

oerlikon
balzers

Efficient flow.

BALINIT® coatings for rotary pumps in abrasive and poorly lubrication media.



General Engineering



BALINIT® coatings resist extreme conditions.

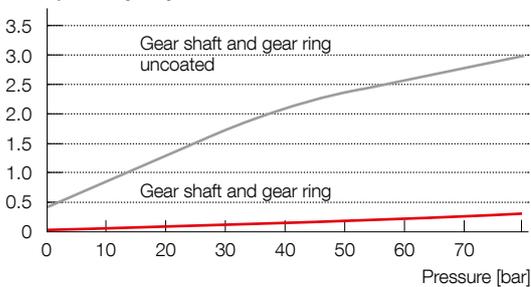
Screw spindle-, vane-, gear-, lobe- and centrifugal pumps have to work in abrasive and poorly lubricating media. This could be cooling media in grinding machines such as screw pumps and internal gear pumps; poor lubrication are applications in fresh- or seawater like screw spindle pumps. Furthermore a combination of abrasion, corrosion and adherence damages parts of external gear pumps for lacquer in the car painting industry. BALINIT® coated screws show an excellent combination of hardness and low friction and prevent wear in poorly lubricating conditions.

Your advantages with BALINIT® coated pump components.

- Excellent wear resistant in metallic sliding (DLC)
- Highest abrasive wear resistance (TiAlN)
- Extended lifetime in severe working conditions
- Reduce friction and energy consumption
- Enable higher efficiency

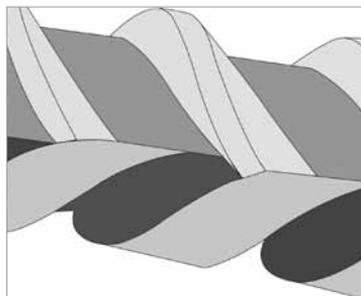
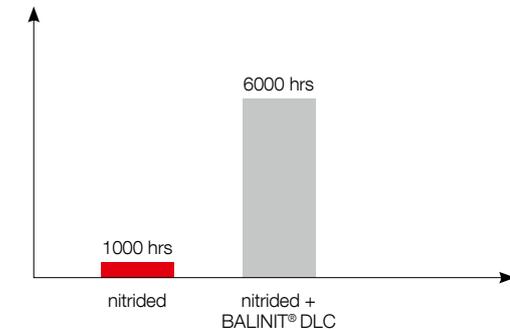
Less wear and leakage free operation.

Delivery losses [l/min]



BALINIT® FUTURA (TiAlN) coated gears show much less leakage compared to uncoated nitride steel.

Lifetime



BALINIT® DLC for screw spindles shows significantly longer lifetime compared to nitride steel DIN 1.7131 in abrasive grinding cooling media.

We recommend: BALINIT® coatings for high-level efficiency.

Coating	Coating material	Micro-hardness (HV 0.05)	Typical thickness	Coefficient of friction μ against steel (dry)	Colour
BALINIT® DLC	a-c:H	2500	2-4 μm	0.1 - 0.2	Black-grey
BALINIT® FUTURA	TiAlN	3300	3-7 μm	0.5	Violet-grey

There's much more to talk about – please get in touch to discuss what we can do to improve your business.

Oerlikon Balzers Coating AG | Balzers Technology & Service Centre | Iramali 18 | 9496 Balzers | Liechtenstein
 T: +423 388 7500 | F: +423 388 5419 | E: components.balzers@oerlikon.com | www.oerlikon.com/balzers