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Super durable low-temperature coatings designed for construction and agricultural machinery, with outstanding corrosion protection.

A powder coating that delivers exactly what it promises.



## Long service life and eco-friendly solutions.

The IGP-HWFindustry 79 series of energy-efficient, super durable powder coatings offer enhanced corrosion protection and superior resistance to chemicals. These properties make them the ideal choice for coating construction and agricultural machinery. Thanks to flexible curing windows, these coatings also enable shorter curing times or lower oven temperatures, offering significant potential for energy savings.

### Your benefits at a glance

- + Optimum corrosion protection on steel substrates
- + High weathering stability
- + Excellent resistance to acids, solvents, and fuels
- + Available in big bags
- + Good storage stability
- + Wide curing window
- + Greater sustainability and efficiency

# Flexibility and energy efficiency through innovative powder coatings.

Explore tailor-made powder coating solutions for your machinery and equipment. IGP's premium coatings ensure exceptional durability and peak performance.

## Reduced energy costs, shorter throughput times

IGP's highly reactive powder coatings are efficient coating solutions for heavy construction machinery and large agricultural vehicles. With curing windows starting at 160 °C, they are both energy-efficient and eco-friendly. These coatings combine long-lasting durability with excellent aesthetics and functionality, and can also withstand frequent cleaning. For manufacturers, this also results in lower energy costs and shorter production cycles.

## Increase efficiency in your coating process

The high reactivity of these powder coatings enables faster processing speeds at any temperature, optimizing oven throughput and boosting efficiency. This means more parts can be coated in less time.

IGP-HWFindustry 79 also enables an immediate temperature reduction compared to current industry-standard systems, while still ensuring reliable cross-linking of the paint film. With fluctuating electricity and gas prices, this creates attractive opportunities to optimize operating costs in response to rapidly changing market conditions. Lower curing temperatures also significantly reduce the coating company's carbon footprint.

Energy-efficient coatings to meet your specific requirements.



## Lower curing temperatures

### Reduce oven temperature

- Save energy costs
- Reduce your carbon footprint

### Cure heavy parts rapidly

- Use oven times cost-effectively
- Ensure cross-linking



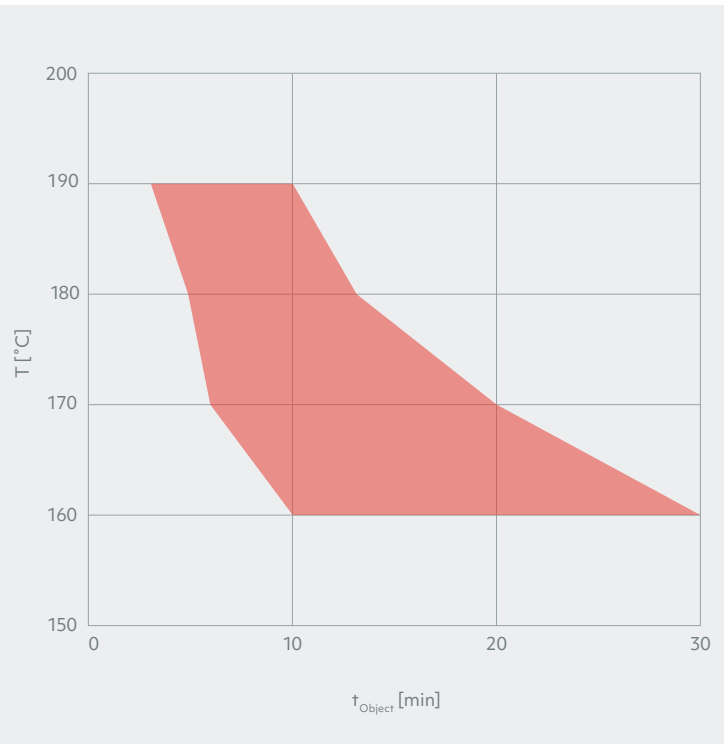
## Increase your processing speed

### Utilize oven times better

- Boost productivity
- Generate economic advantages

### Reduce oven time

- Save time and personnel costs
- Achieve higher profits



Curing window: IGP-HWFindustry 79

The wide curing window allows greater flexibility in the production process.

