

# Materials and Surfaces

## PVD Thin Films

Sulzer Innotec

### Tools

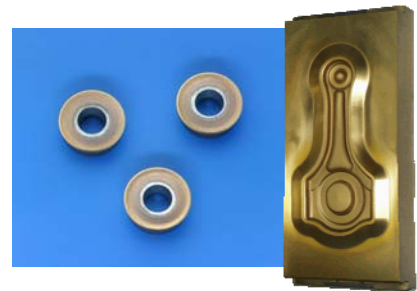
Improve the performance of your tools with our customised PVD surface coatings.

Sulzer Innotec's PVD coatings offer minimum wear, optimal frictional behaviour, improved dry cutting performance, higher durability and maximum lifetime, higher production speed, highest quality for components and products.

#### What we offer

- Comprehensive services by our team of experts
- Standard type PVD coatings customised to specific requirements
- Implementation of theoretical and practical concepts into technical solutions
- Development of new, innovative coating solutions
- Interdisciplinary approach
- Support from construction to production
- Coating services for prototypes and small series
- Quality system ISO 9001 /ISO 14001

#### Examples for coatings on tools

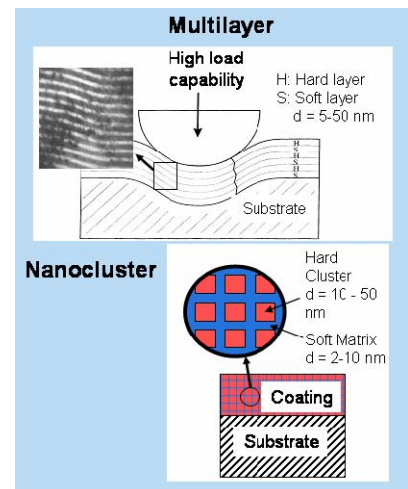


Coated cutting tools and forging dies

#### Examples of coatings

- Diamondlike Carbon (DLC) coatings with extremely low wear and low coefficient of friction
- TiN/NbN multilayer coating with very high hardness and high toughness
- TiSiN coating with increased hardness
- TiC/DLC Nanocluster coating with low coefficient of friction and high hardness
- Carbides: Coatings for reduction of wear and friction at high service temperatures

#### Example for special development



New concepts for extremely hard, wear resistant and tough coatings using nanostructures

#### Examples of applications

- Cutting tools for critical materials and dry cutting conditions
- Drills and cutters
- Punching dies
- Forging dies
- Injection moulds with increased lifetime and improved release properties

Sulzer Innotec has special Know-How in customised PVD coatings for tools. We are constantly extending the scope of applications for our coatings. With us, you profit from our experience and participate in the newest developments.