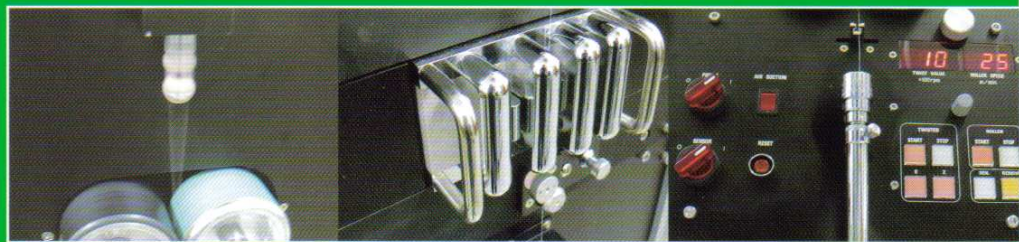


*Keisokki*

# KEISOKKI EVENNESS TESTER

model KET-80V/C & KET-QTV



## Evenness Tester Model KET-80V/C for Windows

The Keisokki Evenness Tester Model KET-80V/C for filament, the new face operating on Windows, succeeds to the legacies of the former models. KET-80V/C, as well as the former models, reveals the characteristics of filament yarn in the terms of CV%, U%, AVE, CV(L)%, etc. Plus KET-80V/C employs Windows technologies.



## What are obtained from KET-80V/C?

### Numerical data from each individual test

- CV% (coefficient of variation) and U% (mean deviation) of mass variations
- AVE (relative yarn count, or mean cross section)
- Max% and Min% (maximum and minimum cross-sectional deviation from AVE)
- R/2 (the half of the range, which is the sum of Max% and Min%)
- CV(L)% with 4 reference lengths

### Graphic data from each individual test

- Diagram of mass variations
- Diagram of mass variations in inert or half-inert mode
- Spectrogram with 160 channels at the maximum

### Statistics

- Mean
- Range (R)
- Standard deviation (s)
- CV<sub>B</sub>%
- 95% confidence limits (Q95)

### Others

- CV(L)<sub>r</sub>%
- Overall spectrogram
- Histograms of CV% and AVE

## Components

Main components are as follows. A diagram recorder as a physical device is no longer used. The diagram is displayed on the screen.

### Measuring frame ME802

Sensor unit and Drive unit are fitted together in the measuring frame.

### Main evaluation frame MEF-V

A PC system for Windows and the KT-80V/C system including the spectrograph are embedded in the frame. The spectrograph is optional. Peripheral devices of a display unit, keyboard, mouse and laser printer are also optional. Windows is preinstalled.

### LABOBANK V/AD-C

This is the KET-80V/C program, which is preinstalled in the PC system of the main evaluation frame as well as Windows.

### Electronic tension device ETD-V

ETD-V gives a precise tension to the testing filament.

### Stand

The measuring frame is put on the stand. In addition, the materials tested are collected in the stand.

### Auto cop changer ACC (option)

ACC is available. Up to 24 bobbins can be automatically exchanged one after another.



**Technical data**

**Measuring specification**

**Range of material:**  
 approx. 10 to 10,000 denier or 11 to 11,000 dTex

**Dynamic measuring range:**  
 ±100%, ±50%, ±25% and ±12.5%

**Measuring mode:**  
 either normal and half-inert modes or normal and inert modes

**Material speed:**  
 25 to 800 m/min at every increment of 25 m/min

**Evaluation time:** 10" to 19' 50" at every increment of 10"

**Twisting speed:** 1,000 to 22,000 rpm

**Twisting direction:** S or Z

**Diagram recorder speed:**  
 2.5, 5, 10, 20, 25, 50 and 100 cm/min

**Recording unit length:**  
 equivalent to 20 cm length of recording paper

**Significant CV% and U%:** 0.20% to 99.99%

**Spectrograph (option)**

**Number of channels:** max. 160 channels

**Wavelengths analyzed:**  
 4 cm to 2,451.8 m at 800 m/min and 6 minutes  
 2 cm to 1,225.9 m at 400 m/min and 6 minutes  
 1 cm to 613.0 m at 200 m/min and 6 minutes