# Corrosion protection that meets the highest standards.



## Exemplary performance

Optimized pretreatment and coating structures lead to significantly enhanced corrosion protection and an extended service life. The customer trials shown here involved a chromium-free chemical pretreatment, followed by two coats of IGP-HWF *Industry 7909A-A0*. The images show the results of the neutral salt spray tests (NSS) after 504, 960, and 1,440 hours.

IGP powder coating systems set new standards, offering superior corrosion protection.

Corrosion undermines the structural integrity and strength of metals. In the case of steel, exposure to moisture leads to the formation of a thick, porous layer of iron oxide (rust) that spreads continuously. Even aluminum is prone to corrosion, including filiform corrosion. With proper pretreatment and the right coatings, surfaces can be protected, preventing corrosion from taking hold. On coated surfaces, corrosion typically begins at the edges, where the coating is thinner, or in damaged areas, spreading along the boundary between the metal and the coating. This can be prevented through an appropriate combination of pretreatment and powder coating.

Standard pretreatment methods like blasting or iron phosphating already provide good results on steel substrates. However, performance is greatly improved with the addition of zinc phosphating. Adding an extra coating layer, such as a cathodic dip coating (CDC) or a powder primer (e. g., IGP-KORROPRIMER 18), further enhances the protective effect. The specific technical requirements depend on the expected service life of the vehicles and machinery in their respective operating environments. Powder coatings from IGP help to increase the longevity of machines and vehicles. When combined with the right pretreatment, they ensure that the required specifications are not only met but often exceeded.

┌ Sustainable corrosion protection for a long service life. └

**Neutral salt spray test (NSS), 500 h\***

	Infiltration [mm]	Rust penetration [mm]	Degree of rust	Degree of blistering
Steel, blasted (SA 2 ½)	2	1	Ri 0	0 (S0)
Steel, iron phosphated	2	1	Ri 0	0 (S0)
Steel, zinc phosphated	0	0	Ri 0	0 (S0)
CDC	0	0	Ri 0	0 (S0)
IGP-KORROPRIMER	1	1	Ri 0	0 (S0)

**Constant-climate condensation test (CH), 500 h\***

	Cross-cut test [GT]	Degree of rust	Degree of blistering
Steel, blasted (SA 2 ½)	GT 0	Ri 0	0 (S0)
Steel, iron phosphated	GT 0	Ri 0	0 (S0)
Steel, zinc phosphated	GT 0	Ri 0	0 (S0)
CDC	GT 0	Ri 0	0 (S0)
IGP-KORROPRIMER	GT 0	Ri 0	0 (S0)

\*All test results are influenced by the type and quality of the pretreatment and the processing method. The values shown in the table should be considered as guidelines.



# Unmatched strength for your machinery.

## Resistance to chemicals: IGP-HWF<sub>Industry 7909</sub>

Chemical substance	Test duration	7909
Diesel	15 hours	4-5*
Biodiesel	15 hours	5
Brake fluid (DOT 4)	4 hours	3
Hydraulic oil	15 hours	5
Biodegradable hydraulic oil	15 hours	5
Engine oil	15 hours	5
Lubricating oil	15 hours	5
Radiator antifreeze	4 hours	5
Hydrochloric acid (10 %)	15 hours	4-5*
Caustic soda lye (10 %)	15 hours	3-5*

\* Depending on color

- 5 No change
- 4 Optical change
- 3 Slight softening, loss of scratch resistance
- 2 Slight surface swelling (film < 50 % softened)
- 1 Swelling down to the substrate (film > 50 % softened)
- 0 Complete delamination

For machines that need to deliver peak performance in extreme conditions, IGP products are the perfect fit. They deliver superior resistance to weather and chemicals, ensuring long-lasting protection for construction and agricultural machinery.

