Practical examples





Advantages

- Energy saving in flash off zone of approx. 48% in comparison to the competition
- Material saving approximately 15% in comparison to the competition, meeting Claas standards
- Shortening the cleaning interval inside the painting equipment
- Gradual reduction of the dry layer thickness of the foundation while complying with Claas standards





Coating components for agricultural machines 2K-Hydropox-base a 2K-Hydropur- top coating BG 04 / AD 02

Claas is one of the world's largest and most modern agricultural machinery manufacturers, with an annual turnover of nearly € 4 billion. Claas Industrietechnik GmbH (CIT) in Paderborn produces axles and pulleys for various agricultural machines assembled at Claas's main Harsewinkel plant. In addition to the use of Claas-products, CIT also produces and paints for co-operating partners of Caterpillar and other manufacturers of agricultural machinery at home and abroad.

Our task was to reduce costs, while the thickness of the primer and topcoat layer could be reduced with the certainty that it would meet all Claas standards. In addition, there was as well need for energy savings in the flash off zone. This required a fast drying epoxy primer.

Painting process description

Painted objects

Axles and pulleys

Material

Steel and alloys

Application equipment

Power and free- equipment with a chain on which the parts hang and are manually electrostatically coated.

Painting process

Only water-based products are used, where the 2K-PU topcoat is approx. 100 min. at room temperature applied to the 2K-EP base. Both are then ventilated and 20 min. dried at 80 ° C.

Characteristics / approvals

Approved according to Claas standard CN 04 0102 BBL 2015 Resistance of individual systems:

- CN Company standard CN 07-
 - 0216(2K-EP-base)
 - depth of 6 mm without cracks according to DIN EN ISO 1520
 - Bending test with mandrel 8mm acc. DIN EN ISO 1519
- CN Company standard CN 07 0337 (2K topcoat):
 - Depth 5 mm without cracks DIN EN ISO 1520
 - Bending test, mandrel 8 mm acc. IN EN ISO 1519