Way Lubricant® X
Efficient performance machine tool slideway lubricant

Product description
Way Lubricant X is an efficient performance machine tool slideway lubricant, formulated with highly refined mineral base oils, friction modifiers, extreme pressure and anti-rust additives, with tackiness agents, and corrosion inhibitors.

Way Lubricant X offers good demulsibility properties for rapid separation from coolants, reducing the possibility of bacteria growth due to oil contamination.

Customer benefits
• Friction modifiers contribute smooth high lubricity, helping reduce friction, drag, stick-slip and chatter, improving workpiece finish
• Tackiness additives provide high oil film strength and assist in accurate table positioning and lubricant stability on vertical slideways
• EP additives maintain tough oil film protection on slideways and guides helping resist scoring and wear under heavy loads
• Rust and corrosion inhibitors, combined with an adhesive oil film, assist in maintaining robust machine protection
• Adhesive performance helps ensure lubricant resists fluid washout, and squeeze-out under heavy loads
• Formulation aids rapid separation from coolants, helping increase cutting fluid life and reduce bacteria growth in contaminated oil
• Compatible with most industrial soluble oils and coolants

Product highlights
• Helps reduce stick-slip, chatter and improves machining accuracy
• Assists scoring and wear resistance under heavy loads
• Promotes robust machine protection

Selected specification standards include:

<table>
<thead>
<tr>
<th>Cincinnati Machine</th>
<th>DIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Motors</td>
<td>ISO</td>
</tr>
<tr>
<td>SKC</td>
<td></td>
</tr>
</tbody>
</table>
Applications

- Machine tool slideways and guides:
  - Horizontal slideways (ISO 68)
  - Light-to-moderate applications (ISO 68)
  - Vertical slideways (ISO 220)
  - More severe applications (ISO 220)
- Suitable for use with Bijur Automatic Lubricant delivery systems.

Other industrial applications requiring an adhesive, corrosion inhibited lubricant with EP properties:
- Damping fluid for wind turbines (ISO 320)

Approvals, performance and recommendations

Performance

- Cincinnati Machine Specification P-47 Heavy-Medium Way Oil (ISO 68)
- Cincinnati Machine Specification P-50 Heavy Way Oil (ISO 220)
- DIN 51524 part II: as hydraulic oil
- General Motors LS-2
- SKC
- DIN 51 502: CG

Typical test data

<table>
<thead>
<tr>
<th>Test</th>
<th>Test methods</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity Grade</td>
<td></td>
<td>68</td>
</tr>
<tr>
<td>Kinematic viscosity at 40°C, mm²/s</td>
<td>ASTM D445</td>
<td>67.77</td>
</tr>
<tr>
<td>Kinematic viscosity at 100°C, mm²/s</td>
<td>ASTM D445</td>
<td>9.33</td>
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<tr>
<td>VI</td>
<td>ASTM D2270</td>
<td>115</td>
</tr>
<tr>
<td>Flash Point, °C</td>
<td>ASTM D92</td>
<td>224</td>
</tr>
<tr>
<td>Pour point, °C</td>
<td>ASTM D5950</td>
<td>-37</td>
</tr>
<tr>
<td>Steel corrosion, A</td>
<td>ASTM D665A</td>
<td>Pass</td>
</tr>
<tr>
<td>Copper corrosion 3h/100°C</td>
<td>ASTM D130</td>
<td>1B</td>
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<tr>
<td>FZG A/8.3/90, Load stage</td>
<td>DIN 51 354</td>
<td>&gt; 12</td>
</tr>
<tr>
<td>TAN, mg KOH/g</td>
<td>ASTM D664</td>
<td>0.57</td>
</tr>
</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. This supersedes all previous editions and information contained in them.