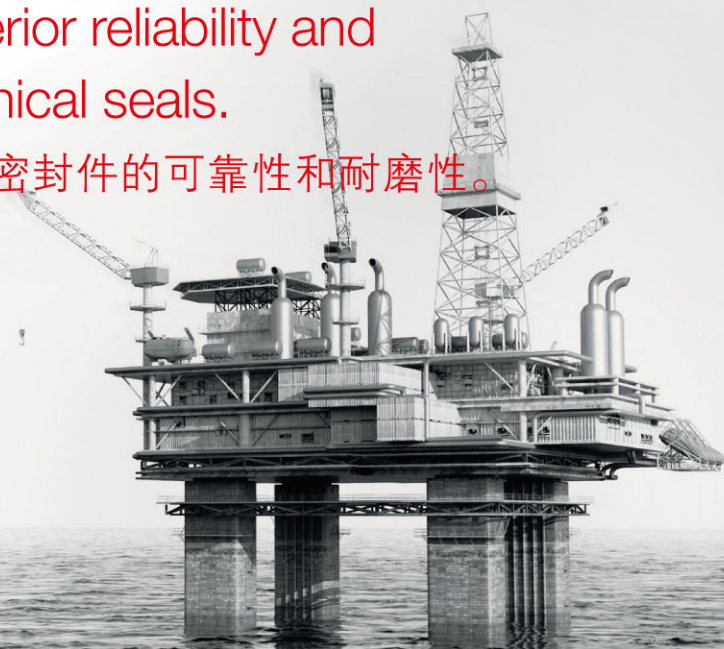


# Hard work needs hard coatings.

## 高难度工作，需要硬涂层

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

BALINIT® DLC 涂层能够提高机械密封件的可靠性和耐磨性。



## BALINIT® DLC: for safe oil exploration.

### BALINIT® DLC: 用于安全的石油勘探

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.

机械密封件用于旋转机械设备，如：钻头、压缩机、泵等，典型的用于高负荷和磨损的环境。由于涂层的高硬度和低摩擦，经BALINIT® DLC涂层的机械密封件具有出色的耐磨性。BALINIT® DLC用于干气密封零部件，能够在无需润滑油的情况下，延长部件的使用寿命，改善性能。BALINIT® DLC可用于多种机械密封件，也可以用作固体陶瓷、碳化硅或热喷涂材料的替代品，同时也是镀铬的低成本有效替代方案。

## Your advantages with BALINIT® DLC coated mechanical seals.

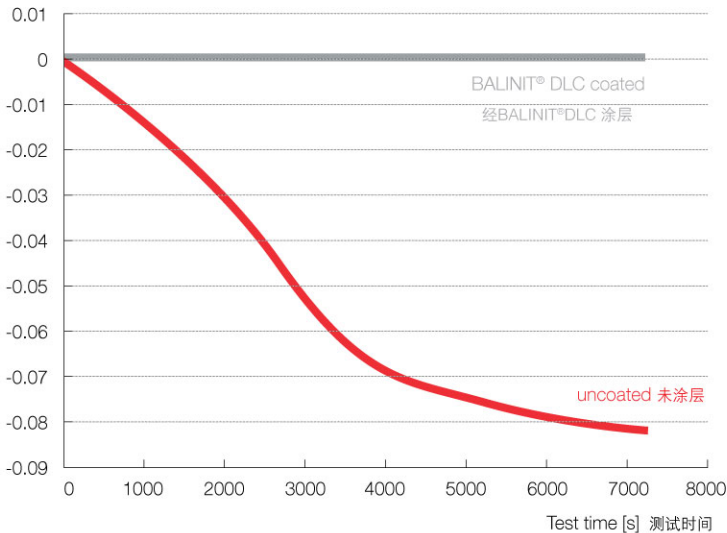
### 经BALINIT® DLC涂层的机械密封件的优势

- Low friction reduces seal damage caused by start up and / or coast down conditions -低摩擦力，降低因启动或滑运行情况而导致的密封件受损
- Less danger of leakage thus protection of the entire system and the environment -减少了泄漏的危险，从而保护了整个系统和环境
- Increased life and less maintenance -延长使用寿命，减少维护次数
- Significant reduction in downtime -显著减少了停工时间
- Cost savings as a result -节约成本

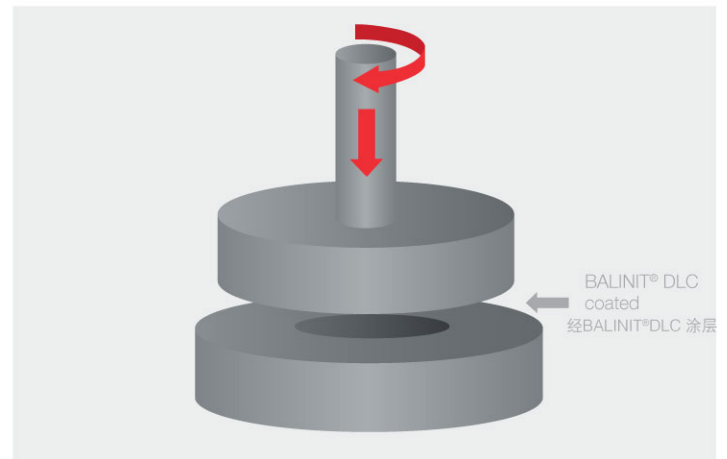
## Trust in constantly low friction and wear resistance.

### 持续减少摩擦、磨损，值得信赖

Incremental Weight Loss [g] 失重增量



Washer test 垫圈测试



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/mm<sup>2</sup>.

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.

BALINIT® DLC涂层用于失重情况的推力垫圈测试的效果—已涂层与未涂层的垫圈作对比（垫圈底部已涂层，两个垫圈都磨损）。

测试环境：1603 RPM, 600 N, 2 小时, 600P 矿油, 10 N/mm<sup>2</sup>.

未涂层的垫圈在测试中均高度磨损。

## We recommend: BALINIT® DLC for safe sealing

### 我们推荐：BALINIT® DLC涂层用于安全密封

#### BALINIT® DLC and DLC STAR

Coating material 涂层材料	Micro-hardness (HV) 维氏硬度	Typical thickness 标准厚度	Colour 颜色
a-C:H/CrN	> 2000	2-4 µm	Black 黑色

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

更多需要了解，请与我们联系

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