



HYEX Synthetic R&O Oil

STARFIRE HYEX Synthetic R&O Oils comprises a line of full synthetic multifunctional products intended for industrial applications. The lighter grades, ISO 32, 46, 68 and 100, are typically used in equipment such as rotary type air compressors, turbines and mild hydraulic applications. The heavier grades, ISO 150, 220, 320 and 460, are typically used in gearboxes for which EP characteristics are not required. All grades can be used in other applications for the lubrication of pump bearings and electric motors.

APPLICATIONS

STARFIRE HYEX Synthetic R&O Oils in the ISO 32 through 100 range are recommended for use in oil flooded rotary screw, centrifugal and rotary vane air compressors operating under severe conditions of high and/or cold temperature startup. The advantages of the use of these synthetic oils in place of mineral oil products include long drain intervals and minimizing varnish deposits and sludge where high air outlet temperatures are expected. Starfire Synthetic R&O Oils used in compressor service are compatible with ammonia, carbon dioxide, helium and hydrocarbon gases (for which solubility with process gases is desired).

STARFIRE HYEX Synthetic R&O Oils in the ISO 150 through 460 range (AGMA Grades 4 through 7) are used most often in gearboxes that have the following characteristics: steel on steel or bronze on steel gearing with spur, helical, herringbone and bevel gear geometries. These oils are NOT intended for applications that require extreme pressure (“EP”) type additives, such as spiral bevel and hypoid or worm gear equipment. These oils also can be used in circulating oil systems, paper machine drier bearings, calendar stacks, winders, large antifriction and journal-bearing applications.

FEATURES

- Lubricates effectively over wide temperature range
- Extended drain intervals
- Reduced power consumption
- Reduced maintenance and downtime
- Improved compressor, gearbox efficiency
- Rust, corrosion protection
- Resists oxidation, thermal breakdown: reduced varnish, deposits, sludge
- Excellent low-temperature fluidity
- Reduced lubricant use, disposal

| ISO GRADE | 32 | 46 | 68 | 100 | 150 | 220 | 320 | 460 |
|------------------|------|------|------|------|------|------|------|------|
| AGMA Grade | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Density (lb/gal) | 6.93 | 6.96 | 6.98 | 7.01 | 7.26 | 7.29 | 7.31 | 7.34 |
| Flash Point | | | | | | | | |
| (F) | 469 | 500 | 509 | 529 | 475 | 475 | 470 | 465 |
| (C) | 243 | 260 | 265 | 276 | 246 | 246 | 244 | 240 |
| Pour Point | | | | | | | | |
| (F) | -72 | -72 | -72 | -65 | -40 | -35 | -30 | -20 |
| (C) | -58 | -58 | -58 | -54 | -40 | -37 | -34 | -29 |
| Viscosity | | | | | | | | |
| cSt @ 40c | 31 | 46 | 68 | 116 | 150 | 220 | 320 | 460 |
| cSt @ 100C | 5.7 | 7.9 | 10.2 | 14.2 | 17.5 | 22.8 | 29.1 | 37.2 |
| Viscosity Index | 136 | 134 | 145 | 150 | 128 | 127 | 124 | 123 |
| ASTM Rust Test | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| FZG Pass Stage | 11 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |