

Materials and Surfaces

PVD Thin Films

Sulzer Innotec

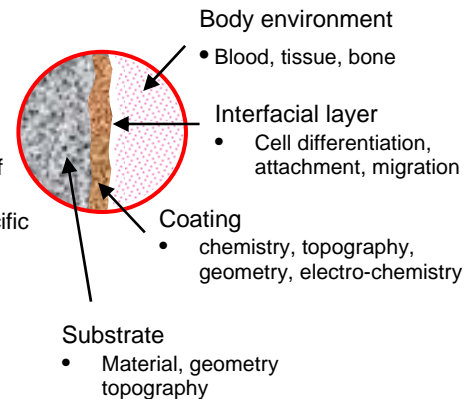
Medical applications

Improve the performance of your implants and medical instruments with our customised PVD surface coatings.

Sulzer Innotec's PVD coatings can be sterilized and offer optimum bio- and hemo-compatibility, minimal reflection, maximum corrosion protection, enhanced x-ray visibility, optimal wear and frictional behaviour.

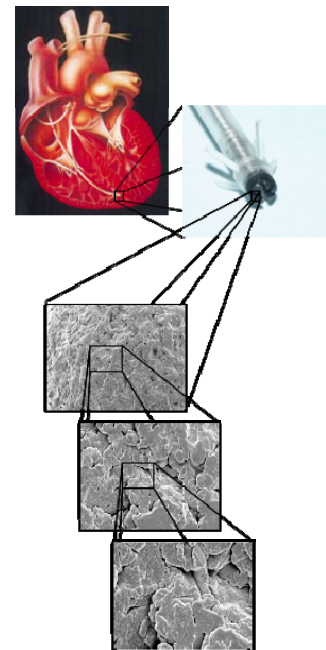
What we offer

- Comprehensive consultancy by our team of surface technology experts
- High quality PVD coatings adjusted 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 of bio-compatible coatings

- Diamond-like-Carbon (DLC): bio- and hemocompatible, chemically inert, hard, wear resistant, low coefficient of friction
- Oxide ceramics: biocompatible, hard, wear resistant, anti-reflective; e.g. Titanium oxide (TiO_x), Zirconium oxide (ZrO_2)
- Nitrides: biocompatible, hard, wear resistant; e.g. Titanium nitride (TiN), Tantalum nitride (TaN), Niobium nitride (NbN)
- Carbides: biocompatible, hard, wear resistant, low coefficient of friction; e.g. Titanium carbide (TiC)
- Sulzer Innotec HyFraSurf: fractally structured surface of electrodes



*Sulzer Innotec's HyFraSurf
Fractally structured surface for
pacemaker electrodes*

Examples of applications

- Wear reduction of implants
- Wear and friction reduction of polymers
- Low friction coating of Catheters for "stick-slip"-prevention
- Electrode surface modification for optimal efficiency of pacemakers and defibrillators
- X-ray contrast enhancement on stents
- Hard, biocompatible and sterilisable anti-reflective coatings for surgical instruments
- Bone ingrowth enhancement for implants

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

For further information please contact our specialists.

Sulzer Markets and Technology Ltd

Sulzer Innotec

P.O. Box

CH-8401 Winterthur, Switzerland

Phone +41 (0) 52 262 21 21 Fax +41 (0) 52 262 0015

E-Mail: innotec@sulzer.com

Internet www.sulzerinnotec.com

