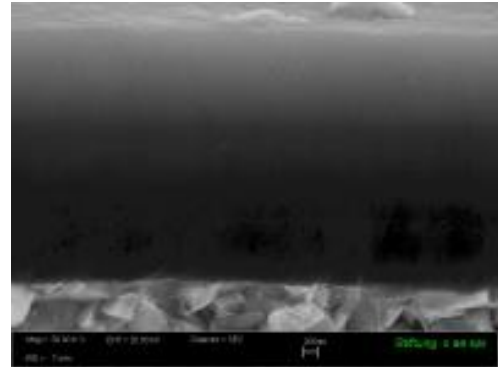


DC99-C®

Properties	Value
Hardness	2500 HV
Elastic Modulus	180 GPa
Coating Thickness	1-5 µm
Friction Coefficient	< 0,05
Op. Temperature	500 °C
Color	anthracite-black
Composition	a-C:H



Key Features

- Excellent performance in lubricated and unlubricated tribological contact
- High wear protection
- Minimal sliding friction
- Ideal emergency running characteristics due to self-lubrication in solid contact
- Corrosion-inhibiting
- Chemically resistant
- Biocompatible & food-safe (LFBG, FDA compliant)
- Very smooth surface
- Dense, compact, and amorphous layer structure

Application Examples

- Energy savings in engine components through friction reduction (e.g., cylinder inner coatings, valve train, pistons/rings, etc.)
- Enhanced tribological performance in bearings (roller, needle, ball bearings)
- Improved emergency running properties in mechanical engineering through self-lubricating behavior (e.g., gearbox components, gears, shafts)
- Reduced friction in belt drives (e.g., tensioning elements)
- Elimination of additional lubricants in the pharmaceutical industry, while simultaneously reducing sticking tendency in embossing zones (e.g., tablet press tools)