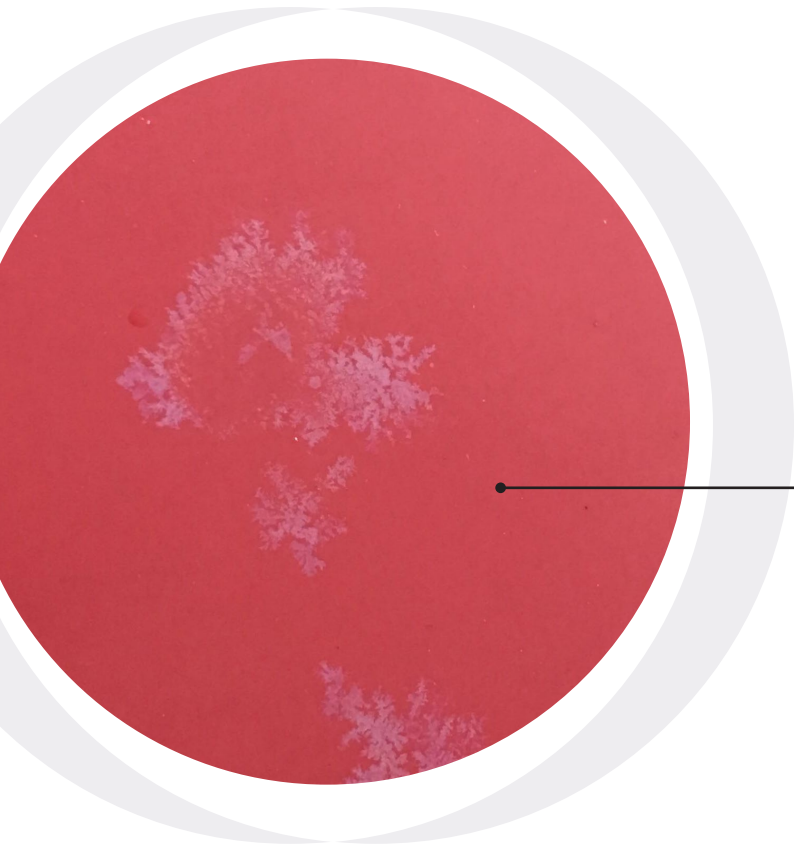
- incorrect application technique
- high air humidity and/or wet surface
- incorrect drying and/or curing times
- use of not appropriate thinner
- incorrect coating thickness applied

PREVENTION:

- adopt application techniques as indicated in the technical data sheet
- use recommended thinners

RESTORATION:

- remove coating, clean the substrate and repaint it



STAINS

CAUSES:

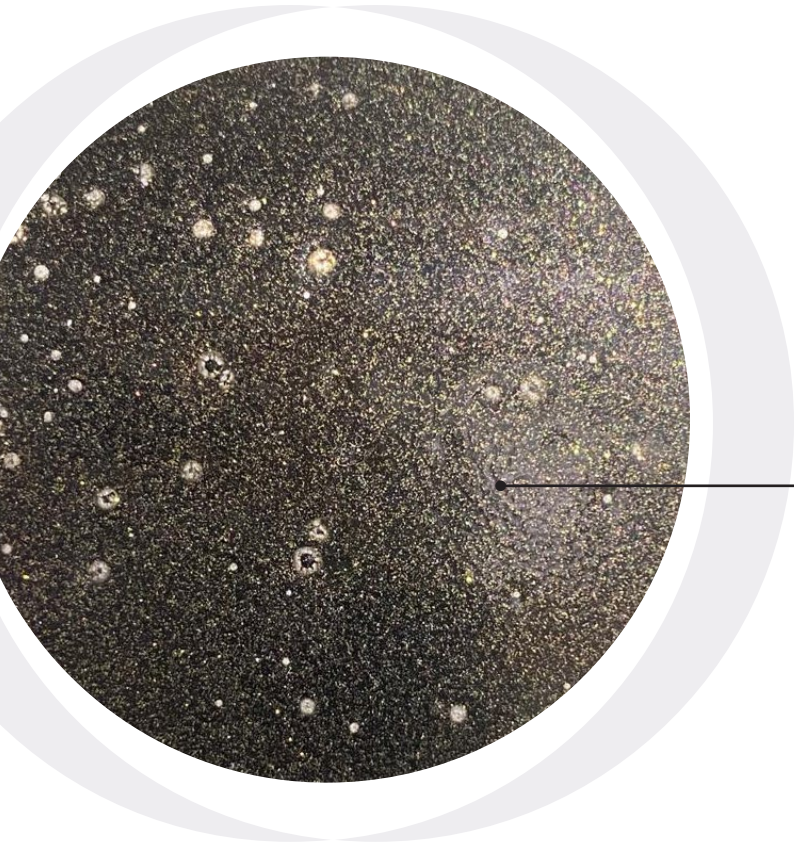
- incorrect application technique, drying times and temperatures
- incorrect spray gun pressure
- use of unsuitable thinners

