

CARBON-X®

Low friction even under tough conditions

CARBON-X® is the low-friction a-C:H based DLC coating from eifeler. Thanks to its high hardness, this coating is the right choice for applications where high abrasive wear occurs and softer low-friction coatings reach their limits.

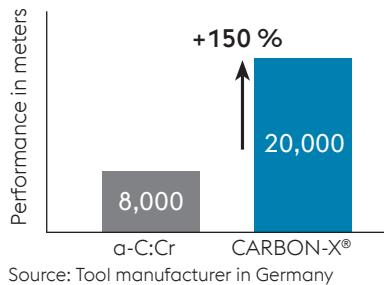
The use of CARBON-X® also efficiently reduces adhesions on tools. The systematic build-up of layers combines multiple advantages of an a-C:H coating to ensure troublefree tool performance, even under tough conditions.

In addition, the DLC coating reliably protects gearboxes against adhesive wear, pitting, microcracking, fretting, and material fatigue.

COATING ADVANTAGES

- » Maximum wear resistance due to high coating hardness
- » Low friction coefficients and reduced adhesions
- » High tool performance and long service life
- » With CARBON-X® up to 2.5 times longer wearing compared to an alternative a:C-Cr layer

FORMING CORES: INCREASED PERFORMANCE +150 %



COATING PROPERTIES

Hardness	2,400 ± 400 HV
Coating thicknesses	1.5 – 2.5 µm
Maximum operating temperature	325 °C / 617 °F
Coefficient of friction against steel	0.05 – 0.15
Color	Gray
Coating composition	a-C:H based

APPLICATIONS

- » Components
- » Cutting / Forming – Non-ferrous metals, cold forming
- » Plastic injection molding
- » Cutting – Non-ferrous metals

FZG GEAR TEST

The measured torque as a function of surface quality decreases as the surface quality increases.

