

## TITAN<sup>4</sup> - UNIVERSAL STRENGTH TESTER T19 CALIBRATION CHECK WEIGHT SET

The T19 Calibration Check Weight Set should be used periodically, between annual loadcell calibrations, to determine the load reading accuracy on the Titan<sup>4</sup> Universal Strength Tester.

The T19 Calibration Check Weight Set cannot be used on Titan<sup>1</sup>, Titan<sup>2</sup> or Titan<sup>3</sup>. If you require a Check Weight Set for these models then contact your James Heal Agent and ask for 794-817.

## Instructions for Use

Power on the Titan<sup>4</sup> instrument and start the TestWise software and Login as normal.

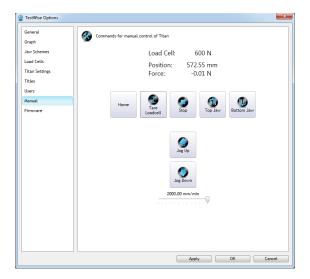
Allow the instrument 30 minutes to "warm up" so that the loadcell and its associated electronics stabilise at room temperature. This is good practise in general whenever you are using Titan<sup>4</sup> and is always done prior to calibration.

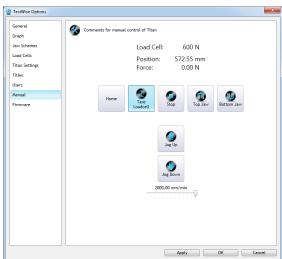


Remove both the top and bottom jaws from the screw thread adaptor.

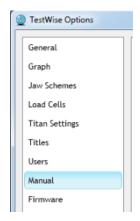
Fit the Check Weight Holder in place of the top jaw. This allows the five circular weights to be centrally positioned on the loadcell.







From the File menu, choose Options, then Manual.



Click Tare Loadcell to zero the loadcell reading.









One at a time, carefully place all 5 circular check weights on to the Check Weight Holder, ensuring they are mounted centrally.

Record the Force reading after the <u>fifth</u> (final / last) weight has been added.

Load Cell: 600 N

Position: 572.55 mm Force: 10.01 N



The second weight.

Load Cell: 600 N

Position: 572.55 mm Force: 20.02 N







The third weight.

Load Cell: 600 N

Position: 572.55 mm Force: 30.03 N



The fourth weight.

Load Cell: 600 N

Position: 572.55 mm Force: 40.04 N





The fifth and final weight.

Load Cell: 600 N

Position: 572.55 mm Force: 50.05 N

The total force you have added is 50N. The load reading on the screen should confirm this. You can use this value to determine the accuracy of the calibrated loadcell fitted to the Titan<sup>4</sup>. For 0.5% this value should be between 49.75 N and 50.25 N.

In your log you should record:

- Date and time
- Loadcell capacity and serial number
- The final reading from all 5 weights
- Pass / fail according to the tolerances above
- Initials of the operators carrying out the check

If the reading is out of tolerance and the loadcell fails the check, please repeat the check to ensure no errors have been made in the procedure. If the loadcell still fails the check, please contact your James Heal Agent to arrange for recalibration.