PREVENTION:

- use application techniques and material preparation as stated in the technical data sheet
- check the spray gun pressure, keeping it parallel to the substrate to be painted
- grant adequate drying times
- use recommended thinners

RESTORATION:

- Remove coating, clean the substrate and repaint it



FISH-EYES

CAUSES:

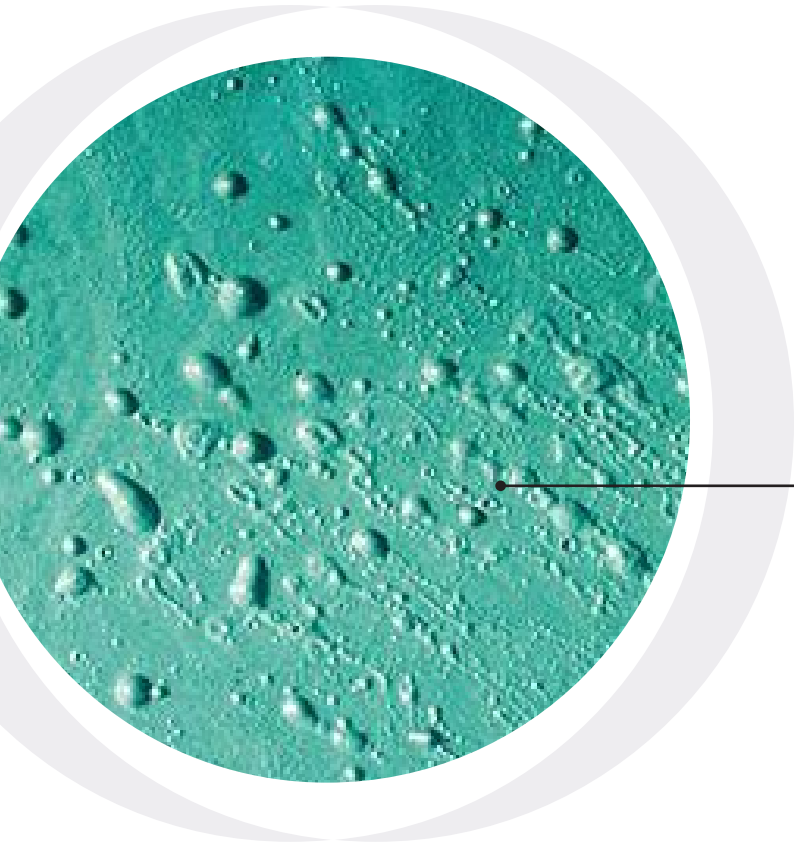
- too high drying temperature
- too short drying time between coats
- too thick primer coat
- unsuitable mixing and incorrect spraying technique
- air in the paint film
- contaminated air or machinery
- inadequate substrate preparation
- use of unsuitable thinners

PREVENTION:

- adopt application techniques and material preparation as stated in the technical data sheet
- check cleanliness of the machineries
- use recommended thinners

