

## **TecTalis Thin-Film Process Success Story**

Phosphate-free, Ni-Free conversion coating process

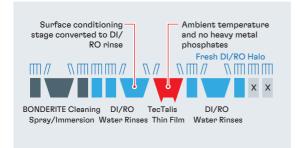
### 1 CUSTOMER CHALLENGES

- » Major automaker in China needed to meet tightening environmental restrictions related to heavy metal phosphates.
- » Process and durability performance required to be equivalent to the BONDERITE Zinc Phosphate Process.
- » Process costs needed to be reduced while simultaneously decreasing ecological footprint.



## 2 RECOMMENDED TECHNOLOGY

- » Henkel recommended the brownfield conversion of a standard Zn phos line to the TecTalis Thin-Film Process
- » Key facilities updates included:
  - Conversion of surface conditioning tank to DI/RO rinsing.
  - Elimination of heat exchanger and laminar flow in conversion coating.
  - Replacement of filter press with bag fi filters.



- » Key material changes included:
  - Replacement of alkaline cleaner with TecTalis Process optimized cleaner
  - Chemical cleaning of surface conditioning and conversion tanks.
  - Charging of TecTalis Process chemicals in previous BONDERITE Zinc Phosphating stage.
- Elimination of passivation materials.
- » About the TecTalis Thin Film Process
  - Provides high-performance corrosion protection on all major metals and up to 100% aluminum.
  - Sustainable process that includes no heavy metal phosphates, no heating in the conversion stage, no surface conditioning step and the potential for reduced water usage.





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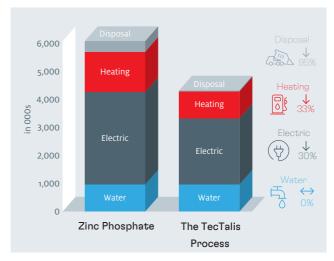
### **3** CUSTOMER BENEFITS

#### **Cost Savings**

» Annual cost savings of ~190,000 euros.

#### **Performance**

» Throw-power performance after conversion to the TecTalis Process is equivalent to BONDERITE Zinc Phosphating system.



# Collaborative Approach

Close technical collaboration across the customer OEM Team and Henkel Team to execute a flawless TecTalis Thin-Film conversion.



#### **OEM Team**

- 1 Throw-power recovery plan
- 2 Waste treatment plan
- 3 Operator training plan

#### **Henkel Team**

- 1 Facilities modification plan
- 2 Chemical cleaning plan
- 3 Production ramp-up plan
- 4 Site safety plan

## TO FIND OUT MORE ABOUT AUTOMOTIVE SURFACE TREATMENTS. VISIT:

www.henkel-adhesives.com



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