

# ***Head Load Tester User's Manual***

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## **Introduction**

The Top Load Tester you have purchased has been developed by S.I. Instruments to enable accurate measurement of head pressure on capping machinery thereby optimising closure application which can then be proof checked with a Mecmesin Closure Torque Tester.

With correct use and regular re-calibration it will give many years of accurate and reliable service.

## Before use

Upon receiving the unit please check that all items are present and that no physical damage has occurred during transit. Items are as follows:

- One hand held digital readout unit
- One 5 kN loadcell and cable
- One stainless steel adjustable bottle neck and locknut attached to loadcell.
- Three aluminium bases
- One AC adapter / battery charger
- One user Manual

## Warning

Do not use other than the AC adaptor provided  
240V 50Hz input / 6VDC 300mA output

Do not apply loads exceeding the 5kN rated capacity of the loadcell.  
'Error' on the display describes the applied load having exceeded 120% of the rated capacity and should be returned to the supplier for calibration to determine if permanent loadcell damage has occurred.

Do not put force on the cable going into the loadcell as damage may occur to the connection of the strain gauge.

## Powering the Gauge

The digital readout is fitted with a NiCad battery pack. Initial charging for approximately 4 hours is recommended. Overcharging can shorten the life of the batteries. A fully charged battery pack will provide approximately 5 hours of use between charges. If the batteries are lacking charge 'Lo bat' will appear on the display. When AC adapter is not in use 'bat' appears on the display.

NB: The unit will power down automatically if no operation of the device has occurred for ten minutes. This feature is designed to conserve battery power.

## Using the Gauge

### ***Connecting and Disconnecting the Loadcell***

Make sure the readout unit is switched off. Offer the plug to the unit and turn until aligned then lightly push in. For removal hold the knurled locking sleeve and gently pull out.

### ***Basic Functions***

Press the ON/Off button to switch the unit on.

Press the UNITS button to select the desired unit of measurement.

Press the ZERO button to tare out the reading to zero.

Press the PEAK button until 'PEAK' appears on the display. This is the ideal setting for Head Load Testing where the peak force applied is held on the display until zeroed.

AUTO PEAK holds the value for just a few seconds and 'tracking mode' displays the value of the applied load in real time.

### ***Setting Tolerance Limits***

The SET button allows the operator to scroll through the maximum and minimum resolution values on the display.

Each value may be increased with the 'arrow' button.

Upper and lower tolerance limits are indicated by MAX or MIN on the display.

Once the desired values have been set press the ZERO button to escape SET mode.

A measured value on the display would then be visually discriminated as

- within the set limits by a GREEN LED
- outside of the set limits by a RED LED