RESTORATION:

- remove coating, clean the substrate and repaint it



INTERCOAT ADHESION

CAUSES:

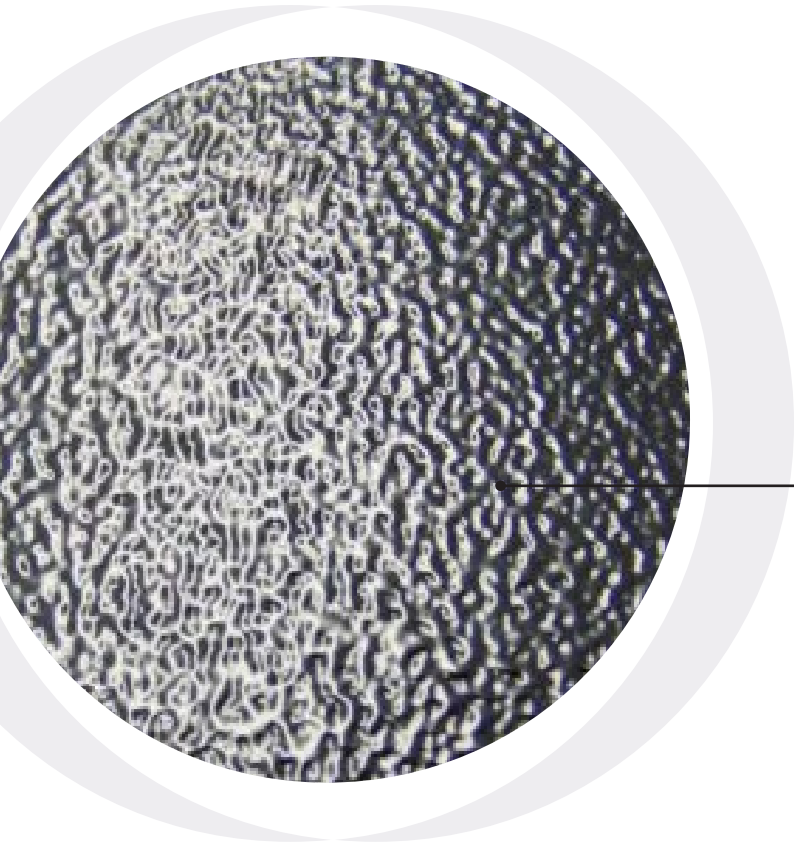
- inadequate cleaning of the surface, presence of humidity or remaining contaminants (e.g. oil)
- application of a too thick layer of paint
- incorrect substrate preparation
- use of non-recommended thinners
- incorrect drying and/or curing temperatures

PREVENTION:

- clean the surfaces thoroughly
- follow the technical data sheet instruction
- use recommended solvents

RESTORATION:

- remove coating, clean the substrate and repaint it



ORANGE PEEL

CAUSES:

