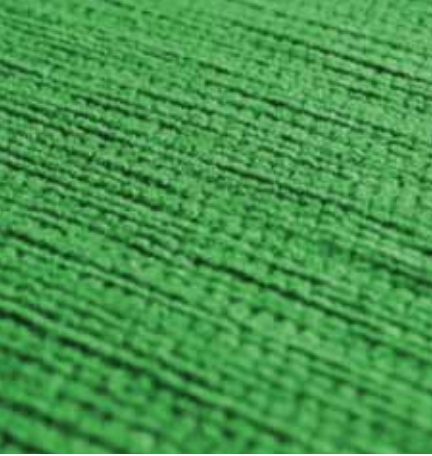


**Textechno**  
textile testing technology



**COVAFIL+**  
Capacitive Evenness Tester for Filament Yarns



**COVAFIL+**  
**Capacitive evenness tester**  
**for filament yarns**

The mass variation is one of the most important quality parameters of filament yarn. Textechno's COVAFIL+ with its novel capacitive sensor design and a self-threading high-speed yarn twister meets all requirements for an effective and reliable quality control system.

The COVAFIL+ can either be operated as a stand-alone unit or in combination with Textechno's well-proved filament yarn testers DYNAFIL ME+ and COMCOUNT, which gives highest testing efficiency and flexibility. The latter setup of testing instruments gives you - apart from tensile strength and elongation - all relevant yarn parameters with just one test system.



**COVAFIL+**  
**Capacitive evenness tester for filament yarn**

## Technical Data

### Test methods

- Measurement of mass variation with constant twist, speed, and pretension (standard test)
- Measurement of mass variation with variable twist, constant speed and constant pretension to conveniently establish the optimum level of twist
- Measurement of linear density (in combination with COMCOUNT<sup>1</sup>)
- Preparation of samples with known mass, e.g. for spin finish measurements<sup>1</sup>

### System components

- Yarn tensioner or optional positive yarn feeder
- Adjustable yarn guides for optimum yarn positioning in capacitive sensor
- Capacitive sensor with integrated electronics
- Self-threading high-speed yarn twister
- Yarn feed system by godet
- Integrated temperature- and humidity sensors to monitor the laboratory climate

### Optional components and devices

- Positive yarn feeder for controlled yarn tension, tension range 1...100 cN
- COMCOUNT automatic linear-density tester, yarn transport by laboratory air
- Automatic sample collector with exchangeable magazines (20 positions)
- DYNAFIL ME+ universal filament yarn tester for combined draw-force, shrinkage, or crimp testing (see separate leaflet)

## TESTCONTROL System

- State-of-the-art WINDOWS<sup>®</sup>-PC
- Open and documented data structure for easy data access, transfer and backup

### Automatic package changers

- Automatic package changer model SM with two positions
- Automatic package changer model ASW+ with 20 positions
- Both models can splice on the running yarn for optimum reliability and throughput

### Cabinet

- Textechno Aluminium cabinet on castors
- Dimensions HWD: 1680/ 680/ 650 mm
- Weight: approx. 120 kg (without COMCOUNT)  
approx. 180 kg (with COMCOUNT and automatic sample collector)
- Lacquer finish: RAL 9006/5002

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<sup>1</sup>Optional equipment



Sensor with Twister

### Further technical data

- Linear-density range: 10 to 4000 dtex,  
other ranges on request
- Yarn speed: 1 to 800 m/min
- Twister speed: Up to 35000 rpm
- Power consumption: 230 V, 50 (60) Hz
- Compressed-air  
supply: 5 bar, 150 l/min  
(depending on settings)

### Test Report

#### Statistics

Values displayed or printed

- Mean value (average)
- Standard deviation S
- Coefficient of variation Cv and Cv (L)
- Confidence range (95%)
- U% (unevenness)
- Minimum value
- Maximum value
- Relative count

## **Graphics**

### Mass/length-diagram

- Freely programmable cut lengths from 0.01 to 1000 m
- Half-inert and inert

### Spectrogram

- Max. wavelength: 1/4 of tested yarn length
- 160 channels, more channels on request

### Length-variation curve

- Cut lengths from 2 cm to 1000 m

## **Data storage**

### Test results

- All measured data are stored on the hard disk of TESTCONTROL System.

### Parameter storage

- All settings, group- and test parameters are stored on hard disk

### Backup

- Data and parameters can easily be copied to backup media, network devices etc. using WINDOWS® functionality
- Backup can be automated

### Data transfer

- Data structure is open and documented. Data can be transferred to LIMS-, Quality-, and other data base systems

## **General**

### Languages

- German, English, Chinese, other languages on request

### Units

- Linear density: dtex, den, tex, other units on request
- Speed: m/min, other units on request

### Testing time

- 5 seconds to 12 minutes, longer times on request

The above technical contents can be subject to changes by Textechno.



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## THE TEXTECHNO GROUP

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Your reliable partners for  
quality improvement

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