IGP POWDER COATINGS

IGP-HWF*smart* 59

Super durable low-temperature powder coatings for efficient coating processes, reduced energy costs and long-lasting surfaces.





Durability combined with optimized coating processes.

IGP-HWF*smart* 59 sets new standards for modern façade coatings. The quality-certified product line combines super durable performance with efficient low-temperature technology, enabling significantly reduced curing conditions, shorter process times, and noticeably lower energy consumption. At the same time, the system ensures long-lasting façade protection and offers a wide variety of surfaces, colors, and effects.

Your benefits at a glance

+ Process reliability through compliance with international quality standards
+ Long-term preservation of the coated object's value through high color, gloss, and film stability
+ More economical coating processes
+ Reduced energy consumption and lower energy costs
+ Safeguard and enhance coating quality
+ EPD as verified proof of environmental impacts
+ Personal consultation and practical support

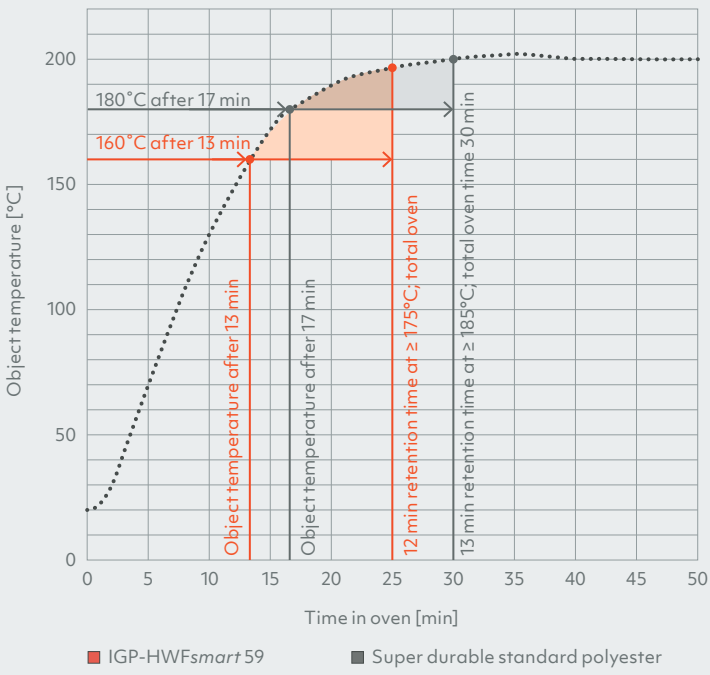
Higher efficiency for more economical processes.

In coating businesses, process parameters determine economic efficiency. Any reduction in oven temperature or retention time has a direct impact on energy consumption, line throughput, and the carbon footprint.

This is exactly where IGP-HWF*smart* 59 comes in: as a highly reactive system that reliably cross-links from an object temperature of 160°C, it offers several advantages over conventional systems.

Increasing efficiency
The cross-linking of IGP-HWF*smart* 59 after 15 minutes at an object temperature of 160°C enables significantly higher process speeds, regardless of the selected curing temperature. This makes it possible to shorten oven throughput times as needed, increasing parts output per unit of time. At the same time, the manufacturing costs are reduced and the carbon footprint per coated component is improved. In addition, the system can be deployed flexibly in response to production demand, enabling optimal use of production capacity and effectively easing bottlenecks.

The example shows time savings of 17% thanks to the use of IGP-HWF*smart*.



Theoretical example using IGP-HWF*smart* 59
Oven temperature set to 200°C. Aluminum profile, thickness 3 mm.

Time in oven for conventional super durable façade coating
- Cross-linking from 15 min at 180°C, in this example, 13 min at Ø ≥185°C
- The minimum object temperature of 180°C is reached after 17 min
- The total oven time, including cross-linking, is 30 minutes

Time in oven IGP-HWF*smart* 59
- Cross-linking from 15 min at 160°C, in this example, 12 min at Ø ≥175°C
- The minimum object temperature of 160°C is reached after 13 min
- The total oven time, including cross-linking, is 25 minutes

Note: Due to the high oven temperature of 200°C, the surface continues to heat up during the cross-linking phase, meaning that film cross-linking of IGP-HWF*smart* 59 is already complete after 12 min.

