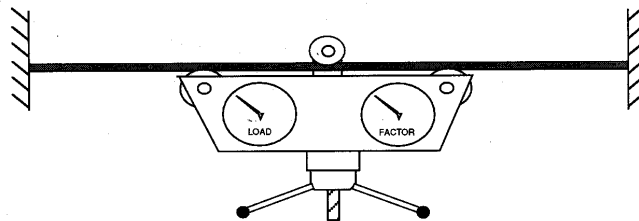


# STATIMETER

## WIRE ROPE TENSION INDICATOR (WRTI) OPERATING INSTRUCTIONS

### COMPARISON METHOD OF OPERATION

6mm - 26mm dia ropes



#### Operating principle

By deflecting an acceptably tensioned rope a known distance between the units two pulleys and measuring the force required, a comparison ref point (baseline) is established.

By using this baseline, provided all ropes are the same type, size and stiffness, even tension between ropes can be accurately achieved and monitored.

#### Instructions

1. Raise centre pulley by turning handle anti-clockwise until the WRTI unit can be placed on the rope.
2. Lower centre pulley by turning handle clockwise, until all three pulleys are in light contact with the rope. Ensure the rope is centrally located in all three pulley grooves.
3. Continue turning the handle further clockwise to create a deflection in the rope. Note that the factor gauge gives a value relative to the rope deflection and the load gauge indicates how much force is being applied to create the deflection.
4. When the desired deflection has been reached, typically factor 10 (3 degrees deflection) read the value off the load gauge. Make a note of the two readings as they are the comparison base line. Note do not allow either gauge to go beyond its scale, as damage will result.
5. Remove the WRTI unit by turning the handle anti-clockwise.
6. Attach the WRTI unit to the next rope/cable to be compared, following procedures 2 & 3. Stop turning handle when the previously noted baseline factor (deflection) reading is achieved.
7. Read off the value on the load gauge. If the load gauge reads higher than the previously noted base line reading then there is more tension in the rope. If reading is lower, less tension is in the rope.
8. Adjust all ropes to achieve the same baseline readings.
9. On open lay ropes ensure the deflection pad is in contact with a crest each time a reading is taken.

**Notes** True tension measurement requires the unit to be calibrated on a test cable of the same type to be measured together with an inline tensiometer as illustrated below.

Statimeter strongly recommend this procedure and layout is used if it is intended to use the WRTI for this purpose.

