FEATURES
This Custom Test System is specially designed by Magtrol to measure force on linear reducers and includes:
- Equipment rack.
- M-TEST 5.0 software.
- A bench equipped with a jack to supply 100 kN of compression force, a force sensor with 0.02% accuracy and a displacement transducer.
- The ability to carry out four types of measurements on the linear reducers whose values are managed and controlled by M-TEST 5.0 software.

TESTS
1) Global Gear Play Measurement
With the reducer’s engine entry blocked, a force is applied in two directions to the reducer's shaft end using the jack. The applied force causes movement of the shaft due to the functional play in the reducer. This play is measured with a precision of 1 µm per 10 mm of area by a specific movement sensor.

2) Rigidity Measurement
With the reducer’s engine entry blocked, a force is applied in one direction (compression) and then in the opposite direction (traction). Rigidity is calculated using M-TEST 5.0 software.

3) Resistance Measurement
With the reducer’s engine entry open, a force is applied to the shaft to obtain a displacement which is measured with a dedicated sensor. The reaction to the applied force gives the value of the reducer’s resistance.

4) Unloaded Torque Measurement
With the reducer connected to the engine and the jack disconnected, the residual torque can be measured by connecting a torque transducer to the engine.

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