

STATIC/DYNAMIC COEFFICIENT OF FRICTION TESTER mod. SST5

STANDARD: IEC 60851-3.B2/B4 NEMA MW 750, EMERSON TP-131

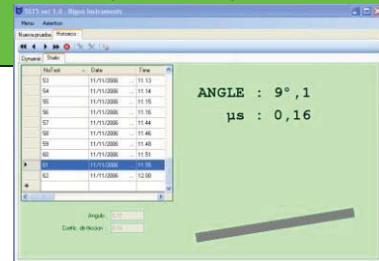
STATIC TEST PROCEDURE: The static coefficient of friction μ_s is determined by measuring the inclining angle α of a plane at the moment when a block begins to slip on the track made from the wire specimen. The wire test specimen shall be removed from the delivery spools by de-reeling over the end flange. The top layers of the spool shall be removed before testing when the wire surface is contaminated by dust or dirt. One part of the wire specimen is straightened and then fixed on the inclining plane by means of the two posts and the two clamps constituting the sliding track. The other part of the wire specimen is mounted in a similar way on the sliding block. The wire block with the wire specimen is then placed in the track of the plane to be inclined in such a way that the wire on the block and the wire on the plane are crossed at right angles at the point of contact.

The plane is then slowly inclined (approximately $1^\circ/1''$) until the block starts to slide down the track. At that moment the angle of inclination α is read from the scale. The static coefficient of friction is calculated as follow:

$$\mu_s = \tan \alpha.$$

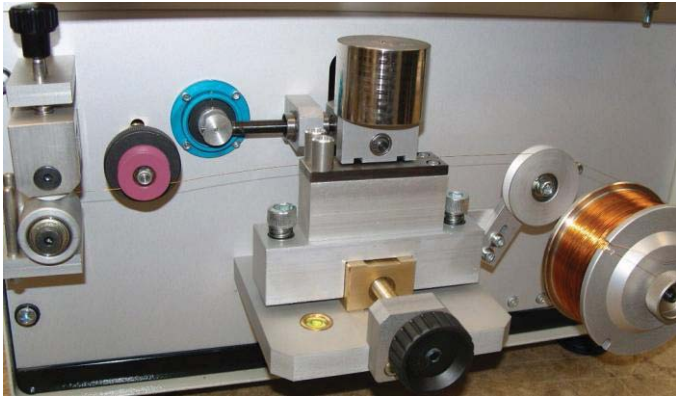
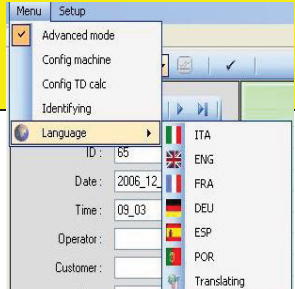
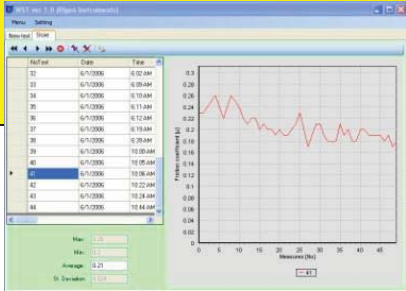
STATIC TEST FEATURES (IEC 60851.3.B2)

- Suitable for wire diameter range 0.05 mm up to 2.00 mm.
- Motorised inclined piano, inclining speed electronically regulated $1^\circ/1''$, angle α resolution 0.1° .
- Test management with industrial PC, parameters setting, automatic calculation of weight to be applied on sample wire, powerful data base.
- Automatic stopping at test block slippage.
- Direct indication of $\tan \alpha$ value, with printout of test result with customisable printout report.
- Complete of two test blocks 50 g and 500 g.



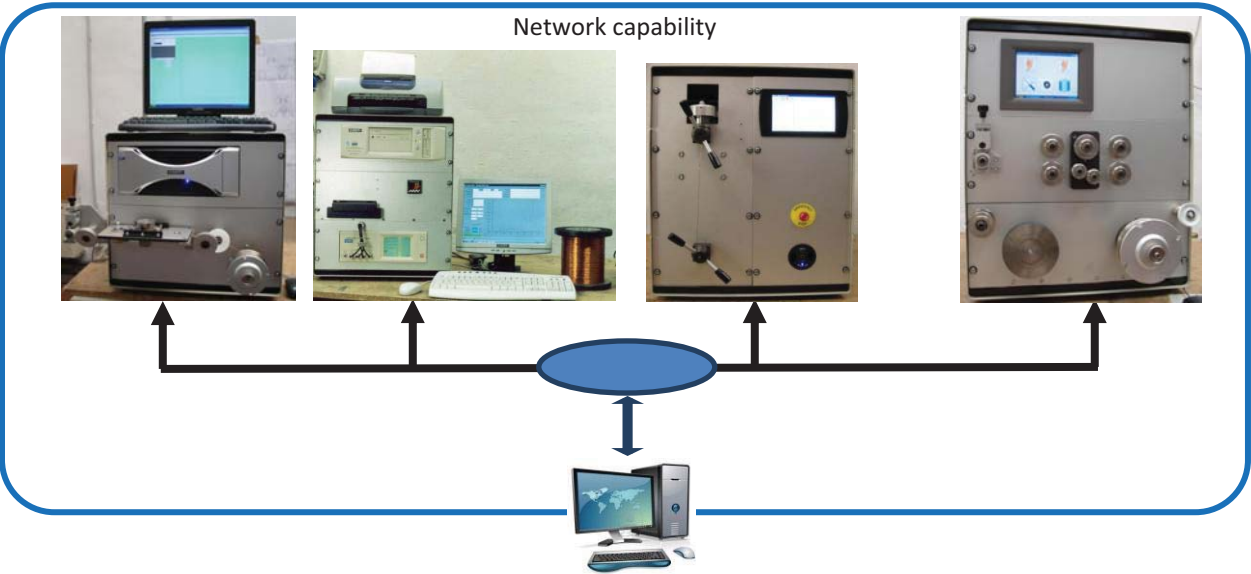
DYNAMIC TEST PROCEDURE: As coefficient of friction, which is defined as $\mu = Fr/Fn$, where Fr is the friction power and Fn the load applied on the wire. The test wire is moved at a speed of 15m/1' between a basic plate and pre loaded sapphires. The sapphires are mechanically connected to a load cell to detect the force of friction, the values detected shall be displayed and recorded at desired intervals.

- DYNAMIC TEST FEATURES (IEC 60851-3.B4, NEMA MW 750, EMERSON TP-131)**
- Load cell to detect the friction force, resolution 0.01 N accuracy 0.25%.
 - Test speed adjustable from 1 up to 30 m/1', asynchronous motor with worm gearbox
 - Complete set of weights 100g, 200g, 600g, 1000g.
 - Pc test management, setting of up to 1000 measurements per test, calculation and printout of measured values, minimum, maximum, average and standard deviation, graphical representation of coefficient of friction.
 - Powerful data base.
 - Easy calibration procedure.
 - Winding wheel for easy wire removal.



TECHNICAL SPECIFICATIONS

Power supply	Dimensions	Weight
230Vac 50/60Hz 1phase 380VA	w 550 x h 560 x d 670 mm	41Kg 90.2 lb



Data changes reserved