

TI000 – Categorisation of effect powder coatings

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Test The various effect powder coatings have different processing requirements. To help ensure error-free processing, the different processing conditions for effect powder coatings from IGP Pulvertechnik AG are divided into five categories (1-5 stars).

Based on the item-specific allocation to a category, you will receive information on the process requirements and tips on processing. Further details on application parameters and information on reclaiming can be found in the corresponding processing guidelines. The category of your powder coating and the associated processing guidelines are printed on the label of your carton or BigBag.

Fundamentals

The parameters and recovery rates recommended in the IGP processing guidelines are to be understood as guide values. In each application, these must be checked by the coating company on its own systems and adjusted if necessary.

As the type of coating plants and the set plant parameters have a significant influence on the effect shades achieved, it is imperative that a suitability test is carried out on the plant to be used before processing.

In order to keep the proportion and composition of effect mixtures constant, a mixture of fresh and reclaimed powder should be started at the beginning of the coating process. This proportion should be maintained throughout the entire coating process.

The maximum recovery proportion specified in the assigned processing guideline must not be exceeded.

The coating company is responsible for regularly checking outgoing goods for the approved shade.

Note

The darker an effect powder, the higher the effect percentage and the finer the effect additives, the higher the demands on processing.

IGP effect categories

5-STAR*****

- Effect additives highly combined with powder grain (IGP-Effectives® technology)
- 90% Reclaimability of the overspray
- Can be processed easily on all geometric shapes
- Manual and automatic coating possible without effort

4-STAR****

- Effect additives are bonded to the powder grain in the premium bonding process
- As a rule, a recovery rate of max. 30% (according to VR) is possible
- Slight fluctuations in effect content and effect orientation Can be processed on all geometric shapes
- Manual and automatic coating possible

3-STAR***

- Minor deviations in effect agent content are slightly visible
- Changes in the alignment of the effect pigments are faintly visible
- Limited reclaiming possible (according to VR)
- The creation of limit samples is recommended to determine the recovery percentage
- If a coating application is processed on different systems, the creation of a pilot series is recommended
- Avoid manual coating if possible.

2-STAR**

- Slight differences in effect agent content can lead to a different colour impression.
- Changes in the orientation of the effect particles can lead to a different colour impression.
- Reclaiming is possible to a limited extent (according to VR), whereby the creation of limit samples is mandatory to determine the reclaiming proportion.
- If a coating job is processed on different systems, the creation of a pilot series is mandatory.
- Manual coating not recommended

1-STAR*

- Slight differences in effect agent content lead to a different colour impression.
- Changes in the orientation of the effect particles lead to a different colour impression.
- Reclaiming is only possible in individual cases, in which case the creation of limit samples is mandatory to determine the reclaiming percentage.
- The fulfilment of the order on different systems should be avoided.
- Automated coating only

Overview of the IGP effect categories and the process descriptions

The various effect powder coatings have different processing requirements. To help ensure error-free processing, the different processing conditions for effect powder coatings from IGP-Pulvertechnik are divided into five categories (1-5 stars).

Process description	Category 5-stars	Category 4-stars	Category 3-stars	Category 2-stars	Category 1-star
Documentation parameters	Documentation recommended	Documentation recommended	Documentation recommended	Detailed documentation	Detailed documentation
Pilot/pre-series mock-up	Pre-series not necessary	Pre-series not necessary	Pre-series not necessary	Pre-series / mock-up and release process	Pre-series / mock-up and release process
Limit sample	Not necessary	Not necessary	Creating limit samples recommended	Create limit sample	Create limit sample
Various installations	Various systems possible	Various systems possible with little effort	Various installations conditional on testing / adjustment	Various installations conditional after testing / adjustment	No different systems
Reclaiming mode	Reclaiming 90%	Reclaiming acc. to VR	Reclaiming acc. to VR	Reclaiming according to VR	No reclaiming

Coating type	Manual or automatic coating	Manual coating possible with little effort	Avoid manual coating	Fully automatic coating	Fully automatic coating
Product recommendation	-	-	-	-	Switch to bonding product
