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Cost efficiency and environmental protection – Innovative INA radial insert ball bearings for textile machinery make it possible

Energy prices will certainly rise in the long term. The operating costs of machines and the sales prices of end products are directly influenced by the amount of energy used. Responsible companies are always looking for environmentally-friendly manufacturing processes not just because of increasingly stringent legal requirements. A question that is increasingly posed is how to improve the energy efficiency in manufacturing in order to be competitive in the long term.

The Schaeffler Group is now offering manufacturers of textile machinery and their customers a solution with the innovative INA radial insert ball bearing SH30-2BRS-AH05. This radial insert ball bearing has a cylindrical outer ring and is mounted by means of an adapter sleeve on the so-called delivery shaft of texturing machines, which are used for manufacturing synthetic fibers. This new solution reduces the friction by an average of 50% compared with conventional radial insert ball bearings! This also reduces the starting torque. In addition, significantly less energy is used during operation. The noise generated by the bearing is also reduced and higher speeds can be achieved.

How is this achieved? The Schaeffler Group's development engineers use their existing expertise to reduce the frictional torque. This is based on the design and manufacturing of energy-efficient Generation C deep groove ball bearings. The INA radial insert ball bearing has a non-contact BRS seal, which is already used successfully in deep groove ball bearings. The Development department matched the recess in the inner ring and the cage design to the proven BRS seal. The internal geometry of the outer ring was optimized and the raceway surfaces improved as in Generation C.

This results in significantly improved grease distribution and reduced contact surfaces, which induce friction.

Radial insert ball bearings in texturing machines must also achieve the required rating life even under challenging operating conditions. Grease egress and dust ingress are reduced to a minimum thanks to the BRS seal. Both of these factors have a positive effect on the operating life of the bearing. The reduced friction influences the grease operating life due to the lower heat generation and also increases the operating life of the radial insert ball bearing. Ultimately, the increased operating life gives textile manufacturers the option of extending maintenance intervals or, put another way, of reducing machine downtimes. The design of the relevant adapter sleeve was optimized to enable the new radial insert ball bearings to be mounted on shafts as simply and quickly as possible. Operating costs for textile manufacturers are significantly reduced due to the longer operating life, reduced maintenance and mounting outlay and energy

savings of radial insert ball bearings.

Conclusion: The Schaeffler Group is consistently following the global megatrend towards energy efficiency. It is offering the textile sector the innovative INA radial insert ball bearing SH30-2BRS-AH05, a particularly environmentally-friendly solution, which makes a significant contribution to the sector's competitiveness thanks to reduced operating costs. This shows once again that environmental protection and cost efficiency are not necessarily contradictory objectives.

If you have any other questions or require further information, please contact your Schaeffler Sales team.

FAG Top-Laser EQUILIGN – Simple and precise, laser optical alignment of shafts

Incorrect alignment of shafts is a common cause of downtimes on rotating machinery. Although this is not a highly complex process, approximately 20 percent of rotating units are incorrectly aligned and are potentially at risk of downtimes. At the same time, unnecessary heat generation and energy losses occur in the coupling due to incorrect alignment. Alignment can be determined and optimized quickly and precisely with the new **FAG Top-Laser EQUILIGN**. This increases efficiency while costs and energy consumption are reduced. This laser-based device is easy to use and has an intuitive design and high measurement accuracy. It is waterproof, resistant to contamination and with a weight of only 800 gram it is suitable for use in maintenance departments in a wide range of sectors. Users can choose between 20 languages – including Chinese and Russian – and display measurement data in millimeters or inches. All information required for the measurement is requested on a step-by-step basis and the device guides the user through the process to ensure a reliable and correct alignment, which is indicated by a thumbs up symbol and LEDs on the TFT display. The FAG Top-Laser EQUILIGN will be available on the market from January 2013.

If you have any other questions or require further information, please contact your Schaeffler Sales team.

Greater reliability in wind power with the Schaeffler Wind Power Standard (WPOS)

Schaeffler has introduced a new Wind Power Standard (WPOS) for its INA and FAG brand bearings for wind power applications, which fulfills the increasing demands in terms of reliability placed on wind turbines and components in the wind power sector. This new standard for products and processes means Schaeffler is ensuring outstanding quality and reliability and is offering the same high standards of quality as it is already successfully offering in the automotive, aviation, and aerospace industries. In future, the relevant products will be labeled with the WPOS designation. All bearings for wind power applications will be included in this new wind power standard by the beginning of 2014.

The Schaeffler Wind Power Standard (WPOS):

- is our quality standard for all products and processes relevant to the wind power sector.
- ensures the highest possible standard of quality and reliability, worldwide.
- indicates all bearings that have been developed and manufactured according to this new standard

The following information is also available:

- Flyer WPS (German / English)

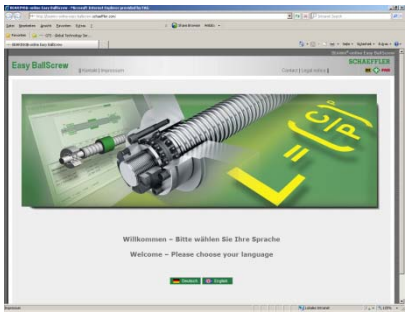
- Press release LINK

If you have any other questions or require further information, please contact your Schaeffler Sales team.

BEARINX®-online Easy BallScrew

The new BEARINX®-online Easy BallScrew module means it is now easy to calculate screw drive bearing supports with Schaeffler products yourself. The calculation program is available exclusively online and can be used free of charge after initial registration.

BEARINX®-online is your access to our Calculation know-how. This service is worldwide and permanently over all time zones available. So we may continue to move the world together.



The program can be started via our homepage from week 47:

www.ina.de or www.schaeffler.com (Products & Services > Calculation > BEARINX®-online Easy BallScrew)

For further information, the flyer PBB (German / English) is available in PDF format in our media library.

If you have any other questions or require further information, please contact your Schaeffler Sales team.