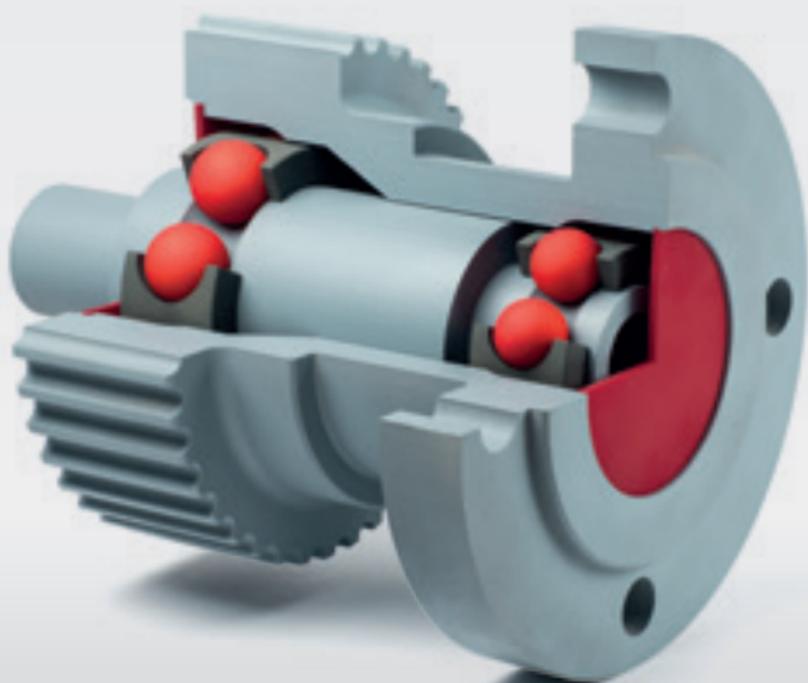


# SAURER.

Temco

## TEMCO BEARINGS. INTEGRATED BEARINGS.

—  
ENGINEERING FOR HIGHEST DEMANDS.



# ENGINEERING FOR HIGHEST DEMANDS.

Since 1957 the technically advanced products of the brand Saurer Temco are the preferred components in textile machine engineering. Leading machine manufacturers as well as end users trust the quality of these premium components.

The core competences of the company located in Hammelburg, Germany are the development, manufacturing and distribution of standard as well as customised components.

Customized bearing solutions which are not used for textile machinery are distributed under the name of Temco Bearings. The demanding field of applications here are amongst others, automation and robotics as well as the printing industry.

