Static Coefficient of Friction

Model SST4

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Test procedure

The static coefficient of friction (μs) is determined by measuring the inclining angle α of a plane 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 using the two posts and the two clamps constituting the sliding track. The other part of the wire specimen is mounted similarly on the sliding block. The sliding block with the wire specimen is then placed on the plane's track to be inclined so 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°/1") until the block slides down the track. At that moment, the angle of inclination α is read from the scale. The static coefficient of friction is calculated as: μs = tan α.

System description

- Suitable for wire diameter from 0.05 to 1.60 mm (44 – 14 AWG)
- Motorised inclined plane, with test speed 1°/1" electronically controlled
- Photocell to detect the slid movement
- Test management PC controlled, with parameters set, automatic calculation of test weight to be applied according to wire diameter, tan α automatically calculated,

- Printout of test results
- Incremental encoder to measure the inkling angle with the resolution of 0,1°, tan α resolution 0.01
- Complete two test slides, 50 g, and 500g

Specifications

Model	**SST4**
SST4	
Dimensions	
Dimensions (WxDxH)	520x680x380 mm
Weight	33 kg / 72.7 lb
Power supply	
Volt	230 V
Hertz	50/60 single phase
Volt-amperes	120
Standards	
IEC	60851-3.B2
Options	

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