Increase your processing speed

Make better use of time in oven
- Cover a larger total area in the same time
- Generate economic advantages

Reduce time in oven
- Save time and personnel costs
- Achieve higher profits

Sustainably reduced energy consumption.

Lowering the curing temperature

Reduce the oven temperature
- Save energy costs
- Reduce your carbon footprint

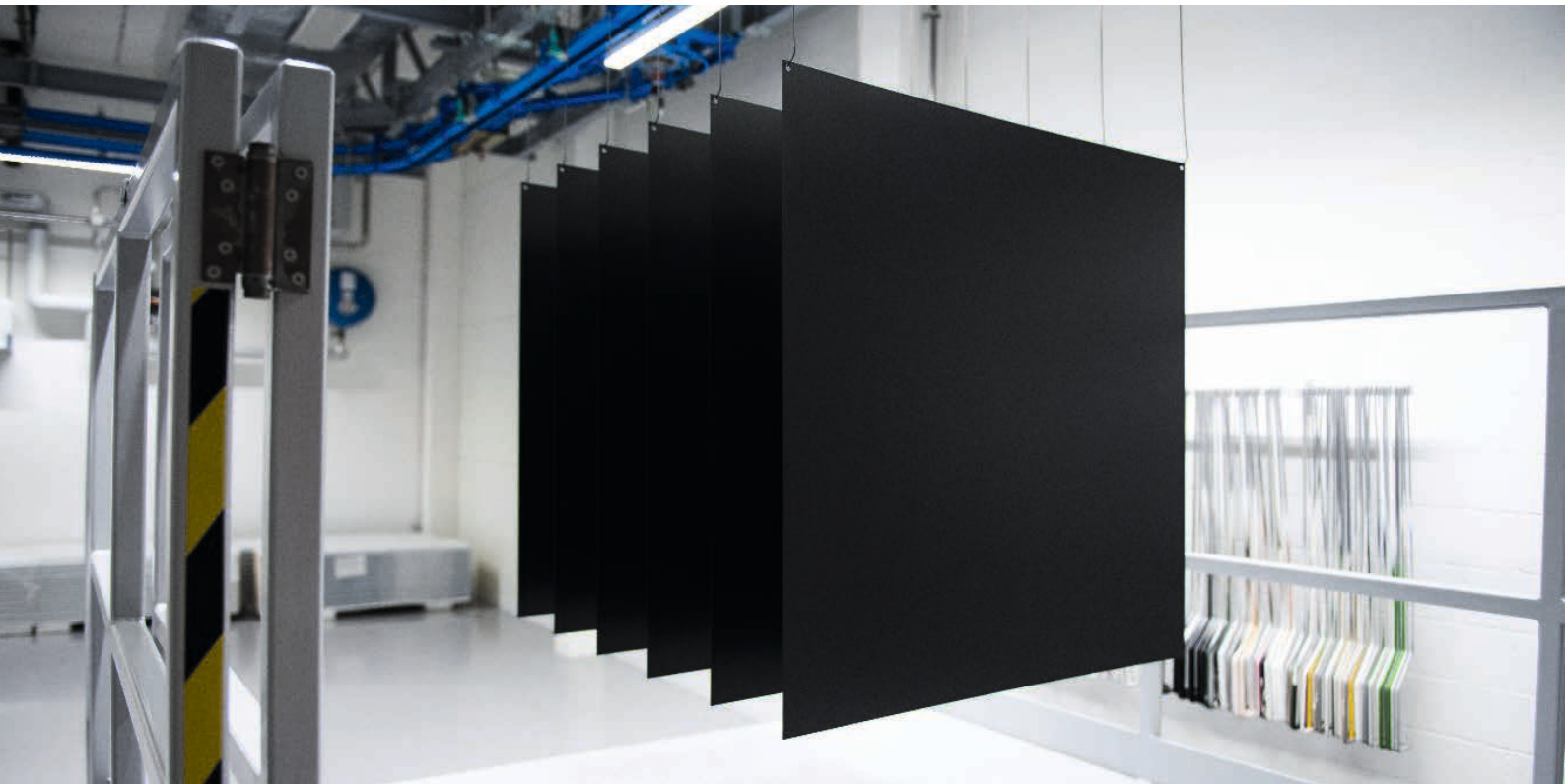
Cure heavy parts rapidly
- Use time in oven efficiently
- Ensure cross-linking

