

# IGP-DURA®one

IGP's highly reactive low-temperature powder coating system introduces a new dimension to economical and sustainable powder coating.





The IGP-DURA®one powder coating system optimizes the coating process by increasing efficiency and capacity, reducing costs, and saving time. Lower temperatures reduce energy costs; wide curing windows ensure process reliability. The series includes various surface characteristics and a wide range of standard shades for modern coating requirements.

### Your benefits at a glance

- + Increase your process speed
- + Significantly lower your curing temperatures
- + Safeguard and enhance the quality of your coatings
- + Certified quality standards
- + Corrosion protection and many different colors
- + Greater sustainability and efficiency
- + Bespoke service
- + Workshops and training courses

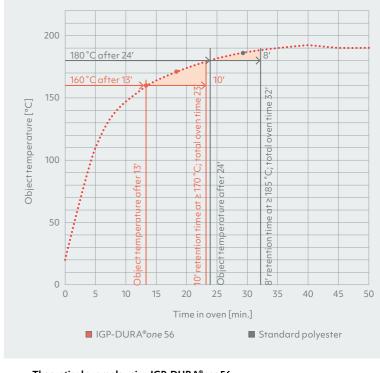
# More efficient processes from start to finish.

Consistent use of highly reactive powder coatings allows an optimized utilization of process resources.

# Increase efficiency in your coating process

Thanks to the highly reactive cross-linking of IGP-DURA®one, processes can be accelerated at any temperature setting. This enables you to optimize your oven throughput times. Ultimately, coating more parts in the same time period means increased coating efficiency. This not only reduces the required manpower, but also helps to cut carbon emissions.

> The example shows a time saving of 30 % from the use of IGP-DURA®one.



# Theoretical example using IGP-DURA® one 56

Initial situation: total oven length 70 m Oven temperature set to 190 °C. Steel object, 4 mm thick.

# Oven time for standard polyester

- Cross-linking from 10' at 180 °C, in this case achieved in 8' at approx, 185 °C
- The minimum object temperature of 180 °C is reached after 24'
- cross-linking is 32'

### IGP-DURA®one 56

- Cross-linking from 15' at 160 °C, in this case achieved in 10' at approx. 170 °C
- The object temperature of 160 °C is reached after 13'
- cross-linking is 23'\*

\* Due to the high oven temperature of 190 °C, the surface continues to heat up during the cross-linking phase. As a result, cross-linking of the IGP-DURA® one 56 film is complete after only 10'.

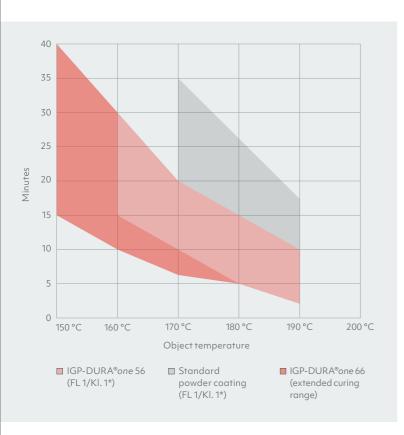


Increase your processing speed

- · Cover a larger total area in the same time
- Generate economic advantages

- Save time and personnel costs
- Achieve higher profits

# Achieve more at lower temperatures.



Curing window – IGP-DURA® one versus standard powder coatings

Thanks to its excellent over-curing stability, IGP-DURA®one also offers a speed-curing option of 3' – 10' at 190 °C.

\* GSB Florida 1 / Qualicoat Class 1

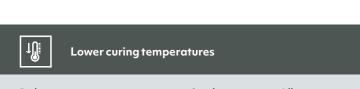
Highly reactive powder coatings allow an immediate reduction in temperatures while ensuring reliable cross-linking of the paint film.

Higher energy efficiency – IGP-DURA® one 56 and 66 IGP-DURA®one 56 is the most energy-efficient and highly reactive quality-certified powder coating series on the market. It impresses not only thanks to low minimum curing temperatures (15' / 160 °C), but also due to its high application efficiency and excellent

IGP-DURA® one 66 crosslinks from 15' at a minimum curing temperature of 150  $^{\circ}$ C and is ideal for industrial applications.

over-curing and gloss stability.

Given current developments in electricity and gas prices, IGP-DURA® one offers attractive opportunities to significantly reduce operating costs. This has a strong and sustainable impact on a company's carbon footprint.



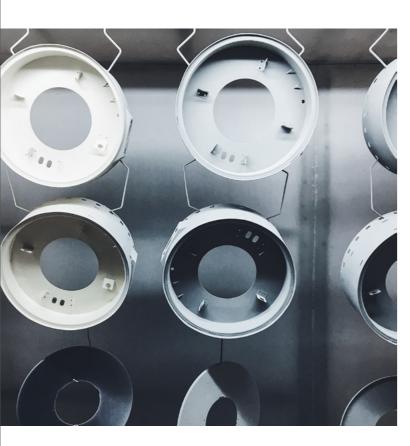
- Save energy costs
- Reduce your carbon footprint

#### Cure heavy parts rapidly

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



# Excellent over-curing stability, even with wide variations in the material thickness.



A wide curing window offers high shade and gloss stability with different application parameters and materials.

