**LUKOIL STEELO**

High Quality Oils for Industrial Gearboxes and Bearings

**APPROVALS**
- Flender revision 13 (ISO VG 150, 220, 320, 460)
- JSC «AVTOVAZ» (ISO VG 100, 150, 220, 320, 460, 680)
- CJSC «Reduktor» (ISO VG 100, 150, 220, 320, 460, 680)
- Danieli (ISO VG 150, 220, 320, 460, 680)
- RexAM (ISO VG 150)
- BATTENFELD (ISO VG 220)
- Wikov
- Krauss Maffei Berstorff (ISO VG 68, 150, 220, 460, 680)
- FLOWSERVE (ISO VG 68)
- FELUWA Pumpen (ISO VG 220, 320)
- LAEIS (ISO VG 100, 220)
- Eickhoff
- Santasalo (ISO VG 150, 220, 320, 460, 680)
- Kopex Machinery (ISO VG 150, 220, 320, 460)

**PRODUCT DESCRIPTION**

**LUKOIL STEELO** is high quality oils for heavy loaded industrial gearboxes.

**LUKOIL STEELO** offers excellent performance due to carefully selected highly refined base stocks with high viscosity index and special additive package containing sulfur and phosphorus. Optimal ratio of EP properties and anti-friction capacities allow using **LUKOIL STEELO** oils effectively in various components and units of industrial equipment.

**APPLICATION**

**LUKOIL STEELO** is recommended for industrial gearboxes and units with steel gears, where EP oils are required. The applications include bearings, wheel, warm and screw gears in different industrial equipment, as well as oil circulation and mist and splash lubricating systems.

The product name in an order:
- Industrial Gear oil LUKOIL STEELO 68, TU 0253-015-79345251-2008
- Industrial Gear oil LUKOIL STEELO 100, TU 0253-015-79345251-2008
- Industrial Gear oil LUKOIL STEELO 150, TU 0253-015-79345251-2008
- Industrial Gear oil LUKOIL STEELO 220, TU 0253-015-79345251-2008
- Industrial Gear oil LUKOIL STEELO 320, TU 0253-015-79345251-2008
- Industrial Gear oil LUKOIL STEELO 460, TU 0253-015-79345251-2008
- Industrial Gear oil LUKOIL STEELO 680, TU 0253-015-79345251-2008

**TYPICAL TEST DATA**

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>Test method</th>
<th>ISO VG</th>
<th>68</th>
<th>100</th>
<th>150</th>
<th>220</th>
<th>320</th>
<th>460</th>
<th>680</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density at 20 °C, kg/m³</td>
<td>GOST 3900 / ASTM D4052</td>
<td>887.4</td>
<td>888.7</td>
<td>891.7</td>
<td>891.1</td>
<td>898.3</td>
<td>904.3</td>
<td>911.7</td>
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<tr>
<td>Kinematic viscosity at 40 °C, mm²/s</td>
<td>GOST 33 / ASTM D445</td>
<td>67.9</td>
<td>100</td>
<td>151.5</td>
<td>212.4</td>
<td>327.4</td>
<td>461.8</td>
<td>648.5</td>
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<tr>
<td>Kinematic viscosity at 100 °C, mm²/s</td>
<td>GOST 33 / ASTM D445</td>
<td>8.6</td>
<td>10.9</td>
<td>14.4</td>
<td>17.9</td>
<td>23.8</td>
<td>29.6</td>
<td>44.4</td>
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<tr>
<td>Viscosity index</td>
<td>GOST 25371 / ASTM D2270</td>
<td>95</td>
<td>93</td>
<td>92</td>
<td>91</td>
<td>93</td>
<td>93</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>Flash Point, COC, °C</td>
<td>GOST 4333 / ASTM D92</td>
<td>237</td>
<td>249</td>
<td>244</td>
<td>254</td>
<td>266</td>
<td>272</td>
<td>284</td>
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<tr>
<td>Tribological properties on four-ball machine:</td>
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<td></td>
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<tr>
<td>- Index of load wear, N (kgf)</td>
<td>GOST 9490</td>
<td>431.2</td>
<td>481.5</td>
<td>484.4</td>
<td>448</td>
<td>444</td>
<td>523</td>
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<td>- Wear scar diameter, mm</td>
<td>GOST 9490</td>
<td>0.31</td>
<td>0.32</td>
<td>0.33</td>
<td>0.32</td>
<td>0.35</td>
<td>0.34</td>
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<tr>
<td>Pour Point, °C</td>
<td>GOST 20287 B</td>
<td>-25.4</td>
<td>-25.9</td>
<td>-22</td>
<td>-19.5</td>
<td>-17.6</td>
<td>-15.8</td>
<td>-18.5</td>
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</tbody>
</table>

The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved by OOO “LLK-International”.

**MEETS REQUIREMENTS**
- DIN 51517-3 CLP
- AGMA 9005-E02 (EP)
- David Brown SEB 181226
- AIST 224

**LUKOIL STEELO** oils effectively in various components and units of industrial equipment.