Highly reactive powder coatings enable a direct reduction of the curing temperature without compromising reliable cross-linking of the paint film.

Less energy, full cross-linking
IGP-HWF*smart* 59 is a highly reactive, super durable, and quality-certified powder coating series. Thanks to its high reactivity, the system fully cures even under low curing conditions of 15 minutes at 160°C.

The achievable energy savings by lowering the oven temperature noticeably reduce energy costs and, at the same time, improve the carbon footprint of each coated component.

Lower curing temperatures. Reduced energy consumption. Lower costs and a reduced environmental footprint.

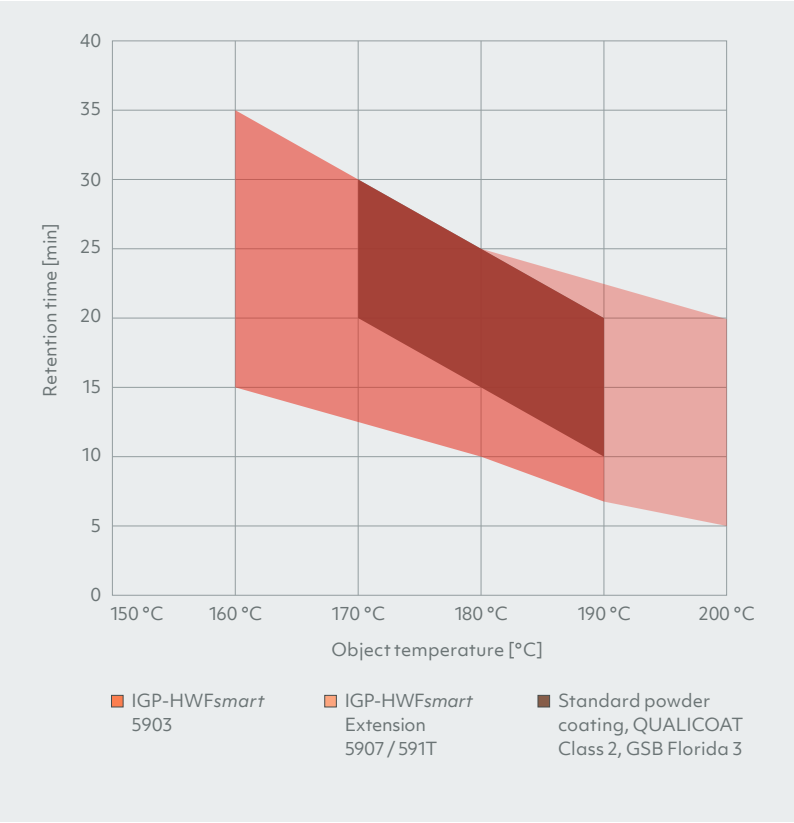


High gloss stability for reliable processes.

An extended curing window offers high color and gloss stability and thus reliable processes.

Stable quality, simplified production planning
IGP-HWF*smart* 59 offers a significantly expanded curing window compared to conventional super durable coating systems. This ensures a uniform appearance even with varying application parameters and different substrates. Additionally, the system features very good over-curing stability. The high process stability was confirmed by the independent IFO Institute.

