

# PreCoat CPF, make your pretreatment line futureproof

## 1-on-1 replacement for traditional iron phosphating and/or cleaning processes

### Improve your process

Futureproof your process. Improve on cleaning performance, corrosion protection and paint adhesion.  
1-on-1 replacement for conventional processes

### Multi-metal

Can be applied on steel, aluminium, galvanized steel and stainless steel

### Save on costs

Savings on energy, maintenance, wastewater, and chemical costs

**In mechanical engineering, furniture industry, agricultural machinery production, and electrical engineering industry, phosphating is still one of the most commonly used pretreatment and cleaning processes for metal surfaces.**

The most common processes are a 1-phase process (degreasing + phosphating in 1 step) and a 3-phase process (a. degreasing + phosphating, b. rinsing, c. DI-rinsing or passivation). An applied phosphate layer ensures paint adhesion and corrosion protection.

In recent years, phosphate and silicate-based systems have come under increasing pressure from an environmental and safety perspective. With the emerging EU Green Deal, it is expected that such traditional processes will face even more pressure.

These traditional iron phosphating and cleaning processes are commonly applied at high temperatures of around 50 °C. Another significant drawback for these processes is the high maintenance costs due to sludge formation in baths.

With PreCoat CPF, all these disadvantages are eliminated, thereby enabling a significant step forward towards a future-proof system. PreCoat CPF is a chromate-, phosphate-, and silicate-free pretreatment that can directly replace traditional phosphating and cleaning pro-

cesses. Applicable in both spray and immersion lines as well as washing machines, the product degreases and applies a conversion/passivation layer in one step.

PreCoat CPF provides excellent paint adhesion for both powder coating and wet paint processes. PreCoat CPF can be applied at a low temperature (15-30 °C) compared to traditional iron phosphating processes (50 °C). Additionally, the product is multi-metal compatible. Besides steel and aluminum, galvanized steel and stainless steel can also be treated.

The result is a more sustainable and futureproof process while maintaining high quality and significantly reducing the impact on human health and the environment. Many customers who have adopted this technology report reduced rejection rates, resulting in additional cost savings.

"1-on-1 replacement for traditional iron phosphating and cleaning processes"

-  Sustainable & future-proof
-  Cost saving
-  Work at lower temperatures  
(15-35°C)
-  Sludge nihil, less maintenance
-  Improve overall quality

## PreCoat CPF

Free of chromates, phosphates and silicates

Traditional  
phosphating process

Corrosion protection	+	+/-
Paint adhesion	+	+
Cleaning	+	+
Temperature	15° - 35°	35° - 60°
Multi-metal	+	-
Sludge formation	nihil	much
Waste disposal	nihil	much
Environment	+	-
Sustainable	+	-

# "Make your process futureproof with AD Chemicals"

## PreCoat CPF

### Key features

- **Operating at low temperatures:** 15- 35 °C
- **Multi-metal compatibility:** suitable for steel, aluminum, galvanized steel, & stainless steel
- **Application methods:** immersion, spray, or washing machine
- **Improved cleaning:** superior to conventional processes; new detergents effectively remove contaminants such as grease, oil, & workshop dirt
- **No sludge formation:** does not form sludge, resulting in less machine maintenance
- **Waste water treatment:** phosphate-free product, easy to process, and cost-saving
- **Corrosion protection:**
  - | Aluminium: up to 1008 hours AASS with 1-layer powder coating and up to 1440 hours AASS with 2-layer powder coating
  - | Steel: 480 to 720 hours NSS with 1-layer powder coating and up to 1008 hours NSS with 2-layer powder coating
  - | Comparable results on aluminum and steel in combination with wet paint
- **Paint adhesion:** significantly improved compared to traditional iron phosphating for both powder coating and wet paint processes
- **Chemistry procurement:** overall, the consumption of chemicals will significantly decrease

### Markets

Applications include agriculture, construction, trailer production, and other general industries (office furniture, kitchen appliances, fitness equipment, etc.).

