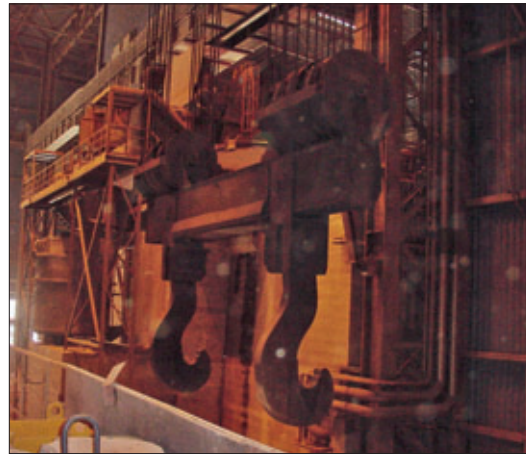


Lubrication of gantry cranes in steelworks

Synthetic High-Temperature Grease



Advantages and benefits

- Excellently suited for bearing points subject to extremely high temperatures
- Protects against corrosion
- Protection of bearings against harmful impurities
- Maintenance of lubricating effect, even in the presence of water
- Forming of only minimal residues when operating temperature is exceeded

In large plants gantry cranes ensure the efficient transportation of heavy loads between the various workplaces. Whether only one crane is being used or more than a hundred cranes, regular maintenance of these facilities is often only carried out insufficiently since they are installed at ceiling height.

Although reliability of the cranes is always required without additional effort and irrespective of the varying operating conditions, such as outdoors, in extremely hot or cold halls or in a chemically aggressive environment. The standard lubricants used in series often do not meet the operational requirements. The optimal lubricant can only be specified when the operating conditions of the individual lubricating points are well known. In combination with central or automatic lubricating systems, relubrication is facilitated decisively and thus reliability and availability of gantry cranes in factory operation are clearly improved.



Product description

OKS 424 is based on a high-viscosity, fully synthetic base oil and an organic thickener. The soft consistency of the grease ensures not only good transportation through the central lubricating systems but also optimal distribution of the grease at the lubricating point. At high operating temperatures the high base oil viscosity allows a load-bearing lubricating film. In addition the added temperature-stable additives offer optimal protection against wear.

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Example of use: Synthetic High-Temperature Grease

In one of the largest steelworks in Saudi Arabia OKS 424 is used to lubricate all the roller bearings of the running wheels of the longitudinal and transverse beams of the gantry cranes. The bearings are lubricated by means of central lubricating systems. These cranes have a bearing load of 15 to 260 tons. Depending on the operation site they are operated more than 20 hours a day at temperatures between 40 °C and 160 °C.



The maximum lifting height lies, depending on the crane at almost 30 m.

In the past bearing damage occurred time and again. The most common cause was that the bearings were not lubricated due to clogged lubricant lines. The enormously high pressure that was required to convey the multipurpose grease that was used beforehand resulted in extremely strong oil separation within the system. The remaining hard residues of the grease then block the lubricant lines. The soft consistency of OKS 424 allows significant lower conveying pressures and guarantees perfect supply of the bearings even for long conveying distances.

In addition it was possible to notably reduce the relubrication quantity with OKS 424, in particular at those bearings that were subjected to high temperatures. In view of the confusion certainty and supplier reduction OKS 424 is now used successfully as the standard grease in this factory.

Further OKS products to be used for the lubrication of gantry cranes

OKS 451	For lubricating the ropes of the lifting equipment at normal temperatures and operating conditions.
OKS 3521	For lubricating the ropes of the lifting equipment at high temperatures.
OKS 3541	For lubricating the ropes of the lifting equipment at high temperatures or under aggressive conditions.
OKS 511	For coating the rope drums in order to facilitate rope guidance. This also avoids the formation of scoring on the surface of the rope drums that leads to increased wear of the rope.
OKS 240	To ensure perfect mounting and dismantling at screwed connections and to lubricate the guides of the brake shoes in the brake system.
OKS ChronoLube	Automatic re-lubrication system to ensure the supply of inaccessible lubrication points over a longer period.