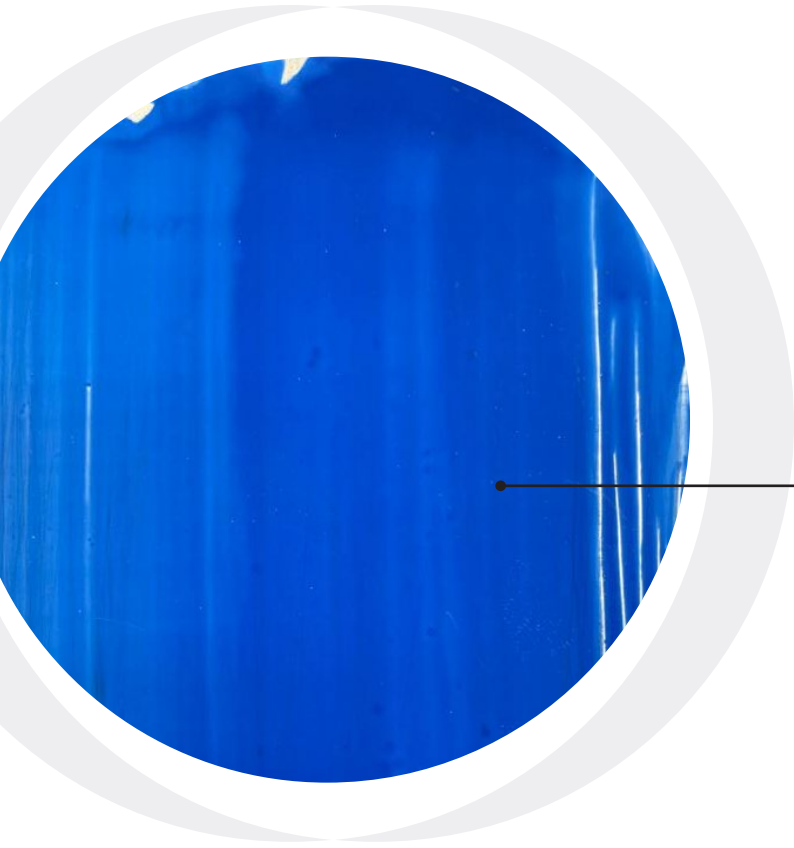
- incorrect paint application: inadequate air pressure, incorrect nozzle setting, spray gun too close to the substrate, too high temperature, inadequate paint viscosity
- not sufficient sanding of the substrate
- application of a too thick/thin layer of paint
- drafts and unsuitable temperature

PREVENTION:

- follow the application techniques stated in the technical data sheets
- avoid too high temperature applications
- apply paint evenly, in thin layers
- use recommended thinners to achieve the correct viscosity of the paint

RESTORATION:

- remove coating, clean the substrate and repaint it



NOT HOMOGENEOUS COLOUR

CAUSES:

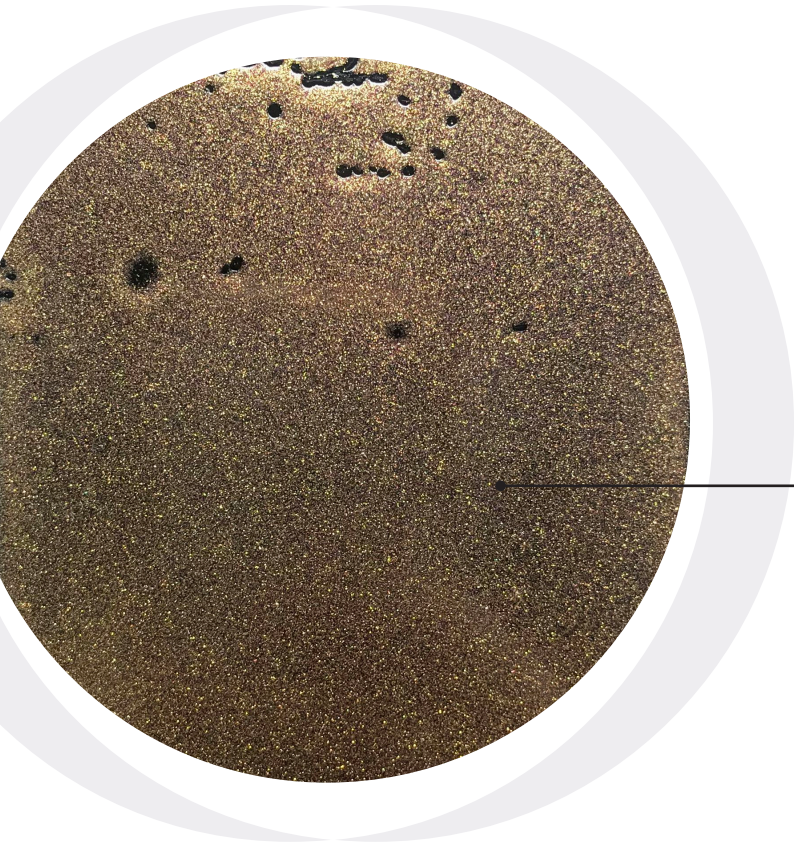
- use of unsuitable thinner
- incorrect paint mixing
- paint exposure to weathering
- incorrect application technique

