Super S® Rock Drill Oils are premium, compounded lubricants formulated for mining equipment under both wet and dry conditions. They contain rust and oxidation inhibitors, EP additives and tackifier agent making them especially suitable to lubricate and cool pneumatic percussion tools and air operated rock drills. Blended from ultra-pure hydrocracked base stocks to give the best possible performance in tough rock drill applications where equipment responsiveness is of the upmost importance.

The excellent film forming ability of Super S® Rock Drill fluids provide good lubricity and reduce scoring failures during sudden high pressure sliding and repeated heavy loads. Pneumatic percussion equipment are usually operated at very high cubic foot per minute (CFM) air flow rates. The excellent shear stability and tacky nature helps Super S® Rock Drill oils to adhere to metallic surfaces and resist thinning due to shear.

The tackifier found in Super S® Rock Drill oil is specially selected to provide low misting properties and optimized adhesion to the specific alloys found in modern mining equipment. Misting in mines leads to environmental concerns as hydrocarbon based fluids are released into the ground by way of spray off. Reducing misting in pneumatic equipment not only reduces wear and extends equipment life, but also reduces environmental impact.

APPLICATIONS

- Pneumatic tools: Rock Drills, jackhammers, tampers, asphalt breakers, drifters
- Bearings in wet operating environments
- Chain drives
- Gear sets with spur, bevel, spur bevel, spiral bevel or herringbone gears

SPECIAL HANDLING, NOTICES OR WARNINGS

Use the same care and handling as for any petroleum product.

FEATuRES/ BENEFITS

- Developed for lubricating industrial pneumatic and mining equipment operating in both wet and dry environments
- Available in viscosity grades from ISO VG 46 to ISO VG 460
- Excellent oxidation resistance and thermal stability
- Provides EP (extreme pressure) and anti-wear performance
- Rust and corrosion protection for both ferrous and non-ferrous metals
- Fast emulsifiers to minimize failures due to water contamination
- Excellent performance in high load and/or extreme temperature operations
- High film strength and lubricity reduces scoring failures and wear due to prolonged use

RECOMMENDATIONS/SPECIFICATIONS

Ingersoll-Rand Rock Drill Oil Specification: Light, Medium and Heavy

Rock Drill 46 is specially formulated for all-season use

Rock Drill 68, 100 and 150 are used in underground mining operations and are classified as Manufacturers’ Grade 20, 30 and 40 oils respectively.

Rock Drill 150 is recommended for Secan drills and in mining operations trying to reduce oil consumption and misting.

Rock Drill 220 is a Manufacturers’ Grade 50 and is normally used in the summer in large bore drills (greater than 10 cm/ 4 inch), operating in open pit mines.

Gardner-Denver, Chicago Pneumatic Worthington, and Joy heavy-duty pneumatic rock drill applications
## TYPICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method ASTM-D</th>
<th>ISO Viscosity Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gravity</td>
<td></td>
<td>46  68  100  150  220  320</td>
</tr>
<tr>
<td>Flash Point, °C/°F</td>
<td>92</td>
<td>193/380  193/380  204/400  204/400  216/420  216/420</td>
</tr>
<tr>
<td>Pour Point, °C/°F</td>
<td>97</td>
<td>-12/10  -12/10  -12/10  -12/10  -9/15  -9/15</td>
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<tr>
<td>Color (max value)</td>
<td>1500</td>
<td>3.0  3.0  3.5  3.5  3.5  3.5</td>
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<tr>
<td>Viscosity</td>
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<td>445</td>
</tr>
<tr>
<td>cSt @ 40 °C</td>
<td>46</td>
<td>6.6  8.8  100  150  220  320</td>
</tr>
<tr>
<td>cSt @ 100 °C</td>
<td>68</td>
<td>11.0  13.1  14.4  23.8</td>
</tr>
<tr>
<td>Timken OK Load lb</td>
<td>2509</td>
<td>60+  60+  60+  60+  60+  60+</td>
</tr>
<tr>
<td>Steam Emulsion Number</td>
<td>1200</td>
<td>1200  1200  1200  1200  1200  1200</td>
</tr>
<tr>
<td>Viscosity Index</td>
<td>95-100</td>
<td>95-100  95-100  95-100  95-100  95-100  95-100</td>
</tr>
</tbody>
</table>

*Typical test data are average values only.*

## PRODUCT NUMBERS

**ISO 46**
- SUS 308: Bulk

**ISO 68**
- SUS 190: 55 gallon drum
- SUS 190B: Bulk

**ISO 100**
- SUS 309: 5 gallon pail
- SUS 310: 55 gallon drum
- SUS 31011: Bulk