

Atlas Copco Lubricants

Roto Inject Fluid NDURANCE

Ultimate Mineral Oil for your GA/GX compressor

Atlas Copco Roto Inject Fluid NDURANCE is a mineral based oil specially formulated to protect your GA-GX rotary screw compressor.

With several years of experience on developing cutting edge technology on compressors, Atlas Copco has designed a unique additive package that enables the Roto Inject Fluid NDURANCE to work in harmony with all other components in the compressor.

With extended service intervals of up to 4 000 hours when operating in mild conditions, RIF NDURANCE is a combination of a premium mineral base fluid with an enhanced additive package to allow your compressor to operate in dusty and humid conditions and keeping your system deposit free. The tailor made viscosity (55mm²/s) together with specially designed anti-wear additives provides your compressor the right lubrication for rotors, bearings and gears for a wide spread of operating conditions.



| | Features | Benefits |
|---|--|--|
| High resistance against oxidation | Resistance against heavy pollution, high operating temperatures and high humidity. | Protects the compressor against oxidation, leading to a longer drain interval: up to 4 000 h or 1 year in mild ambient conditions. |
| Perfect sealing and anti-wear properties | Anti-wear additives are developed to protect the rotating parts. This will also help seal the gaps between the rotors when the air is in the compression phase. | Constant oil film protects the rotors and bearings during operation, preventing metal-metal contact of critical parts. Will avoid air leakages in the element. |
| Protection against corrosion | Roto Inject Fluid NDURANCE separates easily from water, maintaining original lubricant properties. | Ensures that lubricant will keep its original properties after separation from water. It will also keep water out of the oil circuit, avoiding corrosion on the metal parts. |
| Oil system free of deposits | High oxidation resistance of the base fluid in combination with specially designed antioxidant additives will avoid formation of lacquer or sludge when operating in specified conditions. | Reduces contamination in the oil separator that would lead to pressure drop (meaning inefficient working of the compressor), or blocking of valves. This also reduces the risk of downtime due to oil system cleaning. |
| Good demulsifying properties | Roto Inject Fluid NDURANCE separates easily from water, protecting the system from emulsions. | Enables the optimum performance of the Atlas Copco OSC & OSD treatment devices. |
| Low foaming tendency | Good air release properties make sure the air is efficiently separated from the lubricant without foaming. | Increases the efficiency of your compressor. Low foaming will avoid pressure drops in the separator element. |
| Optimized viscosity | Tuned lubrication that guarantees the correct oil film during operation. | Full protection of the moving parts at a wide spread of operating conditions. |
| Volatility and oil consumption | Premium mineral base fluid containing less volatile components. | Reduces oil carry over compared to typical mineral compressor oil. |

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Lubricant Characteristics

Appearance:

Colorless to straw pale yellow, transparent

| Performance | Method | Unit | Value |
|-------------------|-------------|--------------------|-------|
| Density at 15°C | ISO 3675 | kg/dm ³ | 0,87 |
| Viscosity at 40°C | ASTM D 445 | mm ² /s | 55 |
| Viscosity index | ASTM D 2270 | | 106 |
| Foam stability | ASTM D 892 | ml | 0/0/0 |
| Total acid number | ASTM D 974 | mg KOH/g | 0,1 |
| FZG fail stage | ISO 14635-2 | | 11 |
| Rust test | ASTM D 665B | | Pass |
| Pour point | ASTM D 97 | °C | -33 |

These characteristics are typical of current production. Whilst future production will be conform to Atlas Copco's specification, variations in these characteristics may occur. Complies with ISO 6743 /3 /1A class L-DAH

ID Card

| | |
|--------------------------------|---|
| Name | Roto Inject Fluid NDURANCE |
| Oil type | Mineral based lubricant |
| Service intervals | 4 000 h or 1 year at mild ambient conditions |
| Mild ambient conditions | Ambient temperature range from 0°C to +30°C and dusty environment or ambient temperature range from 0°C to +30°C and humid environment |
| | Maximum operating pressure 13 bar |
| Equipment | Atlas Copco single stage oil-injected screws |
| Compatibility | GA - GX compressors |
| Capacity (ID) | 5 l plastic can (1630 1146 00) 20 l plastic can (1630 0918 00) 209 l metal drum (1630 0919 00) 1000 l container (1630 1442 00) |

