Diamond Like Carbon (DLC) Diamonex DLC

**Description**
Superhard, conformal and low friction coating of amorphous carbon with diamond-like bonds.

**Prime Features:**
- Wear/abrasion resistant
- Low friction
- High surface hardness
- Corrosion resistance
- Conformal coatings
- Biocompatible

**Certifications:**
- ISO 9001:2000
- ISO 14001:2004
- AS9100C

**Physical Properties:**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardness</td>
<td>8 – 35 GPa</td>
</tr>
<tr>
<td>Coefficient of Friction</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Coating thickness</td>
<td>0.005 – 30um</td>
</tr>
<tr>
<td>Diamonex DLC (Max Working Temp in Air)</td>
<td>350°C - 450°C</td>
</tr>
<tr>
<td>Deposition Temperature</td>
<td>&lt;150 °C</td>
</tr>
<tr>
<td>Chemical resistance</td>
<td>Inert</td>
</tr>
<tr>
<td>Electrical resistivity</td>
<td>$10^6$ – $10^{12}$ ohm*cm</td>
</tr>
<tr>
<td>Surface finish</td>
<td>Identical to substrate</td>
</tr>
</tbody>
</table>

**Typical Markets:**
- Aerospace
- Electronics
- Industrial
- Medical/Dental
- Optics
- Semiconductor
- Transportation

**Production Capabilities:**
- Coatings for metals, ceramics, plastics, glass
- Flat and 3 dimensional part processing capability
- RF and Ion Beam direct deposition (PECVD)
- Prototype, batch and volume production

**Note:** Values listed are based on test pieces and may vary according to component design. These values are not guaranteed in anyway whatsoever and should only be treated as indicative and for guidance only.