

# IGP-RAPID® FOR WOOD AND COMPOSITE MATERIALS

Sustainable low-temperature powder coatings for applying sophisticated surface finishes to heat-sensitive substrates



IGP-RAPID® - THE CONVINCING POWDER COATING SOLUTION

## THE PERFECT SOLUTION FOR INTERIOR AND EXTERIOR USE

A finish that has long been established for metals is now available for use on other materials as well. This powder coating convinces as a durable and sustainable alternative to liquid varnish.



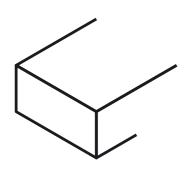
Developers of bathroom, kitchen, and nursery furniture expect a high degree of design and color freedom. The IGP-RAPID® collection comes with different textures and shades in solid-color or with effects that cater to any designer's vision. Even customized colors are possible. The powder coating meets high aesthetic requirements, plus it ensures extremely hard-wearing surfaces with effective moisture protection.

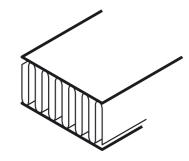
#### **COMPOSITES**

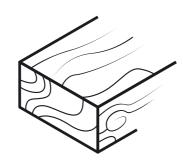
The product's low curing temperatures and short curing times also make it possible to coat plastics, glass fiber reinforced plastics, wood, and composite materials. The powder coating makes the surfaces scratch-resistant and extremely durable, adding the perfect finishing touch to each object.

#### **SOLID WOOD**

Beech, birch, and oak are extremely popular for beautiful, high-end wooden furniture and interior fittings. IGP-RAPID® enhances the esthetics of these surfaces while also protecting them from external stresses. Applying a transparent powder coating really emphasizes the grain in an authentic way, bringing to the fore the most distinctive visual characteristic of natural









Sustainability

Efficiency



freedom



Solvent-free (VOC)



Chemical and mechanical resistance



High adhesion



Resistant to chemical and mechanical stresses



High level of weather resistance outdoors



#### **INTERIOR AND EXTERIOR APPLICATIONS**

IGP-RAPID® is ideal for outdoor objects, providing a weather-resistant finish. Now elements foamed with polyurethane, such as sectional and garage doors, can be coated as a whole without impairing the temperature-sensitive bond between the metal shell and the PU foam.



Moisture-resistant surfaces

#### FEWER PROCESS STEPS AND SHORT CURING TIMES

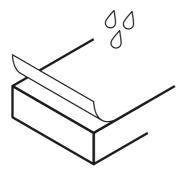
### **HERE'S HOW IT WORKS**

**IGP-RAPID**® convinces with both, single-and two-layer structures. The short curing times and small number of process steps increase efficiency and cut costs.



### SINGLE-COAT STRUCTURE FOR INTERIORS AND EXTERIORS

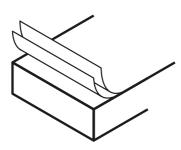
This method combines flexibility with the mechanical and chemical resistance of a conventional two-coat structure, making it the efficient solution for coating large component series.



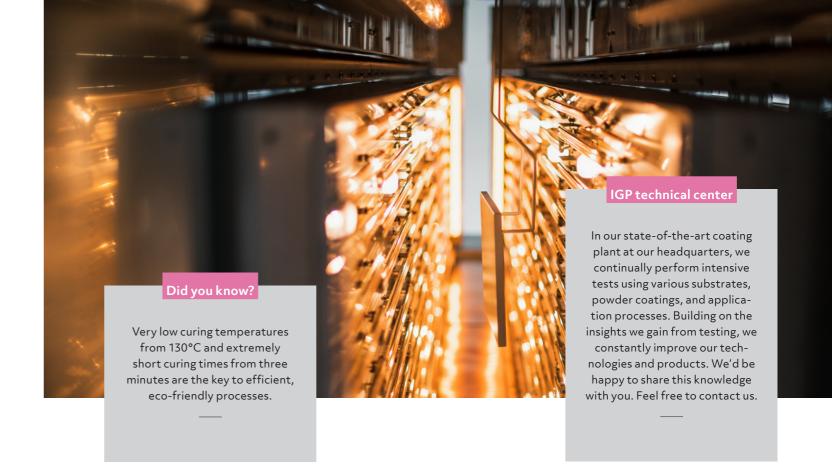


### TWO-COAT STRUCTURE FOR INTERIORS

When it comes to marrying color variety with a perfect surface finish, this method of combining a primer and top coat is ideal. The low cross-linking temperatures allow highest finish quality in an efficient process for highend furniture coating.