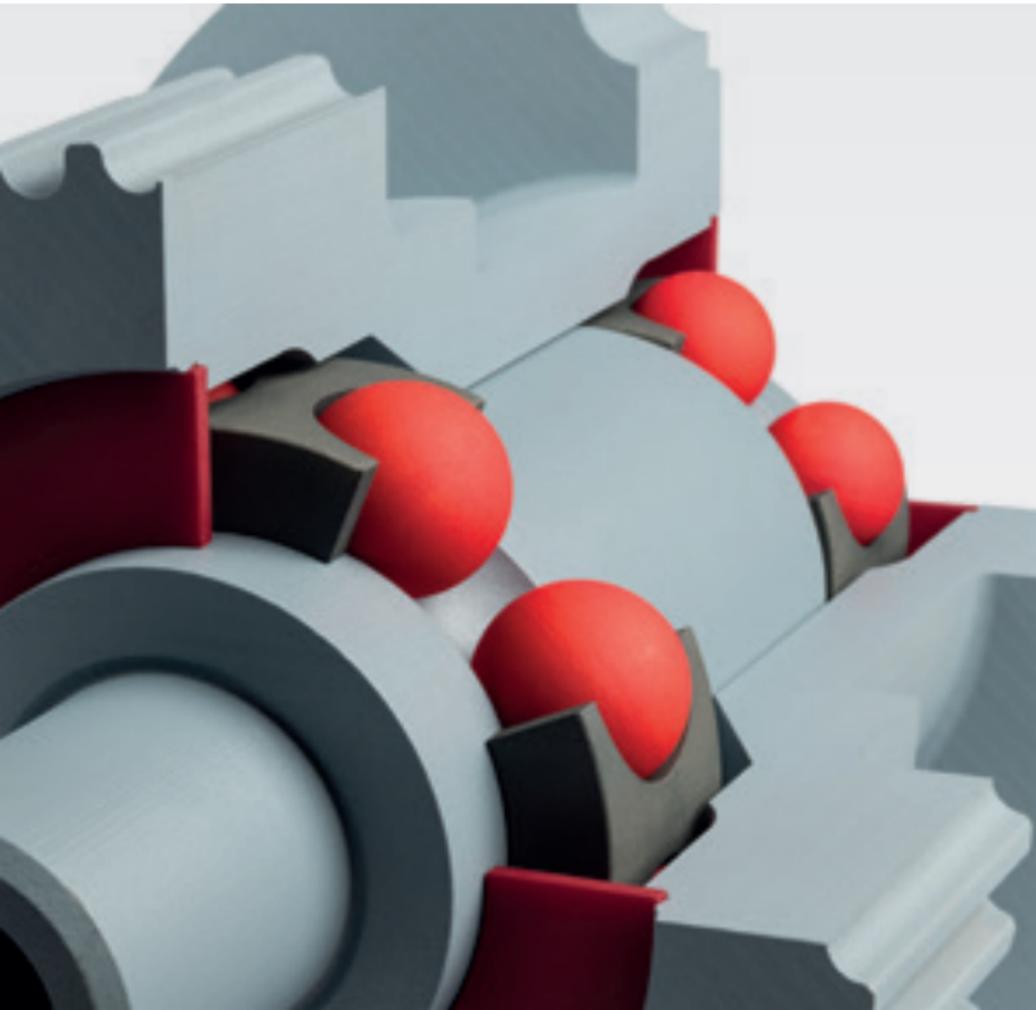
A team of around 65 employees is responsible for the manufacturing and worldwide distribution of Saurer Temco products. To guarantee customers the highest levels of service and worldwide contact persons with technical expertise there is a sale office in China and a network of experienced representatives reinforcing the organisation in Germany.

## **Bearing design for high-end applications**

Do you intend to reduce your budget for spare parts without losses in quality? Are your machine downtimes too long due to maintenance work or the exchange of wear parts? Then you should ask for a Temco Bearing solution.

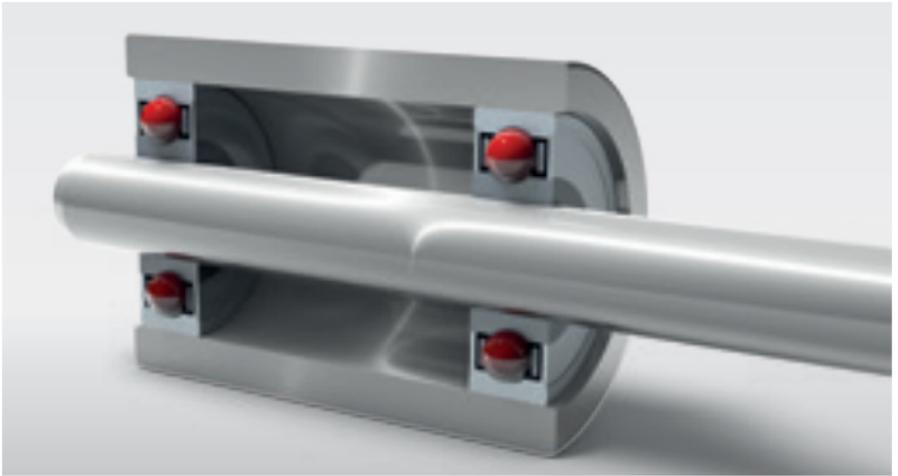
Our integrated bearing concept for high-end applications is highly successful. What are the advantages of integrated bearings and how are these advantages commercially usable?

