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for **windows**

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The window frame is seen today as a **design object** that enriches and complements our homes. We often worry mainly about its aesthetic appearance without thinking that **it will have to last a lifetime**.

Materica for Windows, with 40 years of experience in anticorrosive coating, is your **ideal partner to make your windows and doors unique** and ensure their durability.

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Materica for Windows combines application expertise with a wide range of colors and solutions:

- "Materia" line: a sensory journey from the naturalness of stone to the charm of metal.
- "Architectural" line: unique finishes that follow the lines of modern architecture giving character and originality to the design.

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All our cycles follow the strict dictates of the European standard **UNI EN ISO 12944-8-2018.**

The standard deals with the drafting of specifications for the protection of structures from corrosion by protective coating systems.

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Atmospheric corrosion is a process that occurs in a layer of moisture present on the surface of metal. **The layer of moisture can be so thin that it cannot be seen with the naked eye**. The rate of corrosion is increased by factors such as relative humidity, condensation and pollution rate of the atmosphere.

Knowing the location, **we are able to recommend the most suitable protective cycle**. A window placed facing the sea will experience higher stresses than one placed in a rural area.

The classification of environments according to the standard is as follows: **Rural atmosphere-urban atmosphere-industrial atmosphere-aggressive industrial/marine atmosphere**.

Depending on the cycle applied, the standard indicates the life expectancy:
High Durability: >15 years (before structural maintenance)
Medium durability: 5-15 years (before structural maintenance)
Low durability: <5 years (before structural maintenance)

Materica For Windows offers four cycles of corrosion protection:
Cycle C3 Medium: Urban industrial environments, moderate sulfur dioxide pollution (n.2 coats -tot. DFT 120-140.um)
Cycle C4 Medium: Industrial areas and coastal areas with low salinity (n.3 coats -tot. DFT 180 um)
Cycle C4 High: Industrial areas and coastal areas with low salinity (n.3 coats- tot. DFT 240 um)
Cycle C5 High: Industrial areas with high humidity and aggressive atmosphere (no.3 coats- tot.DFT 300 um)

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All our cycles have been tested in order to ensure the appropriate protection of the window frame (salt spray, humidistatic chamber and UV rays).

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Important advantages of liquid coating over powder coating are:

- **Elimination of all problems** related to the creation of bubbles on the thermal cut after curing in the oven. These bubbles subsequently cause exfoliation of the paint with dangerous corrosion triggers;
- **Complete painting** also of the thermal break with the same color as the window frame;
- **Provision of a paint kit** of the same batch used for painting the window frames, so it is possible to touch up small smears due to assembly on site;
- **Greater emphasis on the craftsmanship** of the window frame with the Architectural/Material line that includes manual satin-finishing steps and color shading.

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We perform **several quality control tests** covering the blasting stage and substrate preparation, painting, and post-painting control.

During the sandblasting process we perform:

- **Roughness test** which measures the roughness of the sandblasted surface using special measuring instrument;
- **Bresle test** which measures the amount of dissolved salts present after sandblasting.