#### 1. SUSPENSION

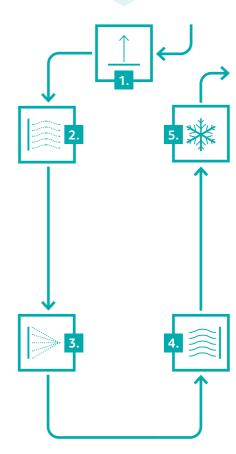
The parts to be coated are suspended on the conveyor and cleaned of dust.

#### 2. PREHEATING

The parts pass through the pre-heating oven for 60–90 seconds, where the surface is heated to 65–85°C to achieve the optimal conductivity. At this stage, the moisture content of the objects is 4.5–6.5%.

#### 3. APPLICATION

The powder particles are electrostatically charged and sprayed onto the parts via coating nozzles. The direction of the powder cloud is controlled by the counter electrode to ensure an even coating on the object.



#### 5. REMOVAL

After a 15 to 20-minute cooling phase, the parts can be quality-checked, removed, and stacked for further processing.

#### 4. CURING

The surfaces are heated to 130–140°C for 3 to 5 minutes so that the powder coating cross-links to form a seamless layer.

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#### FOR HIGH ESTHETIC REQUIREMENTS

## SURFACES AND COLORS

**IGP-RAPID®** powder coatings protect objects made of wood and composite materials. With colors, special effects, and various textures, they provide lasting and distinctive esthetic appeal.



#### HIGH ADHESIVE STRENGTH

The powder coating is sprayed around the entire object in one layer. After application, the curing procedure melts the powder coating. This produces a seamless coating that adheres strongly to the substrate and is extremely robust once it has finished drying through.



#### **DESIGN FREEDOM**

IGP-RAPID® can also be used to coat combinations of different materials. Thanks to all-round seamless coating, the powder coating also allows for sophisticated and complex geometries such as milled angles, rounded corners, and finger holes. That means maximum design freedom.



#### **RESISTANCE**

IGP-RAPID® stands out thanks to its high chemical and mechanical resistance. Powder-coated wooden objects are extremely well protected against hard knocks and moisture. They are easy to clean, lightfast, and weather-resistant. Powder coatings also provide excellent protection for natural wood, while preserving its characteristic esthetics.



#### **SOLVENT-FREE (VOC)**

IGP-RAPID® consists entirely of solid materials and is therefore solvent-free. The components emit no harmful vapors, meaning that the product complies with the ECO-BKP standard.

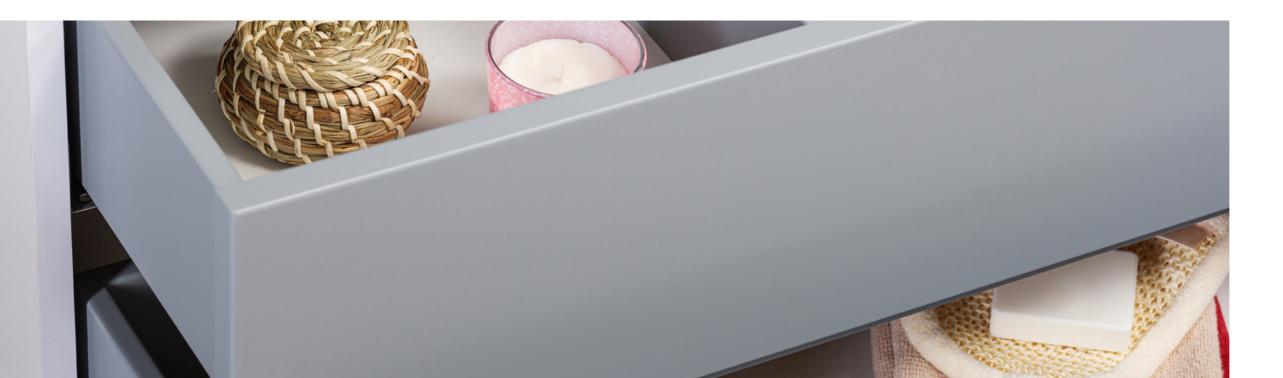


#### **SURFACES**

IGP-RAPID® leaves plenty of scope for surfaces of any look and feel – from deep matt to silk gloss and from fine structure haptics to surfaces in solid colors or with a shimmer effect. No matter which aesthetics are required, powder coatings make surfaces durable and easy to clean.

