A pyrolytic carbon coating on graphite provides
- reduced gas permeability
- increased oxidation stability
- protection against particle release

Pyrolytic carbon coatings have high temperature stability and chemical inertness, similar to the graphite base material.

In addition, pyrolytic carbon can be used to infiltrate and densify graphite which significantly lowers the internal porosity.

<table>
<thead>
<tr>
<th>Properties</th>
<th>Units</th>
<th>Isostatic graphite without coating</th>
<th>Isostatic graphite with pyrolytic carbon coating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical resistivity</td>
<td>μm*Ω</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Apparent density</td>
<td>g/cm³</td>
<td>1.85</td>
<td>1.85</td>
</tr>
<tr>
<td>Young’s modulus</td>
<td>GPa</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Flexural strength</td>
<td>MPa</td>
<td>58</td>
<td>52</td>
</tr>
<tr>
<td>Gas permeability</td>
<td>10⁻⁶cm²/s</td>
<td>34000</td>
<td>5</td>
</tr>
</tbody>
</table>

This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should therefore not be construed as guaranteeing specific properties of the products described or their suitability for a particular application. Any existing industrial property rights must be observed. The quality of our products is guaranteed under our "General Conditions of Sale".