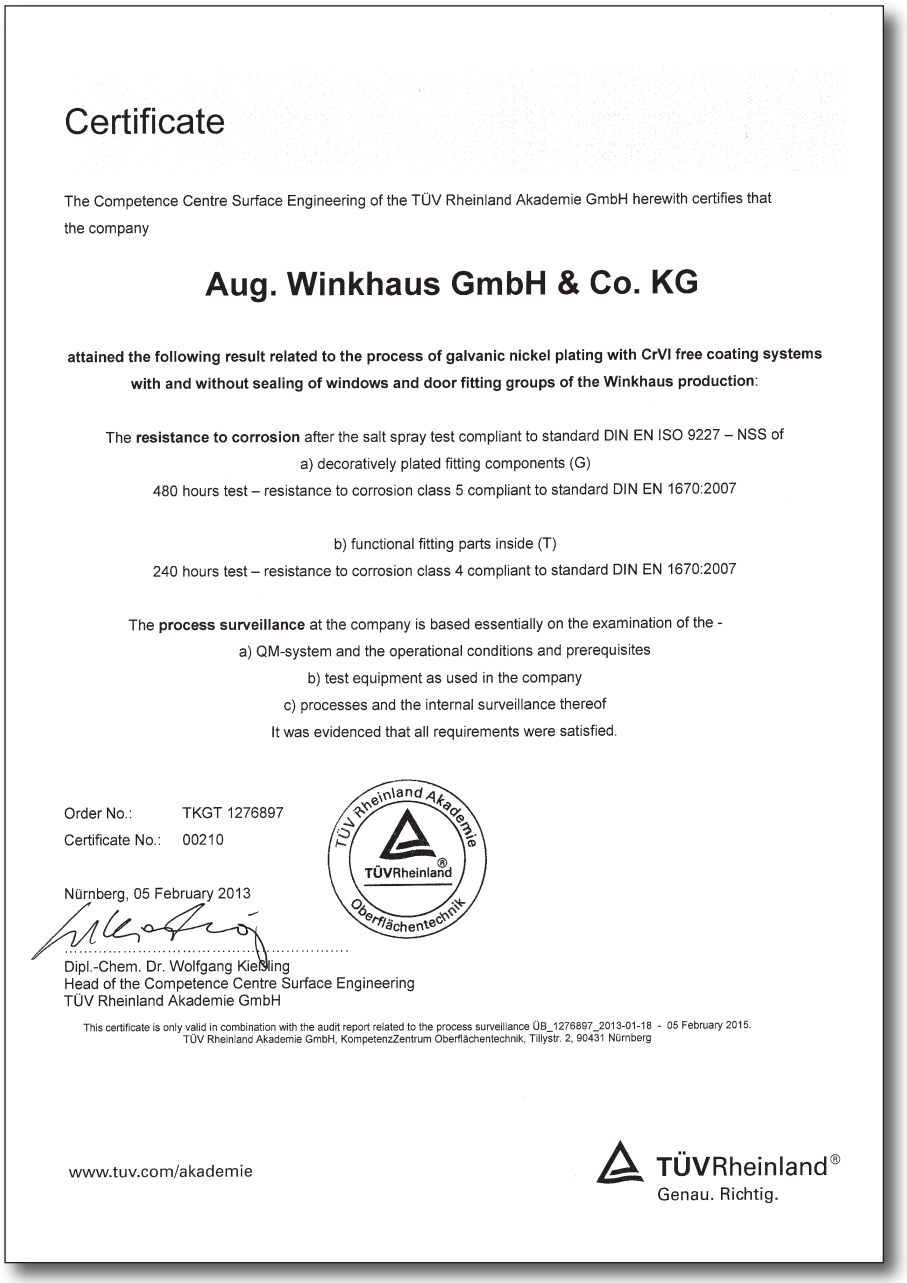
Corrosion Resistance - CE Conformity

To ensure that Winkhaus products meet market requirements, all mild steel or zinc plated components, unless otherwise specified, are designed and manufactured to resist corrosion at a minimum EN 1670 : 2007 Grade 4 (See table for details). This has been independently tested and certified.



Certificate

The Competence Centre Surface Engineering of the TÜV Rheinland Akademie GmbH herewith certifies that the company

Aug. Winkhaus GmbH & Co. KG

attained the following result related to the process of galvanic nickel plating with CrVI free coating systems with and without sealing of windows and door fitting groups of the Winkhaus production:

The **resistance to corrosion** after the salt spray test compliant to standard DIN EN ISO 9227 – NSS of
a) decoratively plated fitting components (G)
480 hours test – resistance to corrosion class 5 compliant to standard DIN EN 1670:2007

b) functional fitting parts inside (T)
240 hours test – resistance to corrosion class 4 compliant to standard DIN EN 1670:2007

The **process surveillance** at the company is based essentially on the examination of the -
a) QM-system and the operational conditions and prerequisites
b) test equipment as used in the company
c) processes and the internal surveillance thereof
It was evidenced that all requirements were satisfied.

Order No.: TKGT 1276897
Certificate No.: 00210

Nürnberg, 05 February 2013

Dipl.-Chem. Dr. Wolfgang Kiessling
Head of the Competence Centre Surface Engineering
TÜV Rheinland Akademie GmbH

This certificate is only valid in combination with the audit report related to the process surveillance ÜB_1276897_2013-01-18 - 05 February 2015.
TÜV Rheinland Akademie GmbH, KompetenzZentrum Oberflächentechnik, Tillystr. 2, 90431 Nürnberg

www.tuv.com/akademie

TÜVRheinland®
Genau. Richtig.

Grade	Definition of the performance (According to EN 1670)	Neutral salt spray test method EN ISO 9227
0	No defined corrosion resistance	No performance or test
1	Low corrosion resistance	24 +1 / -0 Hour
2	Moderate corrosion resistance	48 +1 / -0 Hour
3	High corrosion resistance	96 +1 / -0 Hour
4	Very high corrosion resistance	240 +1 / -0 Hour
5	Exceptionally high corrosion resistance	480 +1 / -0 Hour