

KEISOKKI EVENNESS TESTER

model KET-V⁺⁺/C & KET-QTV

Evenness testing for filament yarn



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model **KET-V⁺⁺/ C & KET-QTV**

Evenness Tester Model KET-V⁺⁺/ C for Windows 8.1

The Keisokki Evenness Tester Model KET-V⁺⁺/ C for filament, the new face operating on Windows 8.1(32bit), succeeds to the legacies of the former models. KET-V⁺⁺/ C, as well as the former models, reveals the characteristics of filament yarn in the terms of CV%, U%, AVE%, CV(L)%,etc.



What are obtained from KET-V⁺⁺/ 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 170 channels at maximum, up to 1000m wave length at maximum

Statistics

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

Others

- CV(L)_r%
- 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

Sensor unit, drive and power unit are fitted together in the measuring frame.

Software

KET-V⁺⁺/ C software for Windows 8.1 (32bit) is provided by CD-ROM.

Analog Input PCB

An analog input board with full PCI connection type AD16-16U (PCI) EV is provided.

*PC (User prepare, Windows 8.1 (32bit))
Enough size to store full size PCI board;
(177(L) x 106(H) mm)*

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, 50, 100, 200, 400 and 800m/min

Evaluation time:

00'10" to 19'50" at every increment of 10"

(Measuring yarn length: Max 2000m)

Twisting speed: 1,000 to 22,000 rpm

Twisting direction: S or Z

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

Spectrogram (option)

Number of channels:

Max.170 channels

Wavelengths analyzed:

1cm to 1km

Amplification setting:

Automatic

CV (L)%

Number of channels: 4 channels

Reference length: 0.20 to 10.00 m

Electronic tension device ETD-V (option)

Range of tension: 5cN to 50cN

Auto cop changer ACC (option)

Maximum number of bobbins: 24

Type of Knotter: automatic fishermans knotter

Knotting cycle: about 3 seconds

Range of material: approx.18 to 1,080 denier
or 20 to 1,200 dTex

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 m³/h

Auto cop changer: 0.6 Mpa and about 4 m³/h

Size and Weight

Measuring frame:

320 (W) x 646 (H) x 364 (D) mm and approx. 34kg

Stand:

