

CORRUGATOR

Lubrication for Corrugator

In a Corrugator machine, there are numbers of rolls, chains operating under high-temperature environment up to 180°C and higher.

One of the critical factor to expand service life of the corrugating system is lubrication, which functions to minimize wear, or in another word, to minimize the surface-to-surface contact of roll bearings and chain connections.

Factors taken into consideration would be the high-temperature, high-loading, and exposure to steam.



Corrugating Rolls

High-temperature Bearing Grease

These large Interchangeable corrugating rolls have large roller bearings on each end. For heated single facer roll bearings, one needs a grease which is thermally stable in the high-temperature operating environment, which easily reaches 180°C and higher.

For this Dulub offers:

NyeCorr 140

It is PFPE oil thickened with PTFE. PFPE is chemically stable up to 343°C. It will not burn and does not react with oxygen. PFPE grease, which forms its own seal around the bearings, also resists long-term contact with steam. PFPE has a density much higher than the typical hydrocarbon lubricant, which provides superior load-carrying and film-forming capability.

If the working conditions, such as temperature, are not that critical and cost is a concern, than one may consider the alternative:

LAGERFETT GU986

It is a specially formulated high/low temp, high speed grease based on synthetic fluid and organic polymer.

The synthetic base offers a very good thermal stability. And due to its strong oil film, it can take high load and shows out excellent anti-wear property. The organic polymer thickener makes it very suitable against thermal stress attack. The long-term operating temperature range is defined as -40 to 170°C. For short / peak, 190 / 210°C is also possible.

Surface Lubrication

It is common that surface of corrugating rolls gets contaminated by glue residual and paper scrap. Therefore, periodic surface maintenance, i.e. weekly, is necessary.

Clean the roll surface with compressed air or water. After cleaning, apply silicone oil to the roll surface to protect it from corrosion.

For this Dulub offer:

Forsil 1252

It is a special silicone formulated to meet high demand of severe conditions such as high/low temperature and long service life.

Chain Systems

For high temperature chain systems, up to 180/220°C with pressurized oil stream system, we recommend:

HOTENLINK KTN351

Combining lubricity, good penetration and adhesion, anti-corrosion, non-carbonizing and low evaporation, HOTENLINK KTN351 extends chain-system life longer than most other lubes do.

For medium high temperature applications, up to 160°C/200°C, we recommend:

HOTEMPFLUID ETR130

It has superior thermal stability, no carbonization residue in high-temp. It possesses high polarity that gives good adhesion toward metal surface. It exhibits good protection against copper corrosion. And it has high viscosity index number which yields less viscosity change.

Preheater Unit

For bearings of preheater roll, which operates at temperature up to 180°C, we recommend:

LAGERFETT GU986

(product as previously described)

Roll Stand

For a roll stand, a hydraulic drive fluid is needed.

For this Dulub offers:

Circusyn SHC46

It gives the proper viscosity and VI value, as well as protection against wear and rust, and the oxidation stability, as needed by hydraulic drive fluid.



杜特潤企業股份有限公司
Dulub Co., Ltd.
www.dulub.com.tw