

WEATHER-RESISTANT POWDER PAINT

# Powder-in-powder: coat twice, cure once

- up to 50 percent more capacity thanks to shorter coating processes
- for extremely high protection against corrosion
- resistant to yellowing, gloss-loss and chalking

LEAN PAINTING PROCESSES

In the construction and agricultural machinery industry, efficient coating processes are required. Heavy steel parts weighing up to 40 tonnes need to undergo complex coating processes to ensure that their surfaces are ready for all weather conditions. With Wörwag's powder-in-powder method (PIP), surfaces are rendered durable with two coats of powder paint without the need to bake the primer.

We apply the primer and the final coating, before putting the part in the oven. It's an all-in-one operation, without the usual intermediate moistening or partial curing step.

WEATHER RESISTANT TO THE EDGES

These type of parts need to be durable, which means the coat thickness needs to be reliable especially at the joints where surfaces meet edges. This is ensured by special application techniques that protect such delicate points, for example, by static charging the paint. This approach also enables rapid painting.

THE ENERGY-EFFICIENT COATING SYSTEM

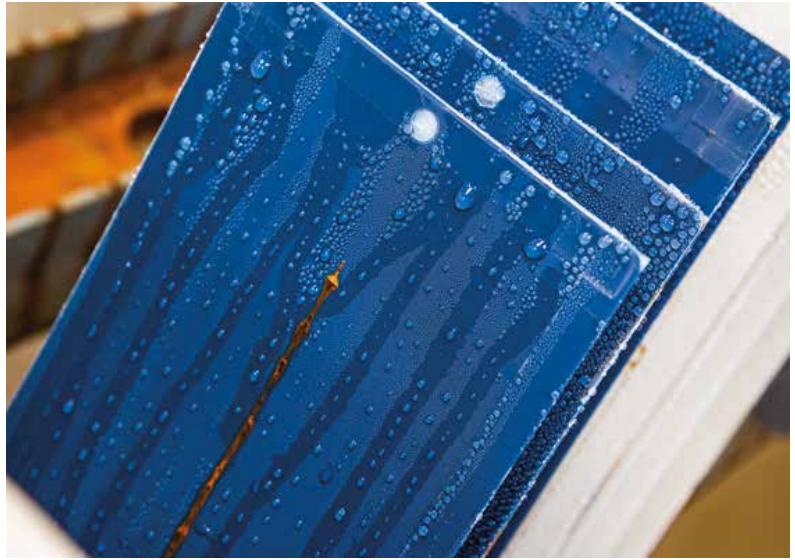
The PIP system is composed of:

- 812 W polyester and epoxy resin primers, glossy, universally applicable
- W 880 top coat, super-durable polyester base, especially weather-resistant, high gloss



## PIP TEST PROCESS AND RESULTS

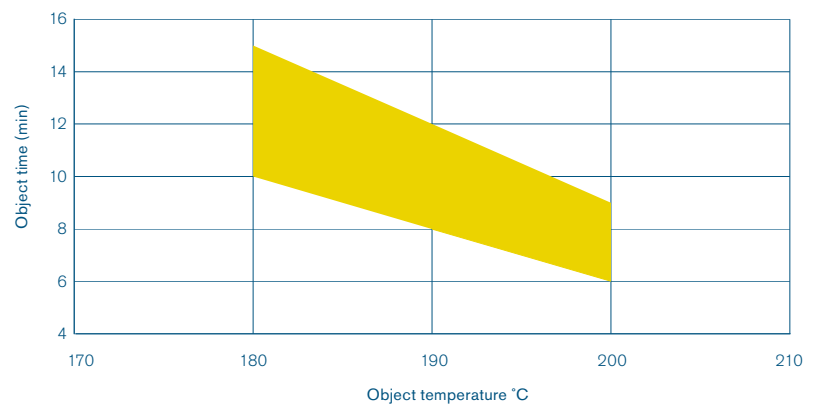
- 1440 h salt spray test per DIN EN ISO 9227 (corresponds to DIN EN ISO 12944, class C5-I/M): Corrosion penetration <4 mm
- 720 hours of condensation water constant climate DIN EN ISO 6270-2 (corresponds to DIN EN ISO 12944, class C5-I/M)
- Cross-cut, before / after two loading: each Gt0 (with adhesive tape removal)
- Degree of blistering per (DIN EN ISO 4628-2: 0), Degree of rusting per DIN EN ISO 4628-3: Ri0
- Xenon 2000 h: Color red, DE deviation <3, gloss loss <15%



## TOP COAT: WÖRALIT-POWDER COATING W 880

Curing conditions (object temperature):

- 10 min at 180 °C, 6-9 min at 200 °C



## WÖRALIT POWDER PRIMER W 812

Curing conditions (temperature):

- 20-25 min at 160 °C
- 10 min at 180 °C
- At 200 °C for 5 min

