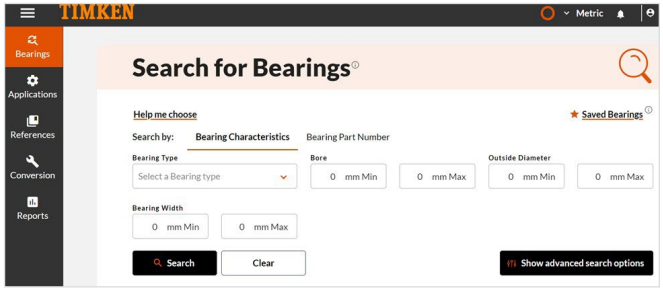
TIMKEN

Timken® Syber™ Bearing System Designer

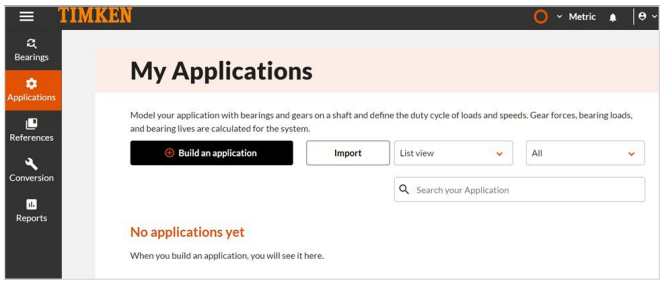
Understanding Timken® Syber™ Bearing System Designer

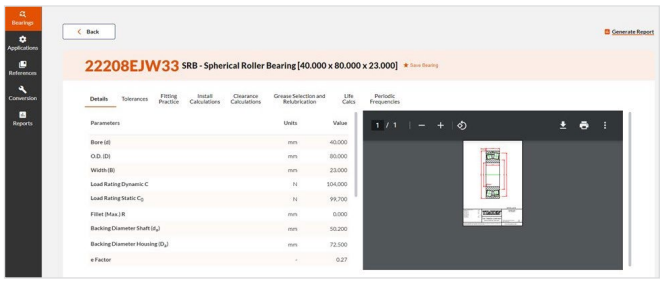
Timken® Syber™ Bearing System Designer is a multi-functional software tool that helps you select and analyze bearings within an application. One of the most powerful features of the tool is the application system analysis function, where multi-bearing systems can be modeled and analyzed for performance. To assist in system analysis, Syber includes a portfolio of calculators and configurators – such as installation calculations, clearance calculations, tolerances, fitting practices, single-bearing life calculations, lubrication calculations, speed ratings and bearing searches – to assist customers with application design, bearing selection, installation and troubleshooting.



Timken Syber Bearing System Designer Features

- An expansive bearing database with more than 30,000 part numbers and powerful search capabilities
- Tools (or calculations) for all popular bearing types including tapered, cylindrical, spherical, ball and thrust bearings
- Access to two-dimensional (2D) bearing drawings and detailed measurements
- Application analysis of the bearing in the system
- Analysis results that provide modified catalog life prediction, rolling contact, stress, torque and many other operating parameters
- Bearing selection options based on life requirements or envelope dimensions
- Easily exported files to save for design records or to be shared with Timken engineers for additional in-depth analysis





TIMKEN

Why use Timken Syber Bearing System Designer?

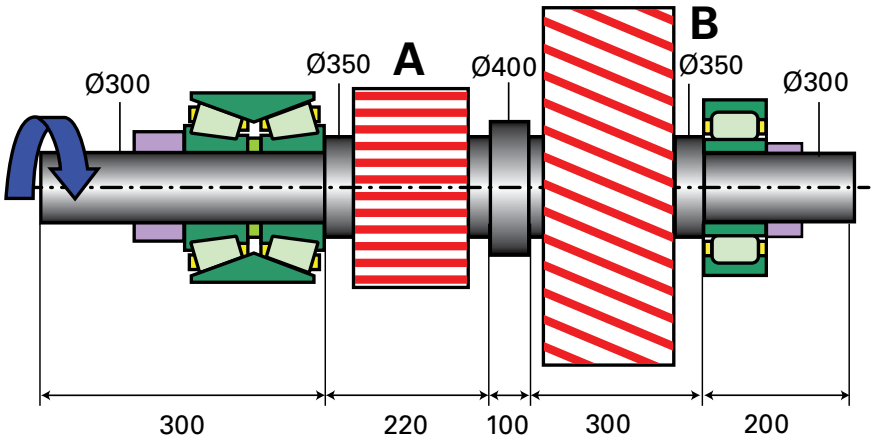
Speed. The system is easy to use and produces results quickly.

Efficiency. All bearing selections, system analyses and supporting calculations are integrated in a single software tool.

Accuracy. Bearing system analysis is more accurate than catalog or hand calculations and users can vary data inputs to simulate changes in operating conditions.

Trust. Syber calculations are developed and approved by Timken, a worldwide leader in bearings and power transmission technology. Results have been tested and validated for reliability and repeatability.

Support. Users can share Syber output data with Timken engineers who can offer additional evaluation and validation.



This is an example of an application that can be analyzed in Syber Bearing System Designer. This sample application shows a two-row tapered roller bearing (TDO) in the fixed positions and a single-row cylindrical roller bearing (NU-style) in the float position on a shaft with different gear types.

The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets bearings, gear drives, automated lubrication systems, belts, brakes, clutches, chain, couplings, linear motion products and related industrial motion rebuild and repair services.