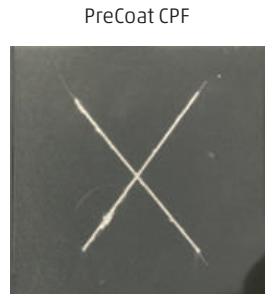
### Test results



Steel | 1-layer powdercoat | 480 hrs NSS



Traditional Process



Alu 6000 | 1-layer powdercoat | 1008 hrs AAST

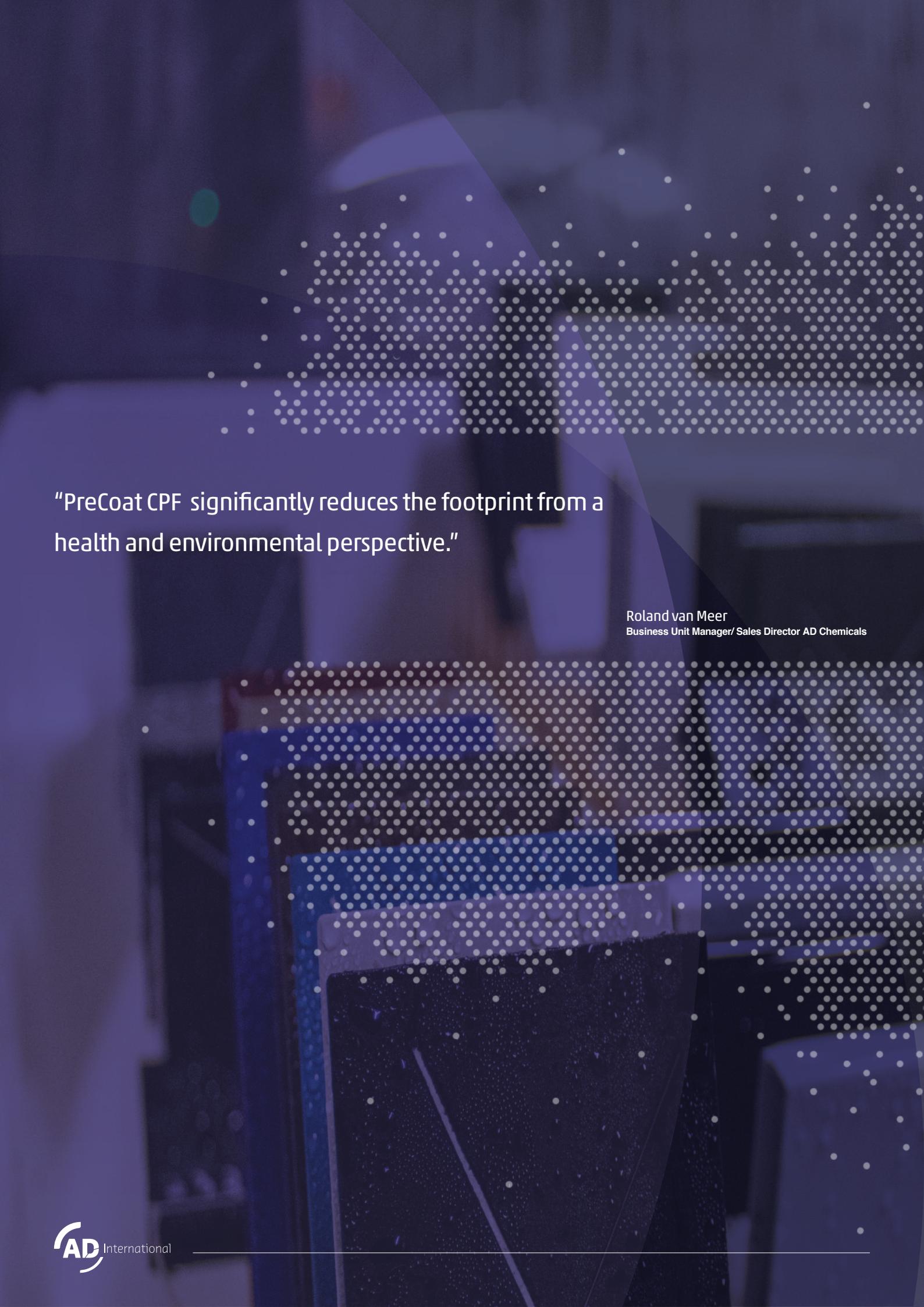


Traditional Process

CO<sub>2</sub>

DEAL

"PreCoat CPF can easily be integrated in every process. Set an important step towards sustainability."



"PreCoat CPF significantly reduces the footprint from a health and environmental perspective."

Roland van Meer  
Business Unit Manager/ Sales Director AD Chemicals