PREVENTION:

- use recommended thinners
- protect painted surfaces from weathering
- use appropriate painting technique

RESTORATION:

- remove coating, clean the substrate and repaint it



CONTAMINATION

CAUSES:

- presence of extraneous agents or chemicals that, adhering to the paint, are absorbed
- lack of paint filtration

PREVENTION:

- remove extraneous agents, ensuring a clean layer
- Filter the paint before using it
- If ovens or drying rooms are used, make sure they have a well-functioning filtration system

RESTORATION:

- remove coating, clean the substrate and repaint it
- thoroughly clean the paint machinery



MUD CRACKING

CAUSES:

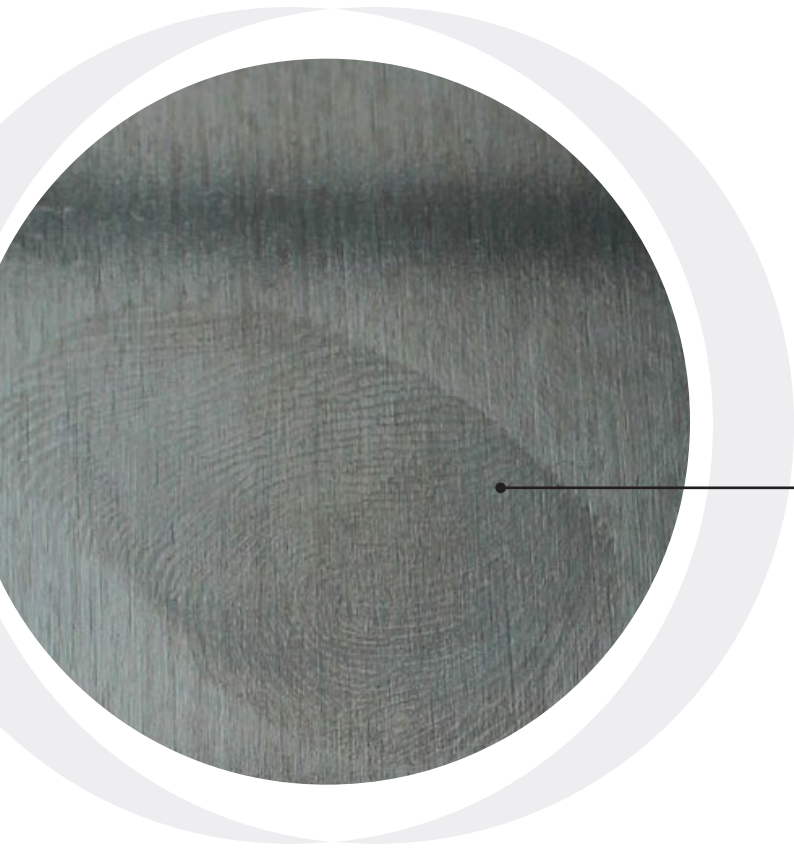
- incorrect substrate pre-treatment
- inadequate mixing of materials
- too thick pain layer
- not sufficient drying time between coats

PREVENTION:

- mix the paint properly
- use a correct application of the paint layers by checking their thickness
- use application techniques and material preparation as stated in the technical data sheet

RESTORATION:

- remove coating, clean the substrate and repaint it



SLOW DRYING

CAUSES:

