

# Tutkimustietoa vetonivelrasva Arctos U5-S on hyvä

Alhainen kitka yhdessä alaiseen kulumiseen. Lisää ikää vetarille.

GPa in new countertrack technology. With this large increase in contact pressures, a challenge of improving durability of CVJs appears for development of lubricants.

Fig. 8 shows a new generation of grease developed by GKN in the 2000s. With a good understanding of the tribology systems in a new design, this new generation of grease performs with a great improvement in the life of CVJs during back to back tests on GKN bench test rig using same batch of CVJs to fulfil GKN requirement for OEM applications. In a fundamental study, it is interested to see that the new generation of grease provides an improvement in the life of CVJs where a large increase exists in Last Non-Seizure Load (LNSL) and Welding Load in 4 ball tests in laboratory, (Fig.8).

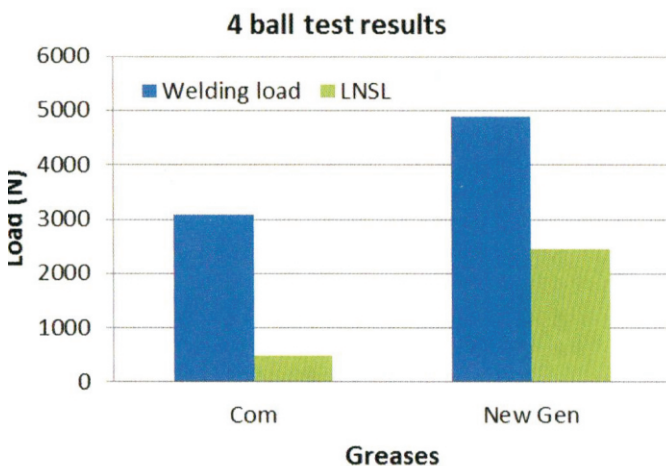
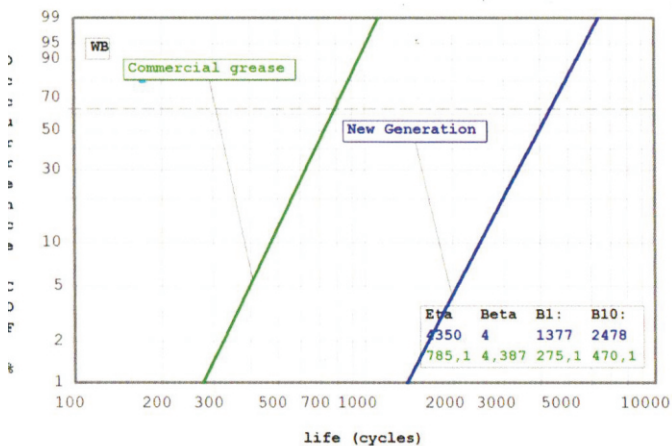


Figure 8. Improvement of CVJ life from understanding requirement in new tribology system.

Achieving low friction in design of grease formulation plays one of the most important roles in improving fuel economy in CVJ systems.

Fig. 9 shows an influence of GKN greases on efficiency of fixed ball type of CVJs. At 15 degree working angle in the same fixed ball type of CVJs, a reduction of about 32% in energy loss could be achieved in GKN standard tests using the advanced grease to replace the commercial grease. In the advanced grease, a synergic effect was investigated and designed between physical and chemical additives in grease formulation where an additive package mainly based on physical lubricants is designed in the commercial grease.

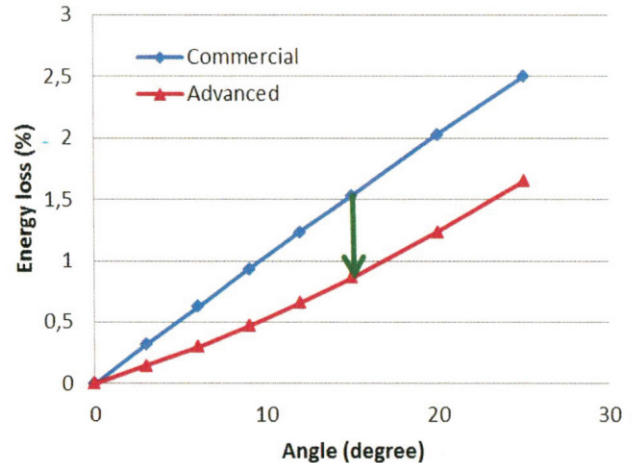


Figure 9. Efficiency of fixed ball type of CVJs.

Inspection shows that contact surfaces of inner races and outer races would become smooth in the fixed ball type of CVJs after use for a long period under heavy conditions, (Fig.10).

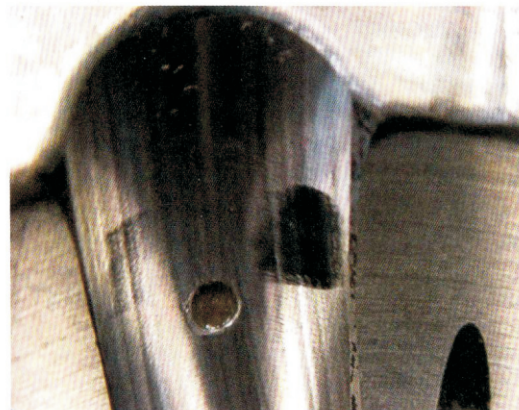


Figure 10. Contact surface of outrace after CVJ tests.