

Metallic Coating powders

Particular aspects to be considered for application of metallic coating powders

General information

In the coating powder segment, metallic hues based on color systems (e.g. RAL, Scala, etc.) normally are approximated hues for technical reasons.

If different paint systems (e.g. coating powder and wet paint) or coating powders from different manufacturers are to be used in an object or if components from different coating suppliers are used, the required color consistency must be clarified **in advance**.

In the case of metallic coating powders, a clear top coat (using Industrial Polyester Powder 5900, Art. No. 5900.-.0015, for example) may be recommendable to prevent the risk of greying of certain effect pigments. This applies in particular to components coated with metallic coating powders exposed to aggressive climatic conditions (e.g. industrial environment) or come into contact with acidic or alkaline substances. If necessary, please consult your Brillux contact.

Application

Metallic effect

In order to obtain a uniform metallic effect, automatic application is to be preferred over manual application when it comes to applying metallic coating powders. Manual ap-

plication should be chosen for coating small parts only.

Plant parameters

Plant parameters, such as voltage, gun distance, conveying and dosing air which turned out to be successful should be used again for future coating processes with the same metallic coating powder.

Gun parameter

The distance of the gun to the substrate should be 20 to 30 cm, depending on part geometry.

The so-called sine curve should be adjusted ideally, by selecting suitable conveying and lifting speeds, in order to prevent streak and/or cloud formation.

If so-called baffle plates are used, particular care must be taken due to the risk of coating powder depositing.

The guns should be blown out regularly and the baffle plate ventilation set up ideally.

The voltage should not be too high, (approx. 50 to 60 kV), especially if powder spray guns without special metallic equipment are used.

Proper part grounding must be ensured in any case.

Tribo-capability

Tribo-capability of metallic coating powders is not ensured in each case, and is of-

ten limited. Check suitability by carrying out pre-application tests.

Cloud formation

In the case of complex parts, pre-coating is to be favored over after-coating in any case due to cloud formation. It must be considered that the side in the field of vision of objects to be coated on both sides is the last side to be coated.

Object-specific jobs

Object-specific jobs should be performed using material from the same batch under identical application conditions where possible.

Non-bonded coating powders

Bonded coating powders are marked with a "B" in the product name.

In the case of non-bonded coating powders, the following information is particularly important:

In order to avoid variations of the metallic effect, non-bonded metallic coating powders should not be applied using a recovery system. In order to avoid separation of the effect-lending components of the coating powder, we recommend application via fluid containers.

Note

This Technical Info is based on intense development work and many years of practical experience. The contents do not constitute any contractual relationship. The user/buyer is not released from its obligation to test our products for suitability for the intended application. In addition to that, our General Terms and Conditions shall apply.

As soon as a new edition of this Technical Info is issued, the previous specifications will become invalid.

If you need the current version, please consult your Brillux contact.

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