Thanks to the high level of process reliability, process steps can be simplified and production complexity reduced – a clear advantage for quality and cost-effectiveness.



Extended curing window of IGP-HWF*smart* 59 compared to conventional super durable façade powder coatings (QUALICOAT Class 2, GSB Florida 3)

Achieving great coating quality

Optimize your conveying speed
- Account for inert powder coatings in the process
- Replace your current powder coatings

Different heat-up curves
- Homogeneous results despite different oven graphs
- Reduced planning complexity


Durability begins
with the right quality
of the powder coating.

Surface protection that lives up to its name.

Verified quality standards
The IGP-HWF*smart* 59 series stands for tested, super durable quality and long-term resistance. It is certified in accordance with the standards of the GSB Florida 3 and QUALICOAT Class 2 certification bodies and also meets the extended requirements for steel and galvanized steel (Qualisteelcoat). In addition, it has been tested and independently validated in accordance with the guidelines for super durable architectural façade coatings issued by the American Architectural Manufacturers Association (AAMA) 2604.

Robust surfaces, simplified handling
Between production, transport and assembly, numerous mechanical loads act on coated components. IGP-HWF*smart* 59 features significantly increased scratch resistance and reliably protects the surface against typical handling and assembly stresses. This reduces scrap and rework and ensures consistently high-quality façade surfaces.

Longer cleaning intervals, more efficient façade maintenance
Coated façade surfaces are constantly exposed to abrasive and biological environmental influences. The IGP-DURA®*clean* effect integrated in IGP-HWF*smart* 59 significantly reduces the surface's soiling tendency and makes cleaning easier. This extends the cleaning intervals, reduces chemical usage, and keeps the surface visually stable over the long term without any visible traces of cleaning.

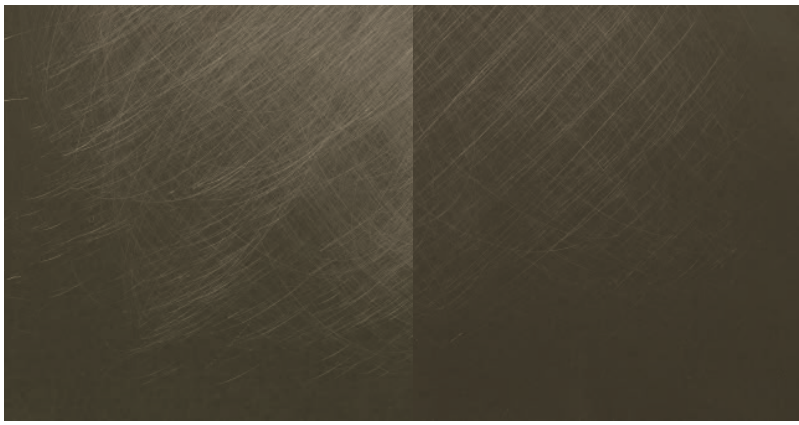
International quality standards

IGP-HWFsmart 59 is certified according to GSB Florida 3 and QUALICOAT Class 2 and is independently validated according to AAMA 2604 (test report).

QUALICOAT Inspired by architecture, trusted by professionals

GSB INTERNATIONAL

AAMA



Conventional super durable façade coating (left) and IGP-HWF*smart* 59 (right)

IGP-HWF*smart* 59 product range at a glance

Product range	Surfaces	Approvals/test reports
IGP-HWF*smart* 5903	Smooth, matte	**On aluminum** QUALICOAT Class 2, GSB Florida 3, and AAMA 2604
IGP-HWF*smart* 5907	Smooth, silk gloss	**On steel/galvanized steel** Qualisteelcoat ST2/HD2, tested with IGP-*KORROPRIMER* 60
IGP-HWF*smart* 591T	Fine texture, deep matte	**Fire performance** test report according to EN 13501-1 Type III Environmental Product Declaration

