

# MAK HITEMP XTRA GREASE

Premium non-soap based grease for high temperature application

MAK Hitemp Xtra Grease is a premium quality clay thickened non-soap base smooth structured grease formulated using superior quality mineral base oil and high performance additives. MAK Hitemp Xtra Grease is characterised by a very high dropping point, outstanding oxidation stability, and excellent water resistance property. It also offers good protection against rust and corrosion. The grease is fortified with 3% molybdenum disulphide (MoS<sub>2</sub>) as solid lubricant for protection of moving parts under severe shock load.

### Applications:

MAK Hitemp Xtra Grease is suitable for lubrication of machine elements, plain bearing and anti-friction bearings operating at high temperatures such as hot air blower bearings, soot blowers, overhead cranes, oven conveyors, sliding machine elements, paper mill dryers, sugar mills etc. It is also recommended for lubrication of various steel plant applications where the components are subjected to heavy loads and frequent shocks at high temperatures.

### Performance/ Benefits:

**High Drop Point** – high drop point demonstrates ability to handle high temperatures and provides excellent performance under high temperature conditions

**High Oxidation Stability** – grease offers high resistance to oxidation and thermal break down. Ensures reliability, longer operating life and less maintenance.

**Excellent Shock Load Carrying Ability** – due to presence of MoS<sub>2</sub> in the formulation, the grease has good shock load carrying ability, making it suitable to protect and lubricate the machine components even under intermittent loads.

**Excellent Water Resistance** – offers excellent water washout resistance and does not get washed away due to water ingress/ contact thereby providing superior lubrication and protection in wet environments.

**Very Good Mechanical Stability** – possesses excellent mechanical stability which helps in avoiding loss of consistency and any leakages during severe operations.

**Excellent Rust Protection** – antirust and anticorrosion additives in the formulation impart the ability to protect

bearings from rusting and early degradation. Hence longer bearing life.

### Performance Level/ Specification:

- IS 12790 : 1999 (Grade 2) (Reaffirmed 2014)

### Typical Physico-Chemical Data: MAK Hitemp Xtra Grease

| Characteristics                        | Method       | Value      |
|--|--------------|------------|
| NLGI Grade                             | -            | 2          |
| Appearance                             | Visual       | Smooth     |
| Color                                  | Visual       | Grey Black |
| Type of Thickener                      | -            | Clay       |
| Worked Penetration, @ 25°C, 60 strokes | ASTM D217    | 290        |
| Drop Point, °C                         | ASTM D2265   | >280       |
| Oil Separation, % wt.                  | ASTM D1742   | 0.5        |
| Thermal Stability, % wt. loss          | ASTM D6184   | 1.4        |
| Operating Temperature Range, °C        | -            | -20 to 170 |
| MoS <sub>2</sub> Content, % wt.        | IS 1448 P:58 | 3          |
| Copper Corrosion at @100°C for 24 hrs. | ASTM D4048   | Negative   |

### Storage & Handling:

The product should be stored inside. Keep it properly sealed to avoid contamination. Avoid freezing. Shelf life is 2 yrs. under protected conditions.

### Health & Safety:

It is unlikely to be hazardous when properly used in recommended applications. Contamination of the grease from other oils, greases, chemicals, dirty water etc. can occur during the use. It should be avoided. Regular monitoring of the in-use product is recommended.