Ergiloy® 9.9135HL for Endoprosthesis Application
Medical Alloys

Zapp is Certified to ISO 9001

Alloy Ergiloy® 9.9135HL – Cobalt-Chromium-Molybdenum-Alloy for Surgical Application
Ergste recently adopted a new alloy to the product programme which is especially designed to endoprosthesis applications. ERGILOY® 9.9135HL is manufactured according to the requirements of the respective standards for surgical implant application. Material is remelted (ESR).

Grade
UNS R31537

Physical Properties
Specific density 8.30 g/cm³

Mechanical Properties

<table>
<thead>
<tr>
<th></th>
<th>UTS [MPa]</th>
<th>YS [MPa]</th>
<th>A₄ [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>d ≤ 35 mm</td>
<td>min. 1172</td>
<td>min. 827</td>
<td>min. 12</td>
</tr>
<tr>
<td>d &gt; 35 mm</td>
<td>min. 1000</td>
<td>min. 700</td>
<td>min. 12</td>
</tr>
</tbody>
</table>

Chemical Composition (Mass-Percent)

<table>
<thead>
<tr>
<th>Description</th>
<th>C</th>
<th>Cr</th>
<th>Fe</th>
<th>Mn</th>
<th>Mo</th>
<th>N</th>
<th>Ni</th>
<th>Si</th>
<th>Co</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERGILOY® 9.9135HL</td>
<td>min.</td>
<td>26.0</td>
<td>0.149</td>
<td>1.0</td>
<td>7.0</td>
<td>0.25</td>
<td>1.0</td>
<td>1.0</td>
<td>bal.</td>
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<tr>
<td></td>
<td>max.</td>
<td>0.149</td>
<td>30.0</td>
<td>0.75</td>
<td>1.0</td>
<td>7.0</td>
<td>0.25</td>
<td>1.0</td>
<td>bal.</td>
</tr>
</tbody>
</table>

Corresponding Standards
- ASTM F1537 Alloy 1 (Low carbon)
- ASTM F799 (Forgings)
- ISO 5832-12

UT Tested
acc. to AMS 2154 class A

Available Products
Bars 8 – 70 mm, peeled, tolerance h9 – h11, 3,000 – 3,500 mm length

Stock Material
Available in sizes: 8 – 70 mm

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Further information regarding our products and locations are available in our image brochure and under www.zapp.com

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