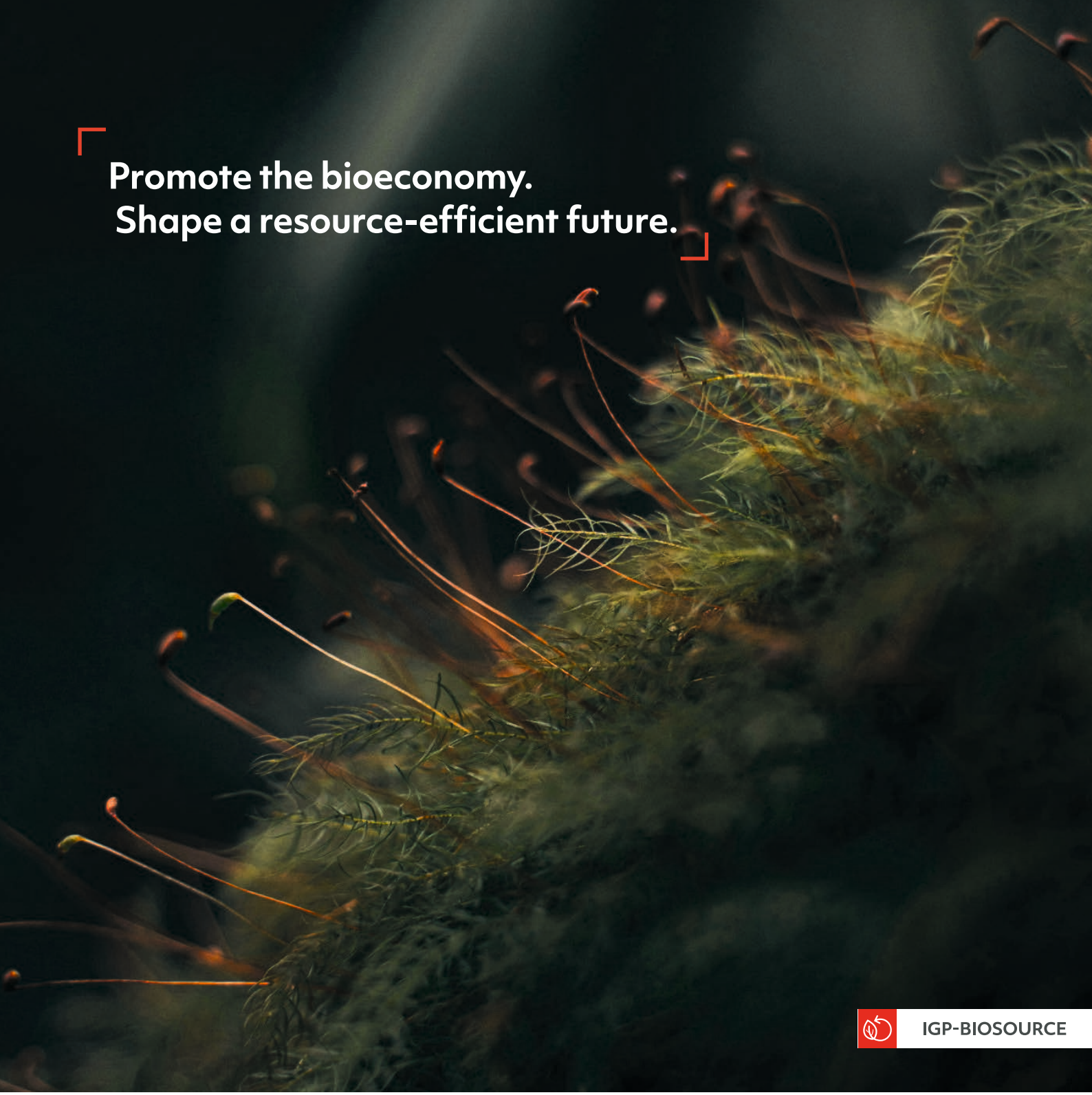
Sustainability starts with choosing the right materials.