#### **COLORS**

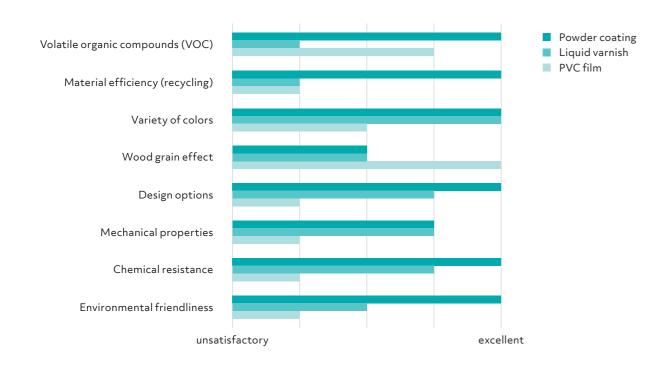
Whether you are looking for the latest on-trend colors, well-established classic shades, cool or warm nuances – our range of standard colors offers a vast amount of choice. However, if the right shade isn't available, IGP is able to produce your own customized color.



COMPARISON OF COATING TECHNOLOGIES

## CONVINCING **PROPERTIES**

IGP-RAPID® is clearly superior to liquid varnish or PVC film coatings.





Coating process based on the example of a matt MDF kitchen front



Pre-sanding IGP-RAPID® and cleaning

All surfaces



### **CHANGEOVER**

A single coating plant can be used to coat different materials. All you need to do is match the powder to the specific material in each case. The changeover takes less than 10 minutes, so rapid color changes are no problem.

Powder coating is extremely efficient because it eliminates the need for multiple sanding and finishing procedures, as well as lengthy drying processes. Thanks to the high degree of automation, the entire process is up to ten times faster than liquid varnishing.





	Pre-sanding and cleaning	IGP-RAPID® primer	Intermediate sanding	IGP-RAPID®		
	All surfaces	All surfaces	All surfaces	All surfaces	-	



Pre-sanding and cleaning	Insulation	Intermediate sanding	Primer	Primer	Intermediate sanding	Top coat	Top coat
All surfaces	Narrow surfaces	All surfaces	Front	Back	All surfaces	Front	Back



#### KIND TO YOUR BUDGET AND THE ENVIRONMENT

# OUTSTANDING **SAVINGS**

Powder coating for surfaces offers a whole raft of advantages. The innovative process is more cost-effective than conventional liquid varnishing, plus it is very eco-friendly.

#### CARBON FOOTPRINT OF VARIOUS COATING SYSTEMS

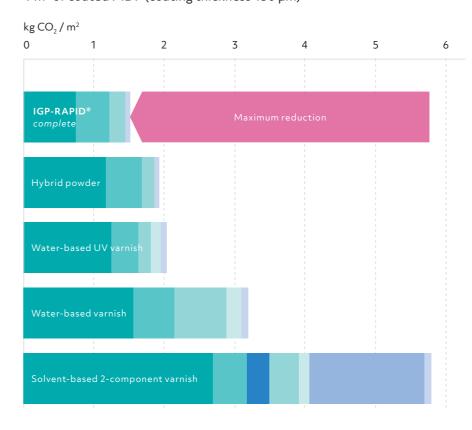
1  $\rm m^2$  of coated MDF (coating thickness 150  $\mu m$ )

Binder (resin)

Production costs

Pigment

Solvent



Process energy

Solvent separationTransport



#### SUSTAINABILITY

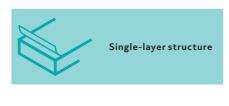
This process does not needlessly waste powder. In fact, 90 percent of the oversprayed powder can be recovered. The shorter coating processes also ensure much lower energy consumption than conventional liquid varnishing. Thanks to seamless all-round coating, edges and surfaces can be coated in a single pass.

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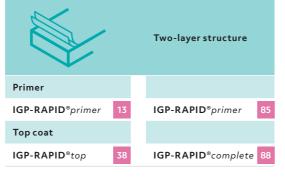
THE RIGHT POWDER COATING FOR EVERY REQUIREMENT

# IGP-RAPID®: THE PRODUCT RANGE

Whether for interior or outdoor use, the **IGP-RAPID®** product range offers the right powder coating for every area of application.