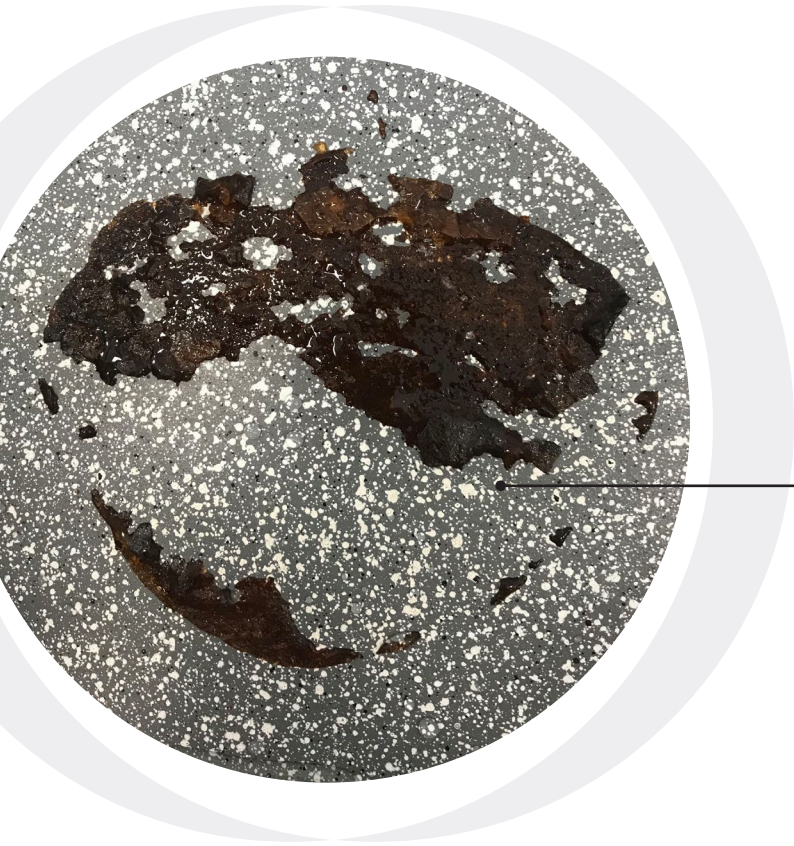
- application of a too thick layer of paint
- adverse weather conditions: cold, humidity, poor air circulation
- incorrect drying time
- use of not recommended or bad quality thinners

PREVENTION:

- apply the correct amount of paint
- ensure adequate warm and ventilated air circulation, avoiding cold and very humid environments
- use recommended thinners

RESTORATION:

- remove coating, clean the substrate and repaint it



POOR NON-STICK PERFORMANCE

CAUSES:

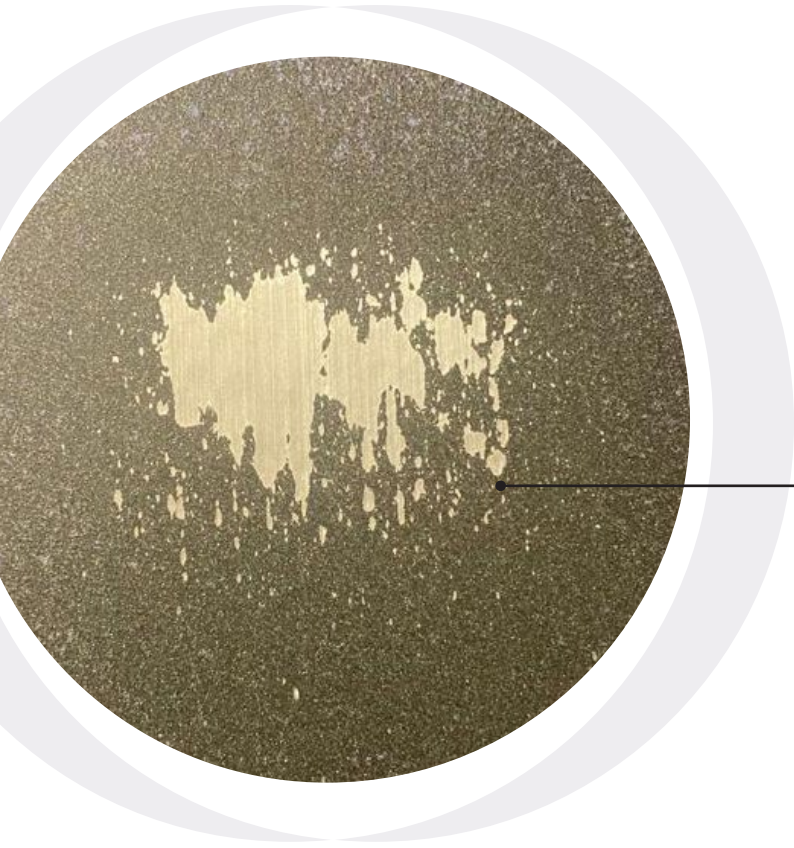
- incorrect flash-off/curing temperatures
- not sufficient amount of topcoat applied
- inadequate product mixing
- excessive dilution

