wessely

PRODUCT INFORMATION

boltcoat® ZN4

Corrosion protection coating

Product properties

- durable corrosion protection layer
- constant coefficients of friction with low scattering, therefore predictability of the machine element
- economically
- dry to handle
- “storable” lubrication
- no impact on other material properties
- replaces cumbersome and inadequate grease lubrication
- cost-effective and perfectly executed contract coating

Application examples

- screws
- nuts
- linkage
- mechanisms in seawater
- non-rotating washers
- small parts like joints, bolts
- guides, springs, notches, etc.
- used for hot dip galvanizing

Product description

The coating system *boltcoat*® ZN4 is one of the most up-to-date innovations in surface technology. *boltcoat*® ZN4 is a dry, silver, non-slip film with exceptional anti-corrosion properties.

In addition to uncompromising corrosion protection, *boltcoat*® ZN4 can also form the basis for various sliding films or Teflon to synergistically reduce friction.

boltcoat® ZN4 can alternatively replace hot dip galvanizing with greater flexibility and versatility.

Fields of application

boltcoat® ZN4 coating system is used for machine components whose surface is heavily corroded without protection and / or claimed as a friction partner. The additional sealing with friction reducing systems (eg PTFE) is optional and ideal for threads. *boltcoat*® ZN4 adheres to even the smallest parts, even where hot-dip galvanized surfaces were not possible until now.

Product use

The *boltcoat*® ZN4 coating system is performed perfectly, cost-effectively and exclusively in our outsourcing operation and in *boltcoat*® -licensed specialist companies.

Minimum quantity 50 kg (reduced quantities on request for an extra charge)

Instructions for use

Please note that the coefficient of friction of coated connection elements is often significantly reduced compared to uncoated screws or nuts. By that a balanced torque-locking force ratio is possible, but the insertion torques have to be adapted. For these calculations you can use our calculation program (please contact us for support).

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Product characteristics

Feature	Testing method	Results	Unit
Appearance without sealing	visual	silver	
Appearance with sealing	visual	depending on sealing	
Operating temperature range		depending on sealing, max. +400 ° C	°C
Friction coefficient μ_{min} without sealing	screw test stand (M42 x 200 8.8)	> 0.16	
Friction coefficient μ_{min} with sealing	screw test stand (M42 x 200 8.8)	depending on sealing	
Danger warnings without sealing		no	
Danger warnings with sealing		depending on sealing	
Layer thickness	Coating thickness gauge	8-30	µm
Corrosion resistance	Salt spray test according to DIN 50021 10-25µm (depending on coating method)	480-1200	hrs
Example: corrosion protection (red rust formation)	DIN 50021, M8x50, blasted 2x centrifuge coating 8µm	> 600	hrs
Solid lubricant		zinc / aluminum	
Binder		inorganic	
Yield (10µm layer thickness)		about 15-18	m^2

The measurement values reflect our current state of knowledge. They represent mean values and can vary relative to the usual manufacturer's specifications. We reserve the right to make changes in the course of technological development. Due to the diverse application possibilities and conditions, the product information can only indicate potential applications. No obligations, liability or warranty claims can therefore be derived from them. We therefore recommend performing tests before use.

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