Customized Test System for Small DC Gear Motors

COMPONENTS
Magtrol has developed a customized testing system dedicated to the automatic testing of small DC gear motors up to 3 kW. The bench is equipped with:

- DSP 6001 High Speed Programmable Dynamometer Controller
- 6530e Three-Phase Power Analyzer,
- 1.5 kW DC power supply
- Temperature measuring module (able to monitor up to 4 thermocouples)
- Personal Computer.

TESTING
The hardware is integrated with M-Test 5.0 Motor Testing Software. All test parameters and test data are acquired and managed by the included software, which also allows the generation and printing of customized test reports.

This small DC gear motor test system collects the following data:

- Gear efficiency
- Electrical efficiency of a motor
- Gear play
- Test reports
GEAR PLAY MEASUREMENT

Gear play

Gear play is the turning angle of the gear output shaft if it is turned from one end position to the opposite end position at a blocked input (motor) shaft.