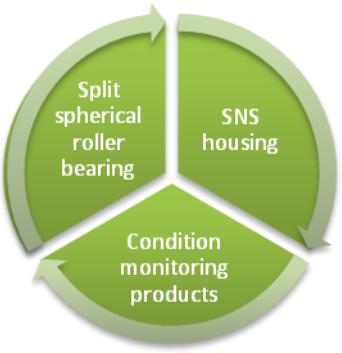
CONTENTS:

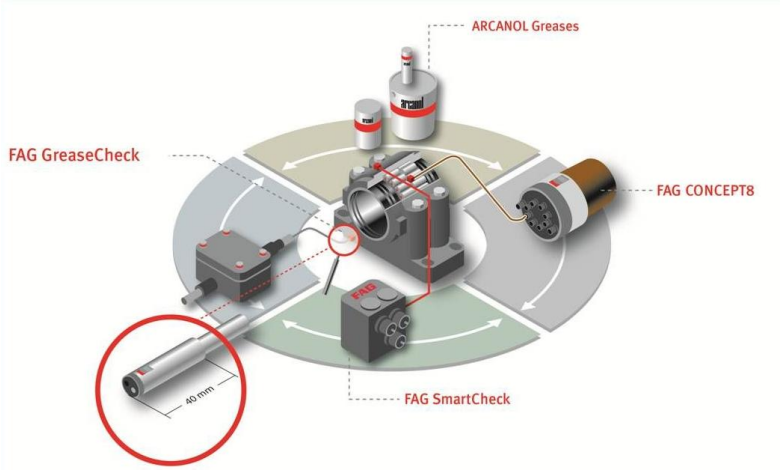
Reducing the Total Cost of Ownership: System Solution with Split Spherical Roller Bearings, SNS Plummer Block Housings, and Condition Monitoring Products

TCO – total cost of ownership. This concept is becoming increasingly important, especially in times of difficult economic conditions. Here, the total cost of ownership is taken into consideration – in other words, not only the direct procurement costs, but also the indirect aspects of use, such as repairs, maintenance, and downtimes. The challenges we all face include enormous cost pressure and the need to reduce downtimes.

In order to help you with these challenges, Schaeffler is offering the following **economic system solution from a single source:**

- **Split spherical roller bearings** combined with the new **SNS plummer block housings**.
- **FAG SmartCheck, FAG GreaseCheck, and FAG CONCEPT8** as an innovative system consisting of grease and oscillation monitoring units as well as an actuated lubricator.





Take advantage of the benefits of split spherical roller bearings along with the new SNS housings, and achieve optimum total cost of ownership savings.

Advantages of Split Spherical Roller Bearings:

- Reduced total cost of ownership
- Assembly/repair times reduced by 50% → fewer downtimes and production stoppages
- Very easy assembly procedure
- Faster bearing replacement in spots that are difficult to reach
- Can be installed in all plummer block housings without reworking
- Greater safety for man and machine
- Internal design according to E1 design

Advantages of SNS Housings:

- 50% greater bearing operating life
- Completely compatible with popular competitor models
- Uses a single SNS housing type for multiple bearing sizes due to its modular design principle, reducing stock holding and costs
- Fast assembly
- Increased breaking resistance
- Numerous seal varieties
- Improved corrosion protection
- Optimum lubricant supply
- Precise housing alignment
- Condition monitoring available right away
- Cost-effective system solution from a single source

For the following applications, we recommend the split spherical roller bearings along with the new SNS housing:

- General plant and machine construction
- Mining applications and conveyance
- Wood and particle board industry
- Gravel quarries
- Spiral conveyors
- Blowers & ventilators

For further information, or if you have any questions, please contact your Schaeffler sales team.

Optimum Design Support with the Housing Selection Assistant in *medias*®

Finally here: the new *medias*® housing selection assistant!

Another boost to the Schaeffler housing initiative is the newly developed *medias*® housing selection assistant.

The assistant provides you with support when selecting INA and FAG housings and housing units. It takes environmental factors, housing properties, and bearings integrated in the housing into consideration.

The assistant helps the user to both select the right housing for a bearing and also select suitable bearings for certain housings, and it can be launched quickly from the medias® start screen.

The basic **advantages of the new housing selection assistant** at a glance:

- User-friendly interface thanks to a self-explanatory structure
- Heightened recognition of the user interface by using the familiar medias® layout
- Clear representation of the relevant selection criteria in two main areas:
  - System properties
  - Bearing or housing properties
- Simple input masks using pictograms
- Increased interactivity
- Clear representation of the number of hits
- Output of results lists with the main dimensions
- Searches possible for shaft diameters or other geometric data
- List of results with every possible combination of different accessory articles

You can find the housing selection in *medias*® at this link
http://medias.schaeffler.de/medias/ga/?lang=en&mediasS=aEChDtUu2iWd

For further information, or if you have any questions, please contact your Schaeffler sales team.

New FAG Double Hook Wrench – Precise Assembly Even Without Measuring

Description of the Assembly Procedure Without the FAG Double Hook Wrench

Measuring radial clearance is very complicated, especially for smaller spherical ball bearings and spherical roller bearings. If the bearing is installed in a housing, it is sometimes impossible to measure the radial clearance. A measurement is therefore often done without, with a rough estimate being made of the radial clearance, which is the normal method until now. To do so, the rolling bearings are pressed so far onto the adapter sleeve until only the outer ring can still be freely spun and there is a slight resistance felt when swiveled outward. However, this approach quickly leads to errors that can result in premature failure of the rolling bearings and thus the machine as well.

Precise and Fast Assembly with the New FAG Double Hook Wrenches

The method using the FAG double hook wrenches that we recommend can set the radial clearance with great precision. The radial clearance is reduced in two steps. First, the locknut is tightened slightly with a specified tightening torque. As a result, an exactly defined initial position is achieved, and the radial clearance is set very precisely in the second step. Then the locknut is tightened by a specified angle. Now the radial clearance has been reduced by the recommended 60% to 70%

Advantages of this Procedure

- Radial clearance can be set precisely without measuring.
- The procedure can be easily reproduced by any service technician.
- There is a low risk of failure for rolling bearings and the system.

Advantages Compared to the Old Version

- Larger diameter range covered
  (borehole diameter 15-75 mm)
- Assembly values now available for spherical roller bearings as well
- Standard connection for customary torque wrenches
- Set prices considerably lower for a large scope of delivery
- Special sizes possible on request

The new FAG double hook wrenches are available from October 2013.

For further information, or if you have any questions, please contact your Schaeffler sales team.

High Axial Load-carrying Capacity Through Optimized Rib Contact: New Brochure on INA and FAG Cylindrical Roller Bearings in TB Design (PIZ)

In order to markedly increase the bearing operating life under an axial load, we have developed the TB roller. TB stands for Torus Ballig. Thanks to a special curvature in the roller end faces, the load is distributed to a considerably greater surface area.

And this reduced contact pressure leads to a host of advantages for semi-locating and locating bearings.

- Increases the admissible axial load by a factor of 1.5 compared to standard bearings (old Fa / Fr ≤ 0.4; new Fa / Fr ≤ 0.6)
- Lower bearing temperature, since the frictional torque under an axial load is reduced by as much as 50%
- Greatly reduced roller wear under an axial load due to better lubricant film formation
- Longer operating life for bearings under an axial load

With non-locating bearings, the TB design improves lubrication at the point of roller/rib contact and thus bearing efficiency.

The brochure (**PIZ**) can be ordered from now and can be downloaded from the Media Library online at the following link:
http://www.fag.de/content.fag.de/en/mediathek/library/library-details.jsp?id=1239939.

For further information, or if you have any questions, please contact your Schaeffler sales team.

Lubtect® Receives H1 Foodstuff Approval

The US organization NSF International has tested the Lubtect® lubricant compound developed by Schaeffler for its compatibility with foodstuffs and has issued an H1 approval (for lubricants that occasionally come into direct contact with food).
H1 lubricants are used very frequently in machines in the food and feed industries as well as in packing machines. Since occasional contact cannot be ruled out in certain applications, it is only permitted to use class NSF, H1 lubricants for such machines in the USA and Europe.

The most important Lubtect® characteristics and features at a glance:

Characteristics

- Lubtect® is a lubricant compound consisting of a lubricant and plastic, which fills the free hollow space in the bearing as a solid porous matrix.
- Usable from -20°C to +80°C
- Usable for ball bearings and needle, tapered, spherical, and cylindrical roller bearings
- Lubtect®-filled bearings delivered on request
- No load rating loss
- Minimum radial load of >1% of the dyn. load rating recommended
- Available with and without a seal
- Lubrication lasts throughout operating life
- **New: H1 foodstuffs approval**

Advantages:

- Large quantity of lubricant stored in the bearing
- Not sensitive to external accelerations
- Additional barrier against coarse contaminants

Uses:

- Maintenance-free
- Increased operating life with respect to the application

The brochure “Lubtect® - Application-Oriented Alternative to Greased Bearings” (**SSD20**), available in our Media Library, contains further information.
http://www.fag.de/content.fag.de/en/mediathek/library/library-details.jsp?id=3403456.

For further information, or if you have any questions, please contact your Schaeffler sales team.