Integrated bearings enable the implementation of very economical solutions for applications with a demand for highest speed, installation space or load.



# Bearing designs by comparison

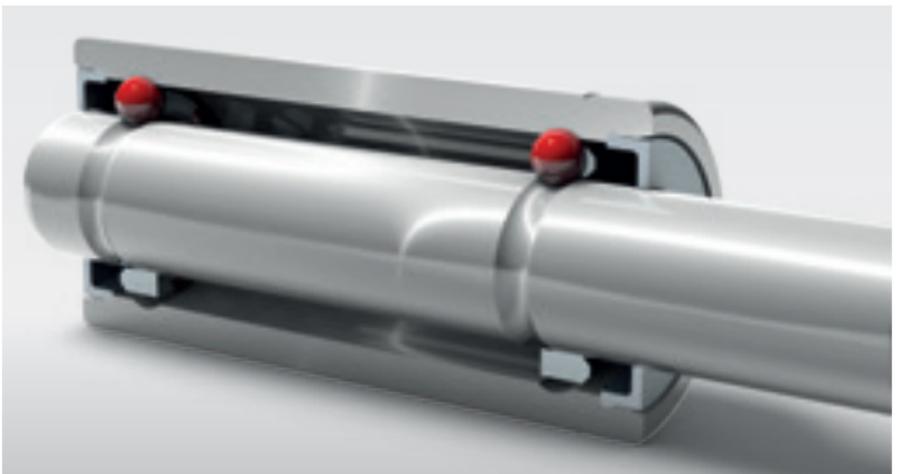
Standard designs mostly use conventional bearings, where standard bearings are installed between raceway and shaft. This design is limited, however in the areas of running speed, lifespan and starting torque. For this reason, bearings designed in this way often need changing on a regular basis.



Standard bearing

What are the key advantages of an integrated bearing? And for which applications can they be used to your benefit?

The integration of the inner internal raceways into the shaft and the external raceways in the bearing housing forms a compact and stable bearings design with several substantial benefits.



Integrated bearing

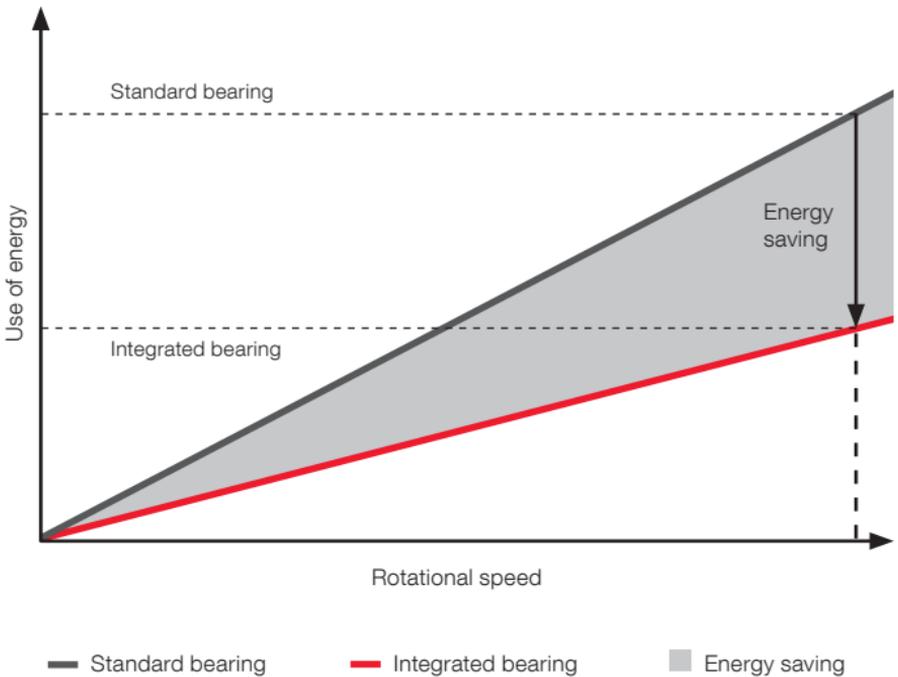
# Technical advantages of integrated bearings