IGP-RAPID°complete 88



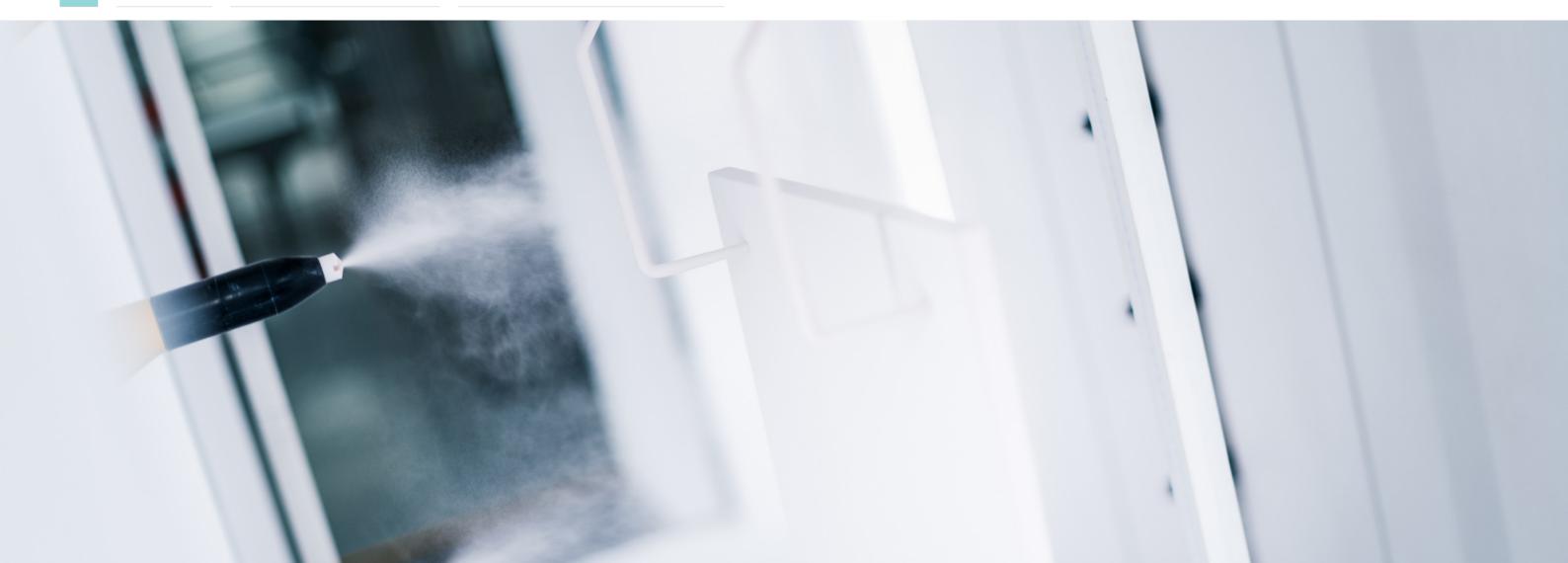


IGP-RAPID®complete 87



"The high scratch resistance, design freedom, and eco-friendliness convinced us to invest in powder coating. With IGP, we have a strong partner at our side."

Serge Eggler, Schreinerei Fust AG Member of the Managing Board



WE ADVISE AND SUPPORT YOU

## THE EASY WAY TO SWITCH TO POWDER COATING

Would you like to powder coat your wood and composite objects for maximum durability and toughness? We are happy to advise and support you – whether you want to purchase your own plant or cooperate with a contract coater.

#### YOUR OWN PLANT

We are happy to support you in purchasing the right powder coating plant for your requirements. You can rely on our extensive experience and that of our selected partners.

### COOPERATION WITH A CONTRACT COATER

You don't necessarily have to buy your own plant when you want to switch to powder coating. There are plenty of contract coaters with a high level of experience in this area. We'd be happy to help you find the ideal contractor for your requirements.



#### Inquire now

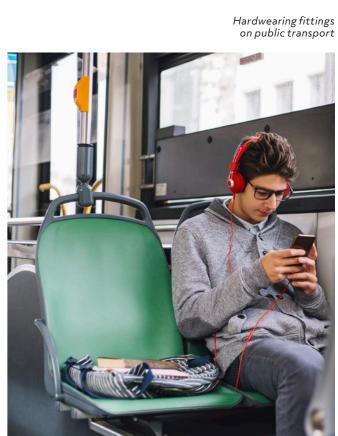
Do you have any questions, would you like to order a sample box, or perhaps you'd simply like to talk to us about your project without any obligation?

Contact us now; just use the QR Code or go to rapid.igp-powder.com.





Moisture-resistant bathroom furniture





Emission-free children's furniture



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