PREVENTION:

- follow the application instructions in the technical data sheet

RESTORATION:

- remove coating, clean the substrate and repaint it



POOR ABRASION RESISTANCE

CAUSES:

- low quantity of paint applied
- incorrect paint mixing
- incorrect flash-off/curing temperatures

PREVENTION:

- follow application instructions on data sheet

RESTORATION:

- remove coating, clean the substrate and repaint it



POOR COVERAGE

CAUSES:

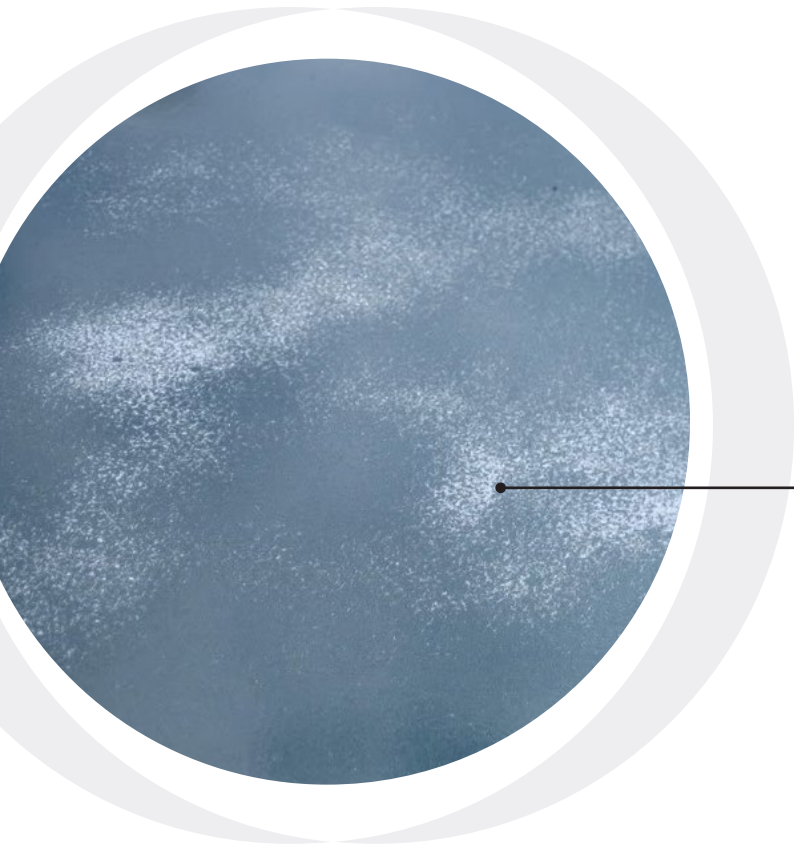
- incorrect application technique
- inadequate mixing of materials
- excessive dilution

PREVENTION:

- apply the paint correctly, making sure that the layer obtained is uniform
- mix the substances thoroughly
- increase paint viscosity

RESTORATION:

- remove coating, clean the substrate and repaint it



HAZE

CAUSES:

- adverse weather conditions
- use of unsuitable thinners
- inadequate air pressure
- forced drying, more than allowed

PREVENZIONE:

- avoid paint application in adverse climatic conditions (humidity, cold)
- use recommended thinners
- make sure the spray booth is adequately climate controlled

RESTORATION:

- remove coating, clean the substrate and repaint it