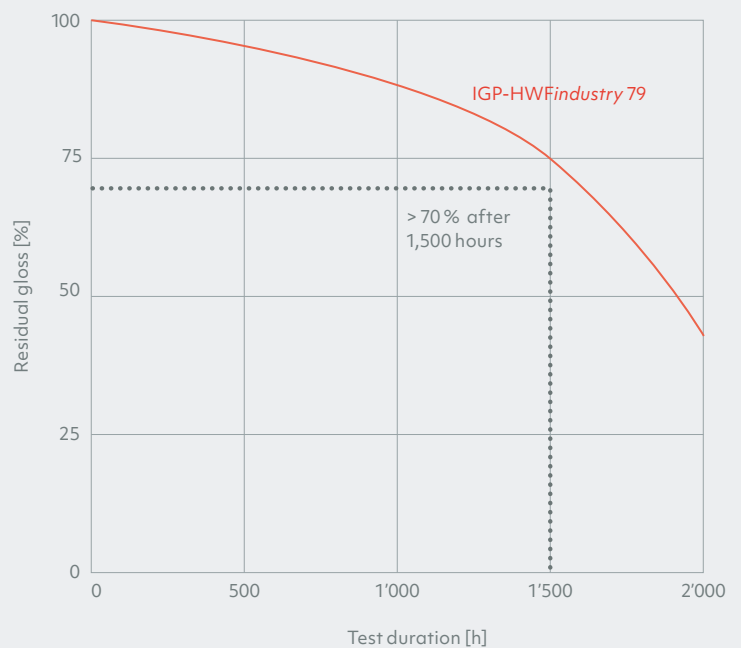
### For rugged machines

IGP powder coatings are characterized by excellent resistance to cleaning agents, construction materials, and fertilizers. They greatly enhance the durability of the underlying material, even under the harsh conditions faced by construction and agricultural machinery, providing long-lasting protection against chemical reactions. As a result, gloss, color, and texture are all preserved for the long term.



The machines, equipment, and vehicles used in the construction and agricultural sectors are designed for punishing work. The steel structures of cranes and other heavy machine components, tractors, plows, concrete mixers, and more, are all exposed to harsh weather conditions and extreme mechanical stress. IGP's range of super durable powder coatings are the right choice for these environments. Their exceptional resistance has been proven in corrosion protection tests, mechanical tests, and weathering tests. The wide variety of surfaces and shades in our range gives you the freedom you need to finish your machinery and equipment in your own unique corporate design.

Accelerated weathering test (xenon lamp) in compliance with DIN EN ISO



**Maximum protection  
and longevity.**

# Long-lasting protection, tailored to your needs.

79

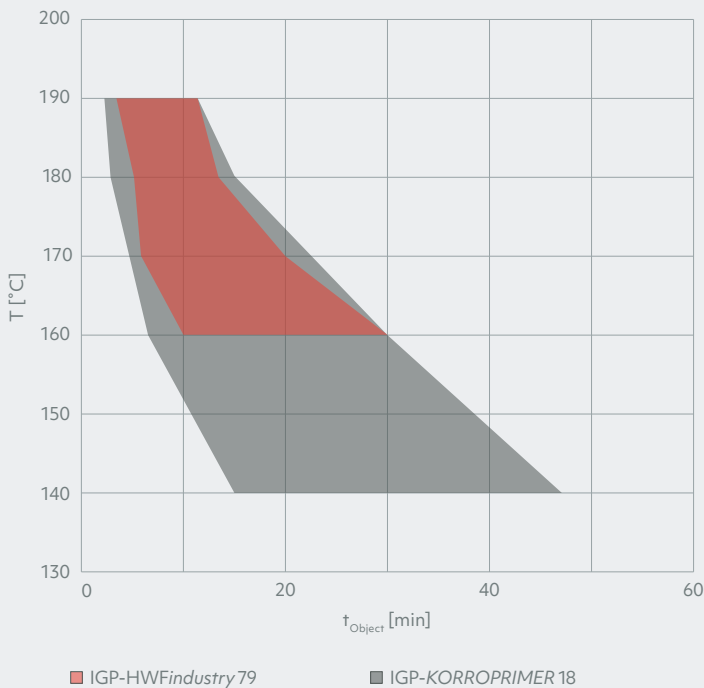
IGP-HWFindustry 79

**Product description**

Super-durable, low-temperature powder coatings, curable at 160 °C or higher, for heavy steel parts and constructions.