**Amplification setting:**  
 automatic or 0.1 to 99% by manual

**CV(L)%**

**Number of channels:** 4 channels

**Reference length:** 0.20 to 10.00 m

**Electronic tension device ETD-V (option)**

**Range of tension:** 5 cN to 50 cN

**Auto cop changer ACC (option)**

**Maximum number of bobbins:** 24

**Type of knotter:** automatic fishermans knotter

**Knitting cycle:** about 3 seconds

**Trigger signal:** +12Vdc and 100 msec.

**Power supply**

**Voltage:** either 100/110 Vac or 200/220 Vac

**Frequency:** 50/60 Hz

**Compressed air**

**Measuring frame:** 0.6 Mpa and about 4 m<sup>3</sup>/h

**Auto cop changer:** 0.6 Mpa and about 4 m<sup>3</sup>/h

**Size and Weight**

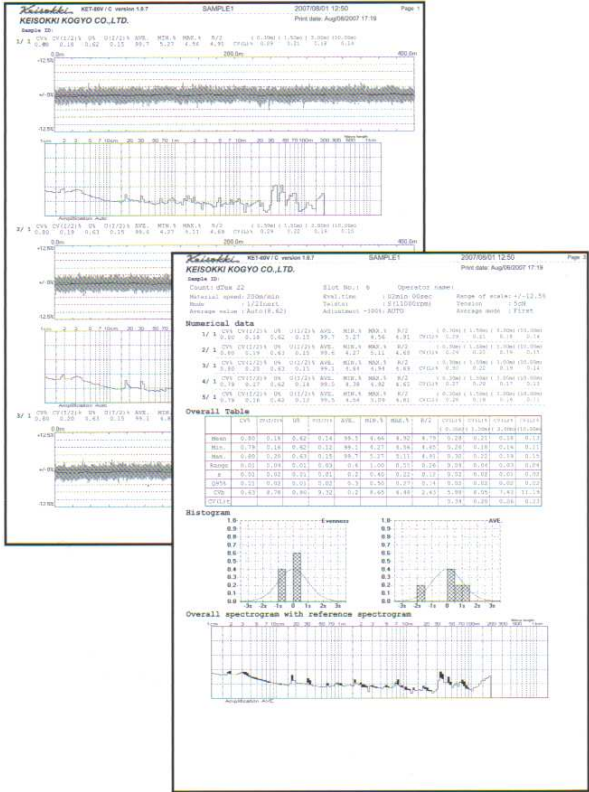
**Measuring frame:**  
 320 (W) x 646 (H) x 364 (D) mm and approx. 34 kg

**Main evaluation frame:**  
 425 (W) x 180 (H) x 500 (D) mm and approx. 17 kg

**Stand:**  
 340 (W) x 490 (H) x 450 (D) mm and approx. 14 kg

**Electronic tension device:**  
 320 (W) x 240 (H) x 147 (D) mm and approx. 5.5 kg

**Auto cop changer:**  
 535 (W) x 250 (H) x 259 (D) mm and approx. 30 kg



## KET-QTV with 4 sensors

KET-QTV is an evenness tester for filament with 4 independent plug-in sensor units. Thus the user can test 4 bobbins at a time.

## What does KET-QTV provide?

### Numerical data from each individual test

- CV% (coefficient of variation) and U% (mean deviation) of mass variations
- Max% and Min% (maximum and minimum cross-sectional deviation from AVE)
- R/2 (the half of the range, which is the sum of Max% and Min%)
- CV (L)% with 4 reference lengths
- CV (half-inert)% and U (half-inert)%

### Graphic data from each individual test

- Diagram of mass variations
- Diagram of mass variations in half-inert mode
- Spectrogram

### Statistics

- Mean
- Range (R)
- Standard deviation (s)
- 95% confidence limits (Q95)

## Technical data

### Measuring specification

**Sensor:** capacitive sensor with one electrode

**Sensor unit:** max. 4 plug-in units with one sensor each

**Range of material:** on demand at the ratio "min. count / max. count = 1 / 6" out of the absolute range of 50 to 5,000 dTex, (for example 100 to 600 dTex or 200 to 1200 dTex)

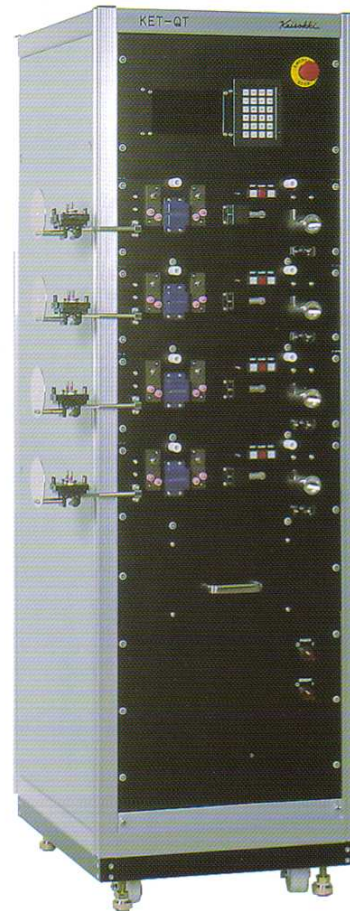
**Material speed:** 25, 50, 100, 200 and 400 m/min

**Twisting speed:** 1,000 to 11,000 rpm

**Twisting direction:** S or Z

### Size and Weight

570 (W) x 1820 (H) x 630 (D) mm and approx. 150kg



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