

your global specialist

A powerful partner in corrugator industry applications

Klübertemp GR AR 555

The corrugator process

The corrugator manufacturing industry today faces the dual challenge of delivering quality products while at the same time meeting the ever increasing demands of volume. The industry is growing rapidly and it is imperative for each producer to adopt the most cost effective manufacturing practices.

In such a scenario, having frequent downtime and shorter re-lubrication intervals can have a significant impact on productivity, as well as cost-effectiveness. More often than not, these problems are related to the corrugator roller bearings, which are exposed to a high temperature and corrosive environment. Therefore, selecting the optimum lubricant for this application is critical.



Your typical application requirements

- Temperature up to 200°C
- Medium speed (20-200 rpm)
- Re-lubrication every 4 weeks or more (depending on equipment and operating conditions)
- Corrosive conditions in case of steam heating
- Aggressive and dusty environment

Our Solution: Klübertemp GR AR 555

- Increased production (less downtime)
- Reduced cost with longer lubricant life
- High temperature resistance
- Longer component life due to high performance corrosion protection
- High chemical resistance
- Low evaporation rate
- Minimal maintenance cost due to longer service life
- Excellent performance in aggressive environment
- We provide you with an NSF H1 certified product which might be required for packaging of certain food and pharmaceutical products. In addition, our manufacturing facilities for this lubricant are NSF ISO 21469 certified.

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How does Klübertemp GR AR 555 compare to other PFPE greases used in corrugator bearings?

Key product data	Klübertemp GR AR 555	Competitor Grease
Base oil, Thickener	PFPE, PTFE	PFPE, PTFE (sodium nitrate)
Color space	White	White
Density at 20°C	1.9 g/cm ³	1.9 g/cm ³
NLGI grade, DIN 51818	2	2
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D 7042, 100°C	Approx. 420mm ² /s	Approx. 240mm ² /s
Kinematic viscosity, DIN 5162 pt.01/ASTM D-445/ASTM D 7042, 100°C	Approx. 39mm ² /s	Approx. 25mm ² /s
Evaporation loss, ASTM D 2595 22h/204°C	1.3%	2.5%
Four ball test (mm) T=1hr, 200N RT	0.3	0.47

Summary

- Klübertemp GR AR 555 has a higher base oil viscosity than the competitor, which ensures better wear protection.
- Klübertemp GR AR 555 only has 1.3 % weight loss while the competitor has 2.5% weight loss. Less evaporation loss results in longer re-lubrication intervals and less grease consumption.
- Klübertemp GR AR 555 has a 0.3 mm wear scar while the competitor reaches 0.47 mm. A lower value wear scar indicates better wear protection and longer bearing life.

Field Test

Key product data	Klübertemp GR AR 555	Competitor Grease	Comments
Color	Brown	Dark Brown	Less contamination in Klübertemp GR AR 555
Element Analysis	Cu: 1,231 Fe: 8,596	Cu: 1,533 Fe: 17,861	Obvious better anti-wear performance of the Klübertemp GR AR 555 (results in increased protection of the bearing)

Conclusion

Not only does the Klübertemp GR AR 555 show improved evaporation loss and wear protection in a test lab, field test results confirm this!