Roughness Test

Bresle Test

Bresle Test

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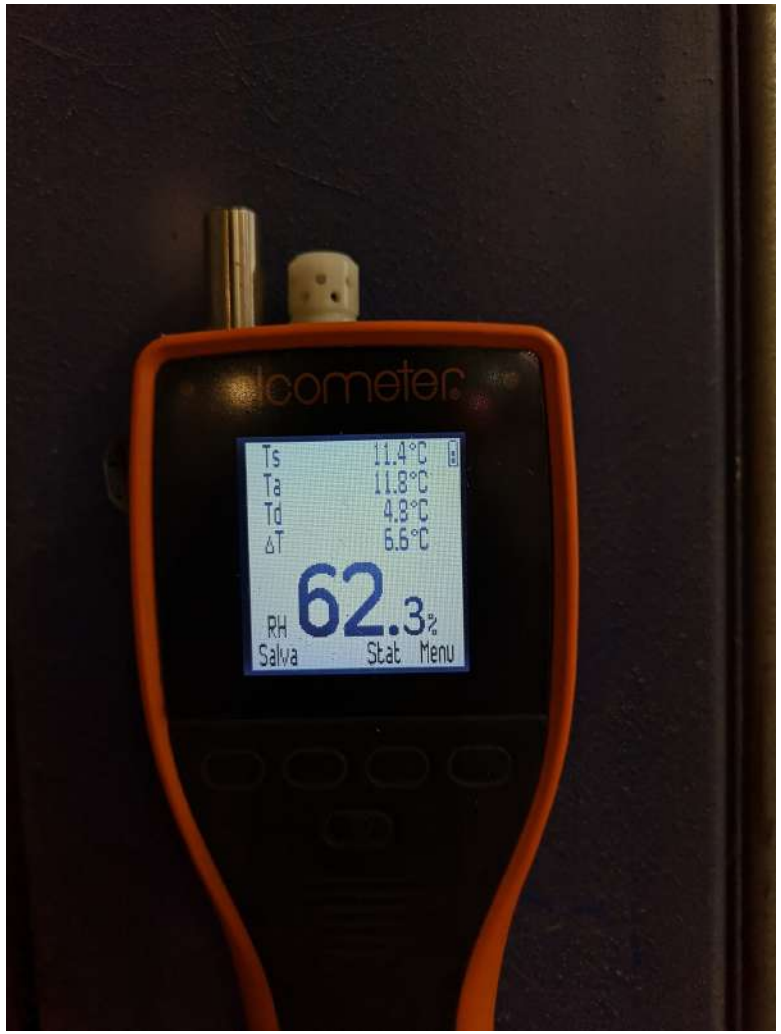
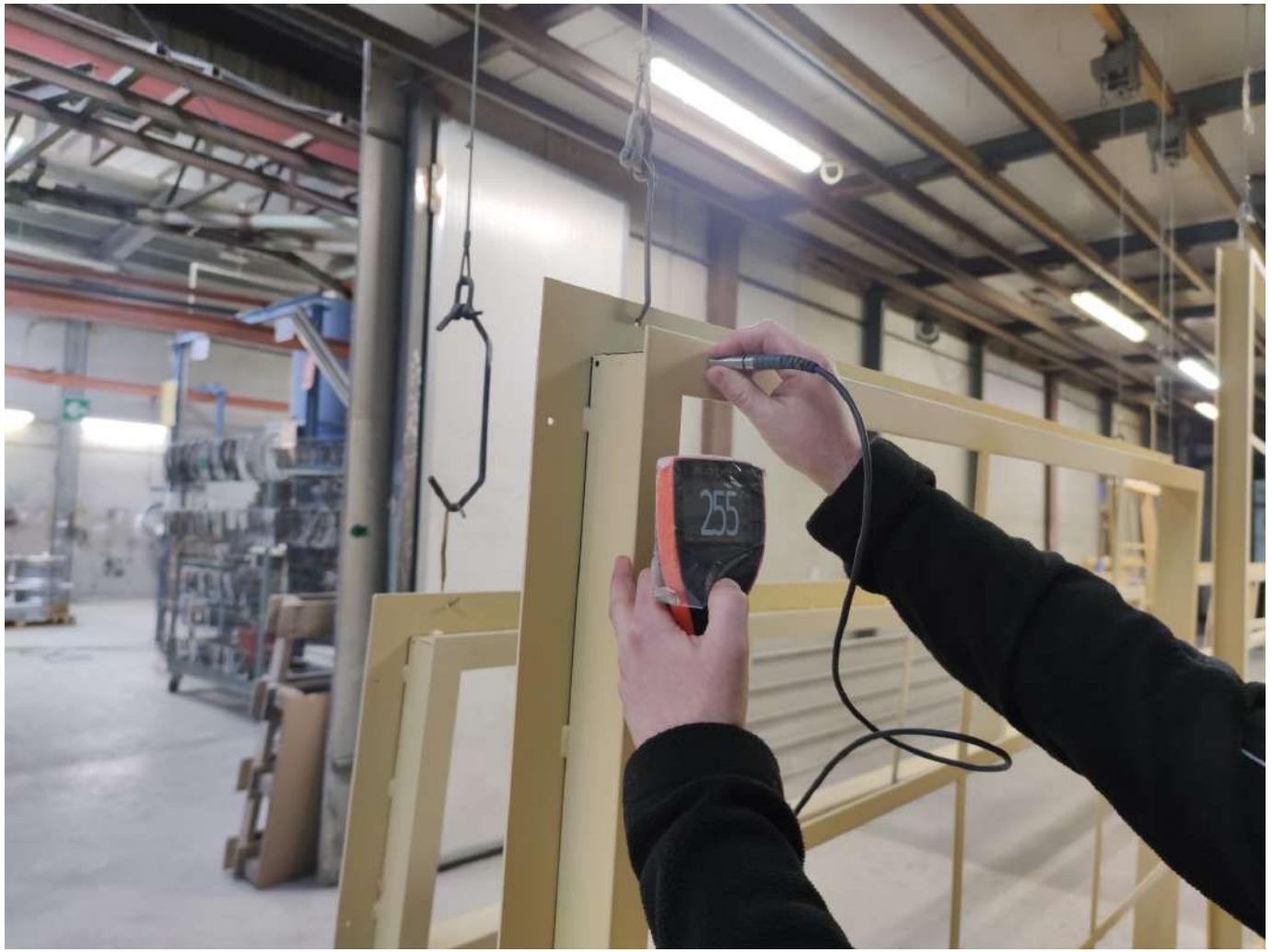
As for the painting phase, with our tests:

- **We check environmental parameters** by digital thermo-hygrometer to check humidity rate, room temperature and dew point;
- **We measure the WFT thickness** of the paint applied during the various coats of primer, intermediate and topcoat. After drying each coat of paint, we measure the dry residual thickness DFT and check it is suitable for the specification corresponding to the relevant ISO standard;
- **We check before packing** each window and door frame whether it conforms to the required finish by visual inspection and check the degree of surface gloss with Glossmeter.



Checking environmental parameters thermo-hygrometer



DFT paint thickness gauge control
digital feeler gauge

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DFT paint thickness gauge control
digital feeler gauge

Gloss control
glossmeter

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Thanks!

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