Hard work needs hard coatings.

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

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**

<table>
<thead>
<tr>
<th>BALINIT® DLC and DLC STAR</th>
<th>Coating material</th>
<th>Micro-hardness (HV)</th>
<th>Typical thickness</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-C:H/CrN</td>
<td>&gt; 2000</td>
<td>2-4 µm</td>
<td>Black</td>
<td></td>
</tr>
</tbody>
</table>

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