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**Order No. 5D17064**

## EXAMINATION REPORT | Your Order from 24.07.2017

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### Order No. 5D 17 064

Received: 26.07.2017

Sample(s) taken by: Customer

Date of Testing: 31.07. – 29.09.2017

Sample(s) suitable for testing

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### Sample Description

> 30 pieces of ASSY Zinc Nickel with P3E coating: 6 x 120 (mm) partial-thread countersunk head screw

### Description of Inquiry

- > Testing of galvanised systems based on EN ISO 12944-6 (05.98), tested according to corrosivity category C5-M-I
  - ◆ Constant condensation water resistance test acc. to DIN EN ISO 6270-CH
  - ◆ Salt spray test acc. to DIN EN ISO 9227-NSS

### Description of the performed Test Procedure

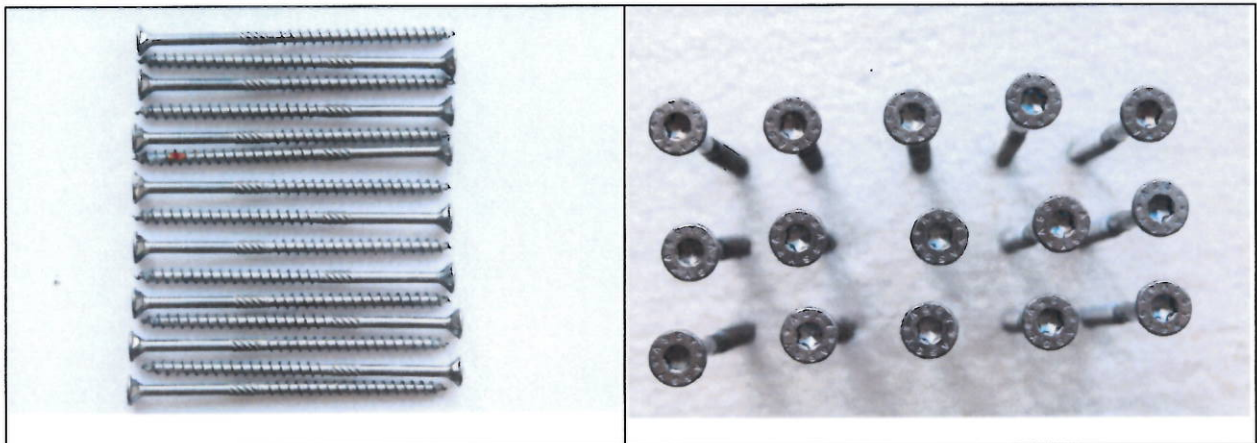
- > The constant condensation water resistance test was carried out acc. to DIN EN ISO 6270-CH in the device of Co. DURA-Köhler, Modell HK 320  
Test duration: 720h
- > The neutral salt spray test was carried out acc. to DIN EN ISO 9227-NSS (09.12) in the device of the Co. Erichsen, Modell 608,  
Test duration: 1440h

### Examination Report

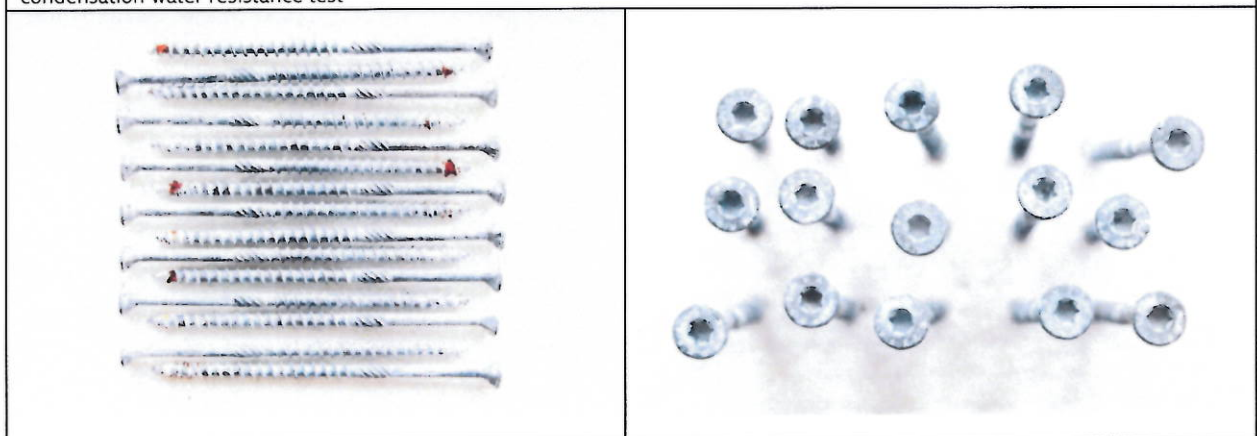
- > The results of the test are to be found in the following table
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sample name	evaluation after		reached corrosivity category
	720h Constant condensation water resistance test	1440h neutral salt spray test	
ASSY Zinc Nickel with P3E coating: 6 x 120 (mm) partial-thread countersunk head screw	The tested screws show no visible surface changes. As well as, corrosion (zinc corrosion = white rust = WR and base metal corrosion = red rust = RR) cannot be detected.	The tested screws show clearly WR but no RR	C5-M-long

> The following images show the tested screws



Tested ASSY Zinc Nickel with P3E coating: 6 x 120 (mm) partial-thread countersunk head screw after 720h constant condensation water resistance test



Tested ASSY Zinc Nickel with P3E coating: 6 x 120 (mm) partial-thread countersunk head screw after 1440h neutral salt spray test

### Conclusion

According to \*DIN EN ISO 12944-6 (05.98) exists the following requirement after the evaluation according to DIN EN ISO 4628 part 3:

- Designation of degree of rusting Ri0

If will be taken as evaluation criteria the requirements of the DIN EN ISO 12944-6, than the tested 30 pieces of tested ASSY DT with HCP coating 8 x 120mm Double screw with cylinder head do **reach** the Corrosive category C5-M-long because they do **fulfill** the requirement of the degree of rusting value: Ri0.

With kind regards  
fem | Forschungsinstitut Edelmetalle + Metallchemie



Dr. Andreas Zielonka  
Director



Roswitha Gardein  
Person in charge

Parts of this examination report must not be duplicated without agreement of fem. The test results exclusively deal with the investigated samples. Sample residues will be returned.

Enclosures

> Tested samples