



Bearing Solutions for Printed Circuit Board Handling Systems



ready-to-fit



Printed circuit board positioning in assembly machines (Photo: Siemens AG)

Printed Circuit Board Handling in Assembly Machines

The (toothed) belt in assembly systems for electronic assemblies has to transport and position printed circuit boards with a high level of accuracy. The smaller the defined space for the transport system is, the larger the surface for inserting components on the printed circuit board can be. This of course, leads to more economical assembly processes.

These requirements pose a large number of challenges.

A Bearing Solution From INA – Ideas and Implementation

Standard tape tension pulleys cannot master the requirements of high-end assembly machines in terms of tilting clearance, frictional torque, operating life





The ready-to-fit guide rollers with and without teeth – in various manufacturing technologies, matched to the requirements of the application

The INA guide roller features significantly higher guidance accuracy compared with standard ball bearings

high-precision

and dimensions. By using the engineering and manufacturing expertise available to us in the Schaeffler Group, we have developed a ready-to-fit and cost-effective unit that fulfills all these tasks.

This is achieved by using identical parts between the toothed belt pulleys and the belt pulleys without teeth, which leads to higher quantities of single parts. The rib washers are now economically manufactured as stamped parts and the teeth are manufactured using cost-effective injection molding processes.

Plastic injection molding, forming, stamping and joining are only some of the manufacturing processes in which we as a company have a high degree of expertise. We use these processes to develop and manufacture the new tape tension pulleys economically.

Significant Benefits for Customers

At the end of the development phase, we can offer you an integrated unit that fulfills all customer requirements without compromises in the smallest of spaces.

- Ready-to-fit unit
- High tilting rigidity
- Low and uniform frictional torque
- High basic load rating
- Large grease reservoir
- Integrated seals

Your Applications

By working with you, our application engineers can find the optimal bearing solution for your printed circuit board handling systems.

Just ask us.





Schaeffler Group Industrial has a wide range of tension pulleys and guide rollers that can also be adapted to meet individual customer requirements





Your contact

Dipl.-Ing. (FH) Jens Dungs jens.dungs@schaeffler.com www.schaeffler.com/ ina/semiconductor

Schaeffler KG

Industriestrasse 1–3 91074 Herzogenaurach (Germany)