# Simplify your production planning

IGP-DURA® one features excellent over-curing stability. Even when materials of different thicknesses pass through the furnace, a stable shade is guaranteed within a beneficial gloss corridor. This optimizes reliability in the coating process while also reducing production complexity. These  $properties\ also\ greatly\ simplify\ production\ planning-an$ economic advantage for coating companies with several powder coating suppliers.



# Achieve excellent coating quality

### Optimize your conveying speed

- · Account for inert powder coatings in the process
- · Replace your current powder

### Different heat-up curves

- · Homogeneous results despite different oven graphs
- · Reduced planning complexity

The over-curing stability of IGP-DURA®one is especially advantageous for workpieces with wide variations in the material thickness.

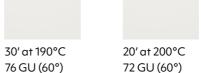
#### **Practical example**

Gloss and color stability with different curing combinations using product group 5607 silk gloss.

#### IGP-Dura®one 56 article no.: 5607A90100A70



15' at 160°C 50' at 170°C 40' at 180°C 74 GU (60°) 77 GU (60°) 72 GU (60°)



GU = Gloss Unit, 60° = angle of measurement

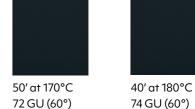
# IGP-Dura®one 56 article no.: 5607A70160A70



15' at 160°C 77 GU (60°)



30' at 190°C 76 GU (60°)



72 GU (60°)



20' at 200°C 72 GU (60°)





# Standards for architecture and industry.

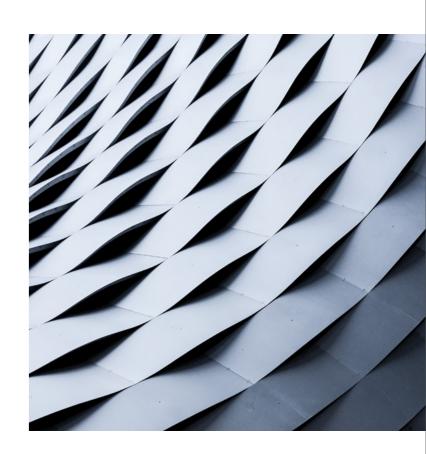
IGP-DURA®one allows surface finishing with high-quality coatings that meet industry standards and promote economic sustainability.

### Excellent gloss stability

IGP-DURA®one 56 stands out for exceptional color and gloss stability. These properties, also in relation to the curing temperatures, were examined and verified by the renowned IFO Institute. This affirmation underscores the reliability and quality of IGP-DURA®one 56.

Surfaces coated with IGP-DURA® one 56 offer improved protection against environmental influences, UV radiation and mechanical stresses, preserving their gloss and aesthetics over a long period of time.

IGP-DURA® one 66 expands the possible surface options to include high gloss, as well as coarse and fine structure characteristics. Both IGP-DURA® one 56 and 66 cover all industrial needs with their surface structures.





 $Note: Additional\ quality, fire\ or\ railway\ certifications\ are\ available\ on\ request.$ 

# Design and reliability – tailored to your requirements.



This high-performance dual solution not only offers outstanding corrosion protection, but also a wide range of colors for finishing architectural and industrial surfaces.

#### Wide variety of colors for surfaces

The IGP-DURA®one 56 product range offers a broad palette of RAL shades and other color systems with matte, silk gloss, and fine structure surface characteristics. The powder coating qualities are certified in accordance with GSB (Florida 1) and Qualicoat (Class 1). IGP-DURA®one 56 is also available as an effect powder coating based on the patented IGP-Effectives® technology.

The IGP-DURA®one 66 product range rounds off the surface characteristics with glossy surfaces as well as fine and coarse structures. Thanks to a large selection of products in stock for both product ranges, we can also guarantee short delivery times.

Wide variety of colors and corrosion protection for architectural and industrial surfaces.

For extended corrosion protection under extremely challenging climatic conditions, we recommend combining IGP-DURA®one with the low-temperature anticorrosive primer IGP-KORROPRIMER.

#### The causes of corrosion

According to the World Corrosion Organization, corrosion costs 3.5% of gross national income annually in industrialized countries. DIN 50900 defines corrosion as "the destruction of metals through chemical or electrochemical reactions with their environment". This environment includes natural factors such as the atmosphere, frequency of precipitation and proximity to rivers or seas.

#### Combat corrosion

The low-temperature anticorrosive epoxy primer IGP-KORROPRIMER 18 can be combined with both IGP-DURA®one 56 and IGP-DURA®one 66 and offers excellent corrosion protection for steel and aluminum. In combination with IGP-DURA®one as a top coat, it significantly enhances the coating's resistance to corrosive attacks and extends the protection time. This approach makes it possible to create cost-effective, eco-friendly surfaces.

56

# IGP-DURA®one 56

#### **Product description**

Wide variety of low-temperature powder coatings for application on metallic components in interior and exterior areas; with curing from 160 °C.

#### Surface characteristics

5603 Smooth finish, matte5607 Smooth finish, silk gloss

**561M** Fine structure, matte

# 66

# IGP-DURA®one 66

#### Product description

Low-temperature powder coatings with curing temperatures from 150 °C for a multitude of interior and exterior applications.

#### Areas of application

6609 Smooth finish, gloss

**661S** Fine structure, silk gloss

**661T** Fine structure, deep matte

6625 Coarse structure, silk gloss

18

# **IGP-**KORROPRIMER **18**

#### Product description

Low-temperature primer (curing conditions from 140 °C) for use on thick-walled substrates. Reduces energy costs and optimizes processing times.

#### Areas of application

**1808** Smooth finish for steel and aluminum

# A new dimension in powder coating.



IGP-DURA®one redefines the future of powder coating technology. This highly reactive powder coating system not only enables first-class surface coatings, but also sets new standards in terms of cost-effectiveness and sustainability.

At a time when sustainability is becoming a necessity, IGP-DURA® one sets a clear benchmark. It is not just a powder coating system; it is a response to the requirements of a responsible industry.

As a harmonious symbiosis of cost-effectiveness and sustainability, it paves the way for future-proof innovations in powder coating technology. When creating the formulas for IGP-DURA®one, we focused on minimizing the use of PFAS additives (PTFE) wherever possible. Furthermore, the powder coatings in the IGP-DURA®one low-temperature powder coating system contain no volatile organic compounds (VOC) or heavy metals.



# Innovative formulas

When developing the environmentally friendly IGP-DURA®one series, we deliberately avoided using harmful PFAS additives (PTFE) to create smooth surfaces – yet this series still outperforms conventional polyester powder coatings in terms of its abrasion properties and scratch resistance.



### **Environmental Product Declaration (EPD)**

Third-party-validated environmental product declarations (EPD) provide the basis for ecological building assessment with their transparent data on the environmental impact of a product. The EPD for IGP-DURA®one 56 is evaluated according to ISO 14025 and EN 15804 and is available for download on both the IGP homepage and the online platform of the Institut Bruen and Limwelt e V (IBLI)





# Tailored Customer Support. Fast and Uncomplicated.



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

#### Application-related consulting

IGP's highly experienced technical advisors are available to support our customers.

#### Colors and color processing

Shades are individually adapted and developed for each project.

#### Testing and investigations

 $IGP's \ services \ range \ from \ corrosion \ and \ weathering \\ tests \ to \ mechanical \ tests \ and \ competitive \ comparisons.$ 

#### Troubleshootin

IGP's technical advisors determine the causes of problems in the powder coating process and identify solutions.

# Defect evaluation, support, and expertise

The IGP service team investigates the root causes of errors and helps to eliminate them.

## **DIN** certified

IGP's DIN-certified coating inspectors provide advice and training for IGP's customers, including on-site support. They are authorized to carry out corrosion protection measures, repair corrosion damage, and certify the results.



# Enhanced performance through further training.

Well-trained employees are a strategic success factor for every company. For this reason, IGP offers education and training for our 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.



**Low Cure Systeme** 



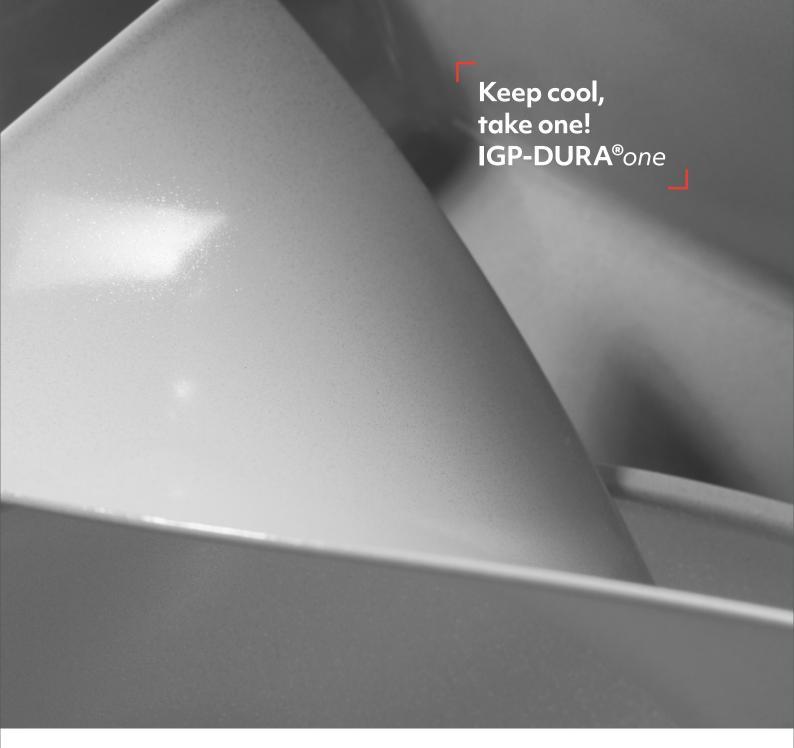






The IGP certification program for coating companies is designed to maximize process reliability while ensuring that all professionals who process powder coatings share a uniform understanding of the respective processes. These certifications guarantee high quality and offer IGP-certified companies attractive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





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