

Tangential Tension Gage - LT



Precision Digital Measurement of Piston Ring Tension



System Components

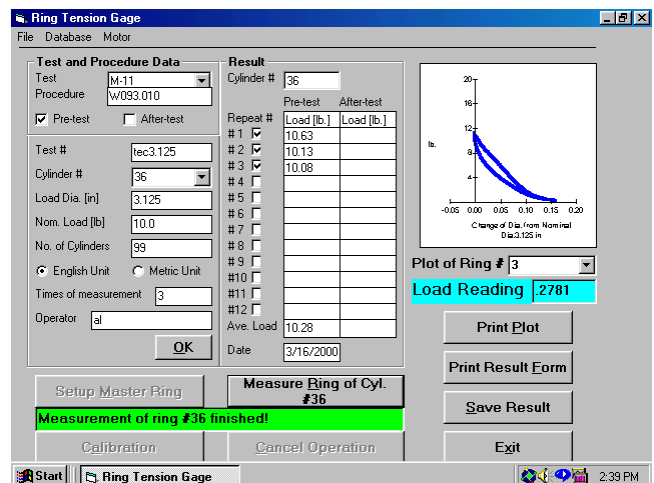
- 64 bit Intel dual core tower PC
- Windows 7 Ultimate OS
- Flat screen monitor
- Proprietary TTGage software
- Mark 10 Series 5 load cell
- Displacement sensor
- Stepper motor
- 40-50Hz vibration motor

Features & Benefits:

- Gage R&R < 25% of ISO ring tolerance
- Unique design eliminates effect of friction from the measured tension
- Data developed provides insight into tab loading and side sealing of expander
- Automatic and continuous loading and unloading of the ring via computer-controlled stepper motor
- Automatic printout of load and ability to download to a central data collection system
- Displacement sensor ensures high precision position measurement
- Mark 10 Series 5 load cell provides significantly higher data transfer

Engine performance characteristics Improved by ring tangential tension

- Oil consumption
- Blowby
- Horsepower output (friction loss)



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CKE precision digital Tangential Tension Gage – LT has been designed and developed to provide a gage that :

- Is rugged and capable of operation in a typical laboratory or manufacturing plant
- Is simple to operate
- Has significantly improved measuring precision
- Completes a measurement and creates a documented record of the output in less than 40 seconds

Operation of Unit:

- Adjust length of .004" (0.1 mm) thick by .5" (12.7 mm) wide band through use of the jog program to accept master plug
- Insert base information or call up from data base
- Click on "OK"; then "Setup Master"
- Insert dummy groove with ring to be measured
- Click on "Measure Ring"

Warranty:

- 1 year parts and labor

Capabilities of Unit:

- Ring diameters 2.000" (51mm) through 6.000" (1152mm)
- Special designs available for larger or smaller rings
- Tension range capability:
 - Standard unit – 2-50 lb (9-220N)
 - Special unit can be supplied for higher or lower values
- Acceptable ring types:
 - Compression rings
 - 2 or 3 piece oil rings

Tooling required per diameter:

- Master plug with outside diameter same as bore diameter
- Dummy groove with land diameters smaller than cylinder bore diameter

Size and Weight

- Size: 14" (355mm) H x 35" (890mm) W x 17" (432mm) D
- Weight: Approx. 100 lb (45kg)