

# CARIUS EP SERIES

## High Temperature and Extreme Pressure Grease

### Description

Carius EP series are greases formulated with special additives for high water wash out and temperature resistant, and with EP additives for extreme pressure resistant.

### Applications

Carius EP 146 is recommended for lubrication of low speed roll bearings used in iron, continuous casting line output units operating between 150 °C and 190 °C. It can be used in central lubrication applications. Base oil viscosity is ISO VG 220, NLGI is 1,5. Carius EP 220 is recommended for lubrication of middle speed roll bearings used under heavy and shock loads in a water intense environment. It can be used in a wide range applications such as iron-steel, cement and automotive industries. Base oil viscosity is ISO VG 220, NLGI is 2. Carius EP 320 is recommended especially in mining industry. Due to its Molybdenum Disulfide additive, it prevents metal-metal friction in case of vibration. Base oil viscosity is ISO VG 320, NLGI is 2. It can be used up to 175 °C.

### Benefits

- Ensures operation under impact loading due to its excellent characteristic for extreme pressure.
- Reduces grease consumption and maintenance costs.
- Increases equipment life by preventing fatigue andwearing.
- Maintains lubrication at elevated temperatures due to its perfect oxidation resistance.
- Prevents the system against rust and corrosion even in acidic medium (paper, chemical, fertilizer industries, refineries, marine etc.).
- Suitable for usage in central lubrication applications even at low temperatures.
- Provides excellent lubrication at elevated temperatures without decomposition due to its remarkable thermal stability.

### Performance

DIN 51825-KP 1 (1,5) P-20 (Carius EP 146), DIN 51825- KP 1 P-20 (Carius EP 210), DIN 51825-KP 2 P-20 (Carius EP 220), DIN 51825- KP 2 P-20 (Carius EP 320), TS 11584

### Typical Specifications\*

|                                              |             | Carius EP 146   | Carius EP 210   | Carius EP 220   | Carius EP 320   |
|----------------------------------------------|-------------|-----------------|-----------------|-----------------|-----------------|
| Thickener Type                               |             | Lithium Complex | Lithium Complex | Lithium Complex | Lithium Complex |
| NLGI                                         |             | 1,5             | 1               | 2               | 2               |
| Colour                                       |             | Blue            | Blue            | Blue            | Black           |
| Base Oil Viscosity,40 °C, mm <sup>2</sup> /s | ASTM D 445  | 220             | 220             | 220             | 220             |
| Timken OK, lb                                | ASTM D 2509 | 60              | 60              | 60              | 60              |
| Dropping Point, °C                           | ASTM D 566  | 240             | 240             | 240             | 240             |
| Welding Load                                 | ASTM D 2596 | 400             | 400             | 400             | 500             |
| Rust Test                                    | ASTM D 1743 | Pass            | Pass            | Pass            | Pass            |
| Cone Penetration,25°C                        | ASTM D217   | 295-310         | 310-340         | 265-295         | 265-295         |
| Water Washout, %Weight                       | ASTM D1264  | <8              | <8              | <8              | <5              |
| Oil Separation, 25°C, 24 sa.                 | ASTM D1742  | <4              | <4              | <4              | <4              |
| Wear Diameter (Four-Ball)                    | ASTM D2266  | <0,5            | <0,5            | <0,5            | <0,9            |

\* Values shown may differ between productions.

CARIUS EP 146



CARIUS EP 220



CARIUS EP 320

