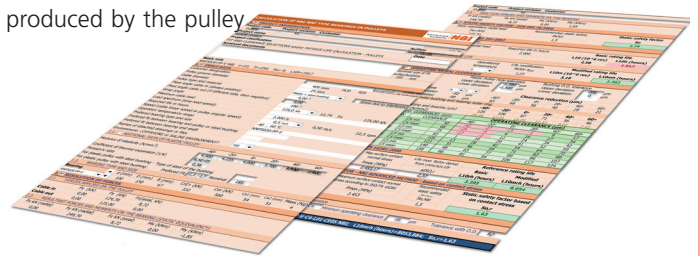


NBI develops a new software, E+asyc, Advanced bearing-pulley System Calculation

NBI has developed a new software, E+asyc, Advanced bearing-pulley System Calculation, used as a complement for Romax, for the selection of the "Double row, full complement, cylindrical roller bearings" used inside plastic and steel pulleys as well as plastic pulleys with steel bushing.

Using the E+asyc software, NBI can calculate:

- Life rating according to ISO/TS 16281.
- Static safety factor according to NBI internal standard (more accurate than ISO76).
- Operating radial clearance calculation due to the interference produced by the pulley (and bushing).



NBI bearing: Thermo-sealed cage for cylindrical thrust bearings (81...)

NBI works constantly on improving its products range. A new cage design has been developed for the 81... series. The chosen NBI suffix for this new cage is -TN2, therefore for new orders or in case of this cage is required, please consult commercial department.

Cage Characteristics:

This new cage consists of two pieces, subsequently joined by a thermo-sealed process. This open up improved characteristics for the bearing, being able to accommodate the rollers more tightly, in other words, it is possible to wrap diametrically more rollers surface. This allows more accurate

roller guidance improving the rolling conditions in the bearing and preventing or minimizing damages due to sliding movements.

Furthermore, depending on the size, this cage can accommodate one roller more, with the consequent benefits in the bearing load capacity, better load distribution between rollers and therefore a lower tension stress on the raceway.



NBI joined the Romax European Summit programme and showed the results and benefits derived from working with Romax solutions

The European Summit is one of Romax's largest and most significant events of the year and the 2013 event covered a wide range of topics for all levels of user in all product and industry areas, as well as offering a unique insight into Romax capabilities for those wanting to learn more about Romax.

NBI, together with Volkswagen AG, Robert Bosch GmbH, CETIM, GKN Driveline AB and HONDA, joined the Romax European Summit programme as speaker presenting 'Optimization of raceway profile of cylindrical roller bearings to compensate

for misalignments: Accurate life prediction by Romax'.

Romax is the world's leading provider of advanced simulation technologies for gearbox and driveline systems.

Wherever mechanical power is transmitted through rotating shafts, gears and bearing systems, NBI can now provide customers with innovative solutions to optimize their products for performance, robustness, durability, and through-life costs.

Romax uses advance methods to calculate bearing durability in the transmission application that allow consideration of all system



influences applied on the bearing:

- Deflection of the shaft and housing and subsequent misalignments within the bearings can be included in the fatigue life calculations.
- Contact stress distribution amongst the rolling elements and along roller profile can be evaluated, considering the detailed design micro-geometry within the bearing.