**Areas of application**

- 7906** Smooth finish, silk gloss
- 7909** Smooth finish, gloss
- 792S** Coarse structure, silk gloss



**Curing windows for IGP-KORROPRIMER 18 and IGP-HWFindustry 79**

The overlapping curing windows highlight the excellent compatibility of both product series.

Preserve the value of your investments in machinery and equipment – even in harsh construction environments.

IGP-HWFindustry 79 is a highly flexible powder coating designed to meet the diverse demands of major construction and agricultural machinery manufacturers. Its stand-out features include highly adaptable weathering stability as well as an optimum balance between edge coverage and flow. These properties can be precisely tailored to the specific needs of each customer.

For added protection, IGP-HWFindustry 79 can be combined with a powder coating primer to form a two-coat system.

With their overlapping curing windows, IGP-KORROPRIMER 18 and IGP-HWFindustry 79 ensure exceptional flexibility throughout the curing process. The option to pre-gel the primer is especially appealing, as it can help reduce process costs even further.

Customers who use low-temperature powder coatings are also eligible to become a certified IGP Coating Partner with the new Level-2 IGP Low Cure certification. This product series from IGP Powder Coatings is an efficient, adaptable, and quality-focused solution for your production processes.



Unmatched coating efficiency and superior weathering stability.

# Tailored customer support. Fast and uncomplicated.



Together, we'll make your projects a success – this is the IGP Powder Coatings promise. IGP Powder Coatings' consultants are experts in powder coatings and the coating process, providing know-how and helpful recommendations on all aspects of powder coating.

#### **Quality assurance through specific tests**

Our specific tests offer comprehensive quality assurance for your products. Corrosion and weathering tests ensure that the products are durable and can withstand the prevailing environmental influences. Mechanical and chemical tests confirm that your products can withstand demanding operating conditions and various chemical influences without exhibiting any negative effects.

#### **Technical support**

Our support service offers fast response times and a wide range of support options to ensure your products meet the required specifications. Our experts are available to assist you with color matching and training for job coaters.

#### **Increase efficiency with Analyze-It**

This service offers a comprehensive analysis of the energy efficiency of your products. The Analyze-It tool identifies potential savings and allows us to develop customized solutions. Our experts provide support and help you optimize your products for improved efficiency. Customers receive a detailed overview of their energy consumption, enabling them to make sustainable improvements.

**Quality, support, and  
efficiency – our passion  
for your product.**

# Enhanced performance through further training.

Well-trained employees are a strategic success factor for every company. For this reason, IGP Powder Coatings offers education and training for our customers, enabling them to complete certification programs focused on process reliability.

### Customized training from IGP Powder Coatings

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 Powder Coatings products, and meeting our customers' challenging quality requirements.



### Overview of IGP Powder Coatings certifications

The IGP Powder Coatings certification program for coating companies 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 attractive benefits to companies certified by IGP Powder Coatings.



### Your service overview

#### Training

- IGP OnTour, right on your doorstep
- Customized training courses

#### Coating tests

- Corrosion
- Weathering
- Mechanical resistance
- Resistance to chemicals
- In accordance with customer specifications

#### Certificates


- IGP Low Cure

#### Technical support

- Color formulation
- Specification consulting
- Support for job coaters

#### Analyze-It

- Analysis of energy savings



Premium surface  
finishing with long-  
lasting resistance.

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There is an answer  
to every surface.  
**IGP FOR SURE.**



**POWDER  
COATINGS**