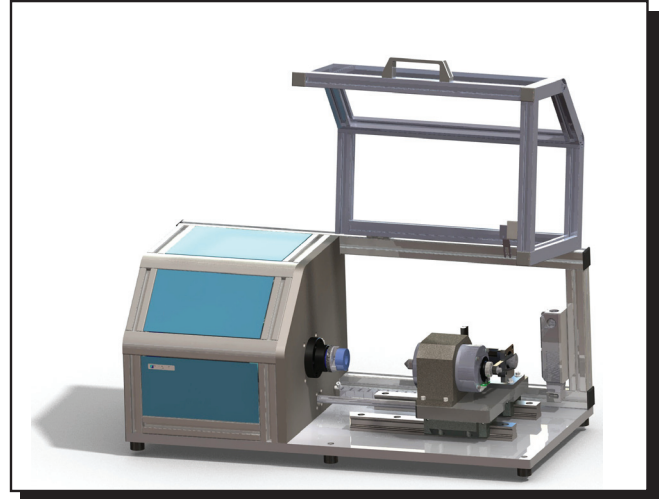


# Magtrol Bearing Tester

**Friction torque, Axial load, bearing temperature**

## FEATURES

- Measures friction torque from 0.5 m·Nm to 200 m·Nm (TBD)
- Apply, control and measure axial load during test (from 1 to 100 N)
- Control and measure rotational speed (from 150 to 10,000 rpm)
- Control and measure the temperature of the bearing (OR)
- Measurement based on air bearing technology
- Data acquisition with Magtrol software via NI card



*Magtrol Bearing Tester MBT 01*

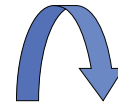
## DESCRIPTION

Leaders in the electric motor market have been working hard to cope with the increasing demand from users for more energy efficient machines and the new norms for motors manufacturers (IE1,IE2,IE3) are also now valid in Europe. When dealing with energy efficiency, every bit helps.

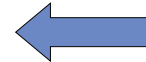
The amount of friction created inside ball bearings is directly proportional to the amount of power required to run electric machines. Bearing manufacturers are currently working to reduce this friction torque. For this reason, Magtrol has developed a new product, the MBT 01 Bearing Tester, designed for manufacturers and users of ball bearings.

This system is capable of measuring very low friction torque by reaction under axial load. This test system is unique in that it can test bearings under the same conditions as they would be subjected to in a machine (motors, pumps, actuators,...).

## APPLICATION



**Friction torque  
measurement**



**Motorized axial load  
application and  
measurement**

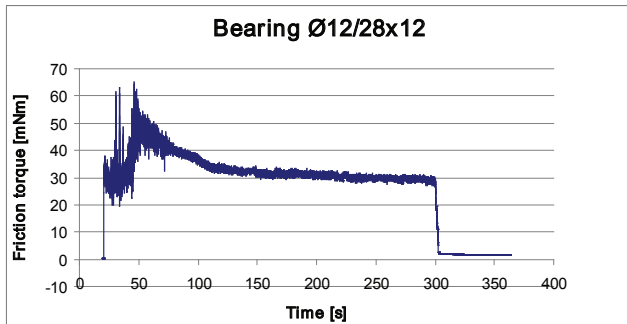
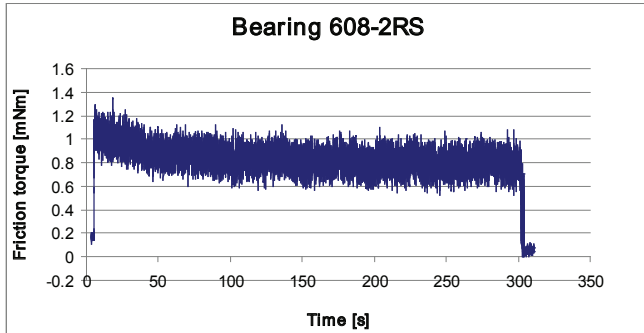


**Bearing  
temperature  
measurement**

## TEST RESULT EXAMPLES

Test conditions on radial ball bearings:

- Axial load: 20N
- Speed: 2200 rpm

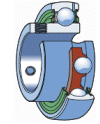


Types of bearings that can be tested:



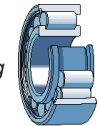
Stainless steel deep groove ball bearing

Self-aligning ball bearing



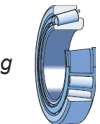
Angular contact ball bearing

cylindrical roller bearing



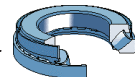
Spherical roller bearing

Tapered roller bearing

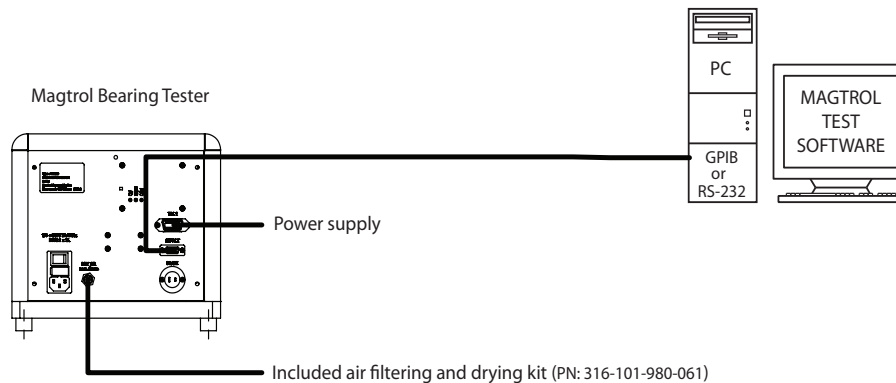


Cylindrical roller thrust bearing

Thrust ball bearing.



## SYSTEM CONFIGURATION



Due to the continual development of our products, we reserve the right to modify specifications without forewarning.



[www.magtrol.com](http://www.magtrol.com)

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