

CUTTING AND FORMING DIES

The layers developed by means of PVD Magnetron Sputtering present the best properties in terms of wear resistance and friction due to its high density and nano-structured growth. The absence of micro - droplets assures the polished surface after coating and an absolute homogeneity.

PVD Coatings



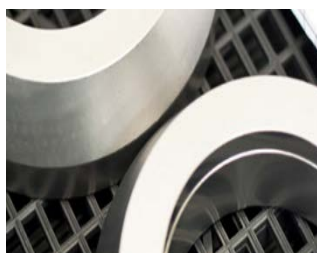
TIN FORM

TIN FORM Based on TiN compound

- High toughness and high hardness. Low friction coefficient..
- Cutting and forming of slightly-alloyed steels.

ALOX FORM Based on AlTiN compound

- High hardness and low stress due to the multi layers growth.
- High-temperature (900 °C) resistance.
- Hot forming dies.
- Cutting and forming dies for high strength steels, stainless steel.



ALOX FORM

CARBO FORM Based on Carbon DLC

- DLC (Diamond-Like-Coating) shows a very high hardness, low friction coefficient and self-lubricating properties.
- Extrusion and forming of aluminum and copper alloys.
- Pressing and forming dies and punches for metallic powder in sintering processes.
- Deformation of stainless steel sheets.
- Deformation of painted and polymer coated sheets.



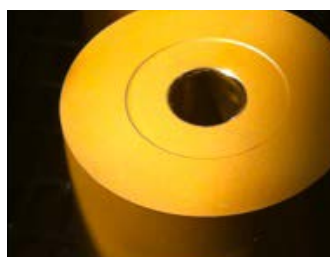
CARBO FORM

CVD Coatings

The process temperature (900-1000 °C) generates a diffusion into the substrate. This is the reason why adhesion values are so high. Flubetech has proudly developed RP CVD technology.

SILNITRON TIN Based on multilayers of titanium and silicon nitrides and carbides

- Excellent adhesion and wear resistance .
- Forming of thick sheets and high strength steels..
- Hot forming dies and punches



SILNITRON TIN

SILNITRON TIC Based on TiC compound

- Excellent adhesion combined with very high hardness (3200 HV).
- Forming of highly abrasive sheets.
- Hot forming of Al coated high strength steels.

