



ZEDEX[®] in
Tribological Polymer Solutions

Processing Machines



HIGH PERFORMANCE PLASTIC SOLUTIONS

EN 2.0

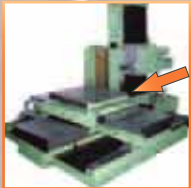
ZEDEX® in action



Rack drive wheels in horizontal transport device



Threaded nut in the drive of cross table



Slideway in machining centre



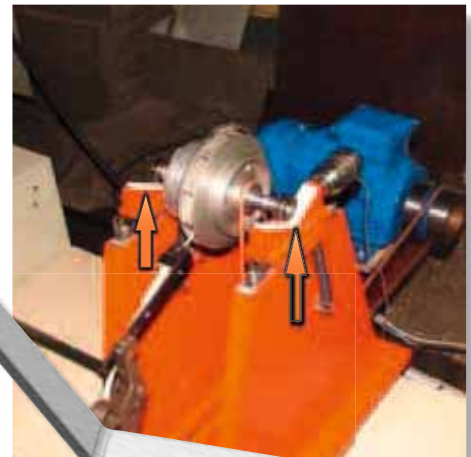
Turret bearing in a CNC-lathe

PROCESSING MACHINES



ZX-100K bushing in a lathe.

Earlier in those lathes bearings of bronze were used. They have had a big disadvantage: depending on frequency of usage and load, the plain bearing bush had to be often lubricated, which was associated with higher maintenance costs and efforts. Thanks the replacement of bronze by our material **ZX-100K** the lubrication belongs now to the past. It resulted in cost savings throughout the whole production process. Not only the customer had no longer to apply the lubricant, but has not even had to buy it any more. Furthermore the machine standing time have been reduced and the usage times increased. The biggest advantage, however, was the significantly reduction of the friction and wear of the sliding bearing, which led to a more efficient, more accurate, less stressful working process, thus extending the lifetime of the machine.



ZX-100MT as sliding surfaces in concrete sawing machine as dirt resistant bearing.

The sliding guides are used to guide the saw table, which leads the concrete parts during the cutting. Slideway made of **ZX-100MT** with a honeycomb structure able to collect the grit, meet the required properties.



Installation of a dry running **ZX-100K** bearing in a horizontal balancing machine, as a substitute for lubricated bronze bearings. Due to the excellent tribological properties of **ZX-100K** there is no more necessity to use lubrication. The maintenance efforts were reduced and the lifetime was increased by preventing abrasive wear. Despite these great advantages, also enormous costs were saved through the **Zedex®** solution.

ZEDEX® in action



Slideway in a CNC-lathe



Spindle nut in a portal milling machine



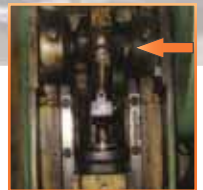
Bushings for folding gate in HSC machining centre



Round guide system in sintered metal press



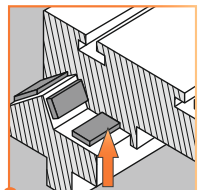
Plain bearing bush in a press



Slideway in a grinding machine



Slideway in a CNC-lathe



ZX-100K as replacement for bronze in a ball joint for swivelling bearing guidance of power and control lines. Using **ZX-100K** in dry running conditions occurs nearly no wear. Furthermore, the component is so smooth and adjustable, that it can be stopped in any position.



ZX-100K as linear bushing
In a machining centre, the built in bearings made of PTFE were replaced by bearings made of **ZX-100K**. The cutting forces occurring during machining were too high for PTFE, which led to creep and too much clearance. For the plain bearings of **ZX-100K** this load were no problem. The life time was extended and the costs reduced.

For guiding the table in CNC-lathes slide guides made of **ZX-100K** are used. The sliding guides made of **ZX-100K** allow an exact guidance. Through the usage of **ZX-100K** no lubrication is needed any longer. Thanks to the low wear, an extended working life is to be expected. Thanks to the good damping properties of **ZX-100K** a better surface roughness of the to manufacture component can be reached.



ZEDEX® in action



Trapezoidal threaded nuts in carcase press



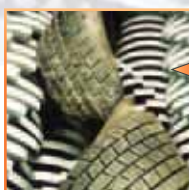
Spur gear in reeling, slitting and filament winding machine



Honeycomb structure bushing in a filament winding machine



Toothed wheel / linear guide in packaging machine



Cutters in a shredding machine



The slide bearing bushes made of **ZX-100K** in joints of a scissors lift for the load of storage shelving. The lift supports up to 4 tons. Here bronze was replaced by the plastic material **ZX-100K**. The application works now maintenance-free.



ZX-100K in a hanging conveying system for continuous assembling. In turn movements, due to the axial joint, lateral oscillations are possible and shaft alignment mistakes from production are balanced. In this application, special axial joint bearings (outer and inner diameter respectively 260mm and 80mm) made of steel with the sliding part made of **ZX-100K** are used.



ZX-100K trapezoidal threaded nuts in a lifting platform. The trapezoidal threaded nuts (TR40) of **ZX-100K** are used in the drive of a lifting platform and their load capacity is 5 tons each. It has been used as standard feature for 10 years and in contrast to the previously used spindle nut made of bronze, it is only a lubrication during assembly necessary. With this great advantage, generated by its excellent tribological properties, enormous costs were saved.



Wolf Kunststoff-Gleitlager GmbH
Heisenbergstr. 63-65
50169 Kerpen-Türnich
Phone: +49 2237 9749-0
Fax: +49 2237 9749-20
E-Mail: info@zedex.de
Internet: www.zedex.de

- Plastic wear resistance parts
- Plastic machine elements
- Customer service
- Materials development
- Components design
- Prototypes production
- Large-scale manufacturing

Handed by: