



TRACKVIS



DESIGN AND PRODUCTION OF
INSTRUMENTS AND APPARATUS
FOR QUALITY CONTROL
ON MATERIALS



These instruments are made in
compliance with CE health and
safety requirements



Scope

This apparatus permits the determination of the surface resistance to sliding currents on the surface of solid electrical insulating materials (produced in given pressure and temperature conditions) when, in operation, they are subjected to a voltage in the presence of an electrolyte.

Test method principle and equipment

The Trackvis is used to carry out tests for determining the comparative tracking index of electrical insulating materials with reference to the test methods ASTM D 3638-93 and IEC 112-1979.

Using the "IEC 112/ASTM D-3638 standard selector" is possible to select the standards to which the tests will be performed.

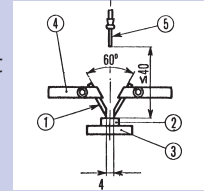
The specimen to be tested, having standardized size, is subjected to electrical currents using two electrodes resting on the surface with a pre-established load. Between the two electrodes, at regular intervals, drops of a solution of a definite conductivity electrolyte are dropped until the voltage applied across the electrodes will cause a current flow exceeding a preset value.

When performed according to the "IEC 112" standard the equipment stops the test automatically when the first

of these following condition has been reached: either when the tracking occurs; or when 50 drops have been delivered. According to the "ASTM D-3638" standard, the equipment stops the test automatically when the voltage applied across the electrodes causes a current flow exceeding a preset value. The equipment has been designed careful attention to the standard drop conditions. The TRACKVIS adopts a peristaltic pump system which has been custom designed and built in CEAST LABORATORIES. The need to perform testing according to the IEC 112 standard has lead to the development of a programmable "drop" counter that allows the operator to set the number of drops. During the test, once the set number of drops has been reached, the counter automatically stops the peristaltic pump and voltage application. This system allows the standardization of the drop volume as well as the drop cycle time, which is guaranteed according to the requirements of the standard.



- 1 - Electrode
- 2 - Specimen
- 3 - Specimen support
- 4 - Electrode holder
- 5 - Drop device



Standards

Designed and built to meet the following standards:
ASTM D 3638, IEC 112, VDE 0303 - Teil 1, NF C 26220
and other equivalents.

Technical Characteristic

Test Voltage	100 to 600 V
Short Circuit Current	1 A
Maximum Test Current	Default: 0.5 A (adjustable as needed)
Voltage Readout	on display of digital voltmeter
Current Readout	on display of digital ammeter
Voltage and Current Regulation	by autotransformer and rheostat controlled by external knobs
Electrolyte drops flow	automatic by peristaltic pump
Drop Rate	adjusted to obtain 1 drop / 30 seconds approx.
Drop Size	adjusted to obtain drops of 23 mm ³ approx. Can be adjusted to customer requirement at time of order in the factory or after delivery at the customer's site.
Drop Volume adjustment	mechanical, operated by an external knob
Drop Height	35 mm
Load applied on each electrode	1 N
Number of Drops	programmable drop counter, up to 999999
Electrode material	brass code 6265.020, tungsten (wolfram) code 6265.021, platinum code 6265.022

Technical Data	
Overall dimensions (L x D x H) with lid closed [mm]	640 x 440 x 500 approx.
Overall dimensions (L x D x H) with lid opened [mm]	640 x 440 x 900 approx.
Weight [kg]	70 approx.
Electrical Supply	230 V - 50/60 Hz - Single phase (110 V on request)
Power [kVA]	1200
Paint	fuchsia RAL 4006 - gray RAL 7035

"Due to the continuous development policy of CEAST's Research and Development Department, changes may be introduced without notice"



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