- ▶ **More compact housings**
  - A clearly higher load rating with the same dimensions and therefore improved lifespan or smaller dimensions with the same load rating
- ▶ **Low starting torque, easy-gliding, energy saving**
- ▶ **Ready-to-install solutions**
  - Reduced installation effort and therefore reduced installation errors
- ▶ **Reduced number of fits**
- ▶ **Minimum dimensional change respectively deformation while installation in the housing**
- ▶ **Reduced shape and tolerance of position in the installation section**
- ▶ **Possible dimensions**
  - Shaft-Ø 4 - 75 mm
  - Outer ring-Ø 10 - 100 mm
  - Shaft length up to 600 mm
- ▶ **Higher limiting speeds compared to standard roller bearings**
- ▶ **Application-specific lubrication**
  - Lifetime lubrication
  - High grease reservoir
  - Possible relubrication
- ▶ **Superior sealing**
- ▶ **Higher rigidity of the whole system (shaft, housing)**

# Economic advantages of integrated bearings

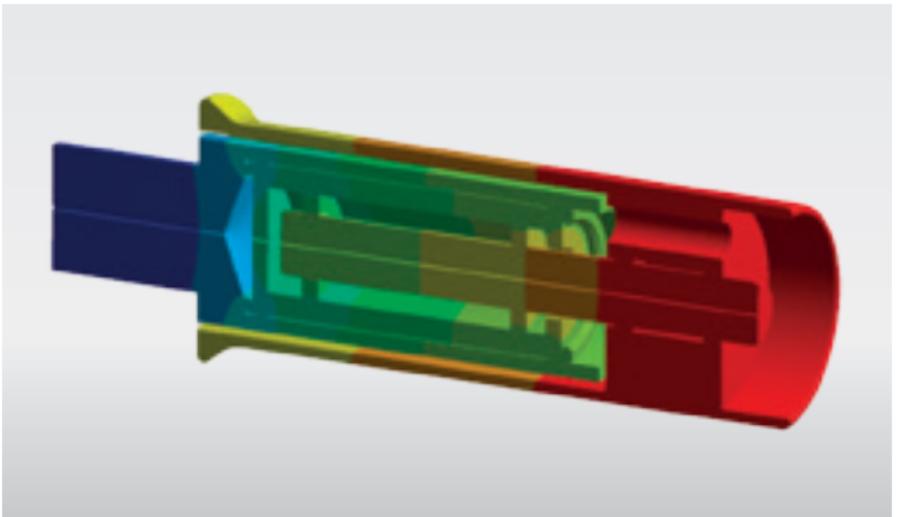
- ▶ **Economic complete solution due to integrated bearing**
  - Reduced procurement effort
- ▶ **Longer service life**
- ▶ **Low downtimes**
  - Drastic reduction of maintenance work and machine downtimes
- ▶ **Energy-saving potential**
  - Up to 50 % lower friction as a result energy savings at the same shaft diameter and the same load rating

## Energy-saving potential



# Service catalogue Temco Bearings

- ▶ **Bearing design**
- ▶ **Bearing calculation with up-to-date simulation programs**
  - Finite element calculation method (FEM)
- ▶ **Application specific lubricant**
- ▶ **Consulting**
- ▶ **Manufacturing**
  - Customized solutions for different applications
  - Use of application-specific surfaces
- ▶ **Prototyping**
- ▶ **Small and medium batches as well as large-scale production**



Bearing calculation with simulation programs according to finite element method (FEM)

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