

oerlikon
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Hard work needs hard coatings.

BALINIT® DLC coating for superior reliability and
high wear resistance of mechanical seals.



General Engineering



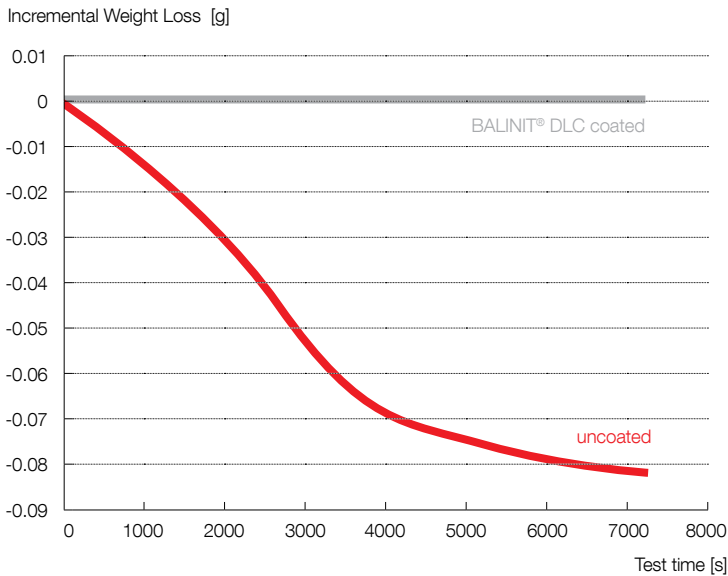
BALINIT® DLC: for safe oil exploration.

Mechanical seals are used in the rotating equipment such as drilling bits, compressors, pumps etc. and typically subjected to high loads and abrasive environments. BALINIT® DLC coated mechanical seal faces provide outstanding abrasive and adhesive wear resistance due to high hardness and low friction of coating. BALINIT® DLC on dry gas seal components provides increased life and improved performance without additional lubrication. BALINIT® DLC is used for various mechanical seal applications and also can be considered as a replacement for solid ceramic, silicon carbide or thermal sprayed materials. It offers an effective replacement for Cr plating with a lower cost solution.

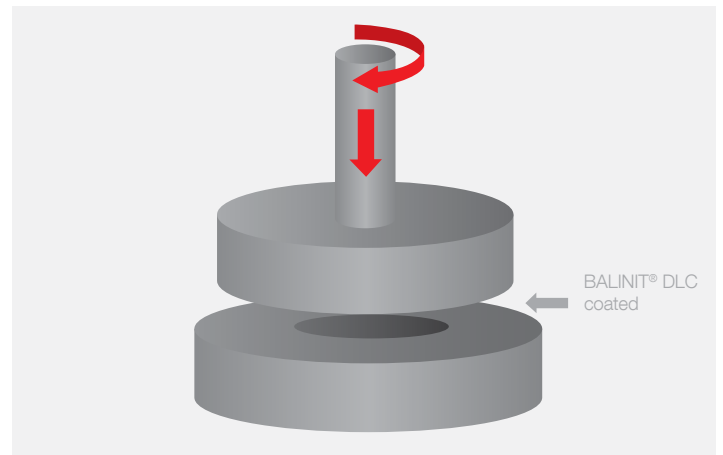
Your advantages with BALINIT® DLC coated mechanical seals.

- Low friction reduces seal damage caused by start up and / or coast down conditions
- Less danger of leakage thus protection of the entire system and the environment
- Increased life and less maintenance
- Significant reduction in downtime
- Cost savings as a result

Trust in constantly low friction and wear resistance.



Washer test



Effect of BALINIT® DLC coating on the weight loss of a thrust washer test – coated verse uncoated washers (bottom washer coated, total wear of both washers).

Test conditions: 1603 RPM, 600 N, 2 hours, 600P mineral oil, 10 N/mm².

The pV (pressure / velocity) test with two DLC coated washers results in nearly no wear.

A test with both washers uncoated results in high wear.

We recommend: BALINIT® DLC for safe sealing

BALINIT® DLC and DLC STAR			
Coating material	Micro-hardness (HV)	Typical thickness	Colour
a-C:H/CrN	> 2000	2-4 µm	Black

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