

DLC – coating based on diamond-like carbon

- Friction reduction
- Protection against dry running
- Scratch-resistant, Wear protection
- Prevents Cold-Welding
- Non-stick coating
- No corrosion
- Chemically inert
- For complex 3D- shapes applicable
- Biocompatible - ISO 10993-12, 18 / SOP PM 061 V03
- Certified for food contact - EG Nr. 1935/2004, 10/2011-OM7

Possible materials

Steel- and steel alloys

Aluminum alloys

Ti, Ta, Nb, W, Mo, Si, etc.

Oxidic and non-oxidic ceramics

(e.g. SiC, Al₂O₃)

No copper alloys

Layer Thickness

typ. 2.5 – 3.5 µm, max. 8 µm

Micro hardness

typ. 1700 – 2400 (HV 0.02)

Friction coefficient

typ. 0.05 versus 100Cr6 (Pin on Disc)

Coating temperature

180 – 300 °C

Temperature resistance

400°C, temporary 500°C

Classification (VDI 2840)

a – C : H a – C : H : X

Part dimensions

length max. 1100 mm

width / diameter max. 600 mm

Certificates

ISO 9001 13485 14001 / OHSAS 18001

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