

Grease Lubrication in Rolling Bearings

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Abstract:

The reliability of grease lubricated bearings is often determined by the life of the grease. This finite life is caused by mechanical and chemical degradation. This again depends on the grease type and bearing operational conditions (speed, load, temperature etc.) and bearing type. In this presentation the lubrication mechanisms of grease lubricated bearings will be explained. Next, it will be shown how to select a grease and how to calculate grease life.

Bio:

Piet M. Lugt, Senior Scientist at SKF Research and Technology Development and Full Professor Tribology-based Maintenance at the University of Twente

Piet Lugt studied mechanical engineering and tribology at the University of Twente in The Netherlands (PhD. 1992).

He worked at the Technical University of Delft until 1995 when he joined SKF Research where he has fulfilled several positions in Tribology and Lubrication, presently as a Senior Scientist, primarily working on the development of models for grease life and grease selection.

He has been a part-time Professor at Luleå Technical University, Sweden, from 2005-2008 and has a (part-time) chair at the University of Twente, The Netherlands, in "Tribology-Based Maintenance" since 2011.

Piet has written the book "Grease Lubrication in Rolling Bearings".