The construction sector is undergoing significant change. Sustainability is becoming the decisive quality benchmark. IGP is focused on this development with a system that combines durability, efficiency, and environmental responsibility.

The combination of long-term protection and reduced energy requirements in the application process makes IGP-HWF*smart* 59 a coating system with clear economic and ecological benefits. This results in façade surfaces that comply with current environmental standards and already take future regulatory requirements into account.

Transparency with a system – EPDs
IGP Powder Coatings documents the environmental impact of its architectural product lines through Environmental Product Declarations (EPDs) in accordance with EN 15804+A2. The independently validated declarations provide transparent life-cycle assessment data across the entire product life cycle and can be integrated directly into a building's life-cycle analysis. This is a key building block for objectively comparing coating systems and incorporating them into green building certifications.



Biosource – the next logical step
More energy-efficient processes are already making an important contribution to a lower-emission future. However, a holistic assessment of the powder coating value chain shows that raw materials are the largest source of emissions.

The optional IGP-HWF*smart* 59 Biosource product variant addresses this challenge directly and makes an additional contribution to the sustainable transformation of the construction industry.

IGP-HWF*smart* 59 Biosource is manufactured using ISCC PLUS-certified polyester resin systems for which more than 90 % of the raw materials are attributed to bio-based and bio-circular sources through the mass-balance approach. In combination with low-temperature technology, this creates a system that significantly reduces CO_2 emissions along the entire value chain[1] – for a sustainable transformation based on robust data.

[1] Product carbon footprint analysis (SPHERA)

Tailored customer support. Fast and uncomplicated.



A powder coating only reaches its full potential under optimal process conditions. With individualized consulting, hands-on training, and data-driven process analysis, IGP Powder Coatings supports coating businesses in sustainably increasing efficiency, quality, and profitability.

Technical support from a trusted partner
Process disruptions, color shade deviations, flow problems – IGP technical consultants know the typical challenges in everyday coating operations. Instead of theoretical recommendations, they provide solutions that work on your line: from optimization and pretreatment to customized defect assessment and oven measurement.

Quality assurance through targeted tests
Whether adhesive strength tests, coating layer thickness measurements, or corrosion tests: using objective test methods, IGP technical advisors systematically ensure the quality of your coating. The tests follow internationally recognized standards such as DIN EN ISO or ASTM.

Colors and color processing
Project-specific colors are defined, adapted, and refined individually.

Increase efficiency with ANALYZE*it* Energy
The ANALYZE*it* calculator was developed in close collaboration with customers and partner companies. It helps you precisely analyze your energy costs and process times to ensure targeted optimizations and maximum efficiency in your processes.

Enhanced performance through further training.

Well-trained employees are a strategic success factor for every enterprise. For this reason, IGP offers training and educational programs for its customers. IGP certification programs are available in the area of process reliability.



Customized IGP training courses
Our comprehensive training program is designed to ensure competent, efficient use of high-quality powder coatings.

The subject matter ranges from the basics to specific specialist content and is therefore suitable for professionals at all experience levels. These intensive training courses lay a crucial foundation in terms of process reliability, correct handling of the various IGP products, and meeting our customers' challenging quality requirements.

IGP Certified Coater Program (CCP)

- Super durable systems
- Low-temperature powder coatings (LOW CURE)
- Effect powder coatings
- ANTICORROSIVE PRIMER systems

Overview of IGP certifications
The IGP certification program for coating businesses is designed to maximize process reliability while ensuring that all professionals who process powder coatings share a uniform understanding of the respective processes. These certifications guarantee high quality and offer IGP-certified companies attractive benefits.



The efficient and sustainable powder coating system from IGP.



The information and illustrations in this brochure are valid at the time of printing. IGP Powder Coatings reserves the right to make any necessary changes at any time and without prior notice. IGP innovations are protected by patents.

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to every surface.
IGP FOR SURE.

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