DELTA-PROTEKT® VL 451 GZ

Article number: 08405542

DELTA-PROTEKT® VL 451 GZ is a topcoat for a zinc flake basecoat or for other metallic substrates. In a system e.g. made of basecoat + topcoat, it is responsible for multifunctional characteristics such as a defined coefficient of friction window, resistance to media, colouring etc. Additionally, it can enhance the corrosion protection properties of the basecoat.The DELTA-PROTEKT® VL 451 GZ is applied via a non-electrolytic application technique directly onto the substrate (part). The zinc flake technique is described in the standards DIN EN ISO 10683 and DIN EN ISO 13858. The application technology can vary according to the dimension and weight of the part; e.g. small parts are usually coated as dip-spin, bigger parts are usually spray coated. All Dörken MKS products have always been free of harmful heavy metals such as chromium VI. As there is no hydrogen involved during the application process, there is no danger of application-related hydrogen-induced stress corrosion cracking.

CATEGORY



VL-Topcoat

Dörken Coatings NA, 11200 Cedar Knoll Drive, PO Box 429, Grass Lake, Michigan 49240, U.S.A.
Phone: +1 517 522 4600, Email: info@doerkenusa.com, Web: www.doerkenusa.com

REQUIREMENTS

Corrosion resistance

- delays galvanic corrosion
- enhances the corrosion protection of the basecoat

Special features

- organic
- solvent-based
- integrated lubricant
- gaugeability

Weathering resistance

- fulfils requirements of artificial weathering and exposure to artificial radiation acc to DIN EN ISO 16474
- fulfils requirements of artificial weathering (fluorescent UV lamps and water) acc to DIN EN ISO 11507
- fulfils the requirements of natural outdoor exposure according to DIN EN ISO 12944-2

Defined coefficient of friction window

- µtot = 0,09-0,14 (VDA 235-101 & DBL 9440)
- prevents stick-slip effects as according to VDA 235-203

Media resistance

- fulfils chemical resistance against operating fluids according to DIN EN ISO 2812

Resistance against

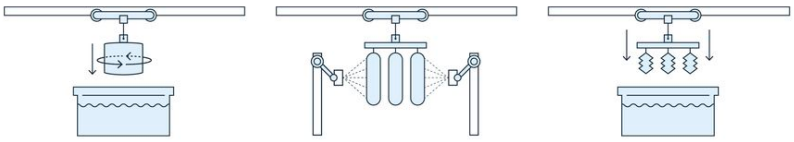
- Corrosion resistance
- Media resistance
- Weathering resistance
- Defined coefficient of friction window

Surface / Substrate

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- zinc flake basecoat
- stainless steel
- zinc die cast
- aluminum die cast
- passivated zinc/zinc alloys
- Phosphat
- typical dry film thickness of 4-20 µm
- Even layer construction possible.
- The technical feasibility depends on pretreatment and individual characteristics of each material.

Application technology



dip-spin spray dip-drain

Legal conditions

- meets the EU End-of-Life Vehicle Directive 2000/53/EC
- meets the RoHS 2 guidelines (also known as EU Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment 2002/95/EC)
- meets the REACh requirements

Contact Person

- Thorsten Speck

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SELECTION OF SUITABLE PARTS

Advised parts



Panels



Metrical threaded bolts M2-M16



Stamped parts



Nuts

Suitable parts



Washers



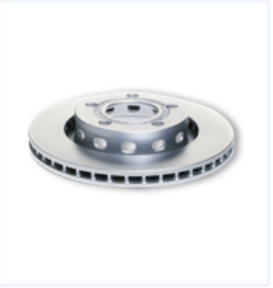
Big parts



Metrical threaded bolts >M16



Non metrical threaded parts



Brake parts

SPECIFICATIONS

ASTM - F3393

ISO - ISO/EN 10683

ASTM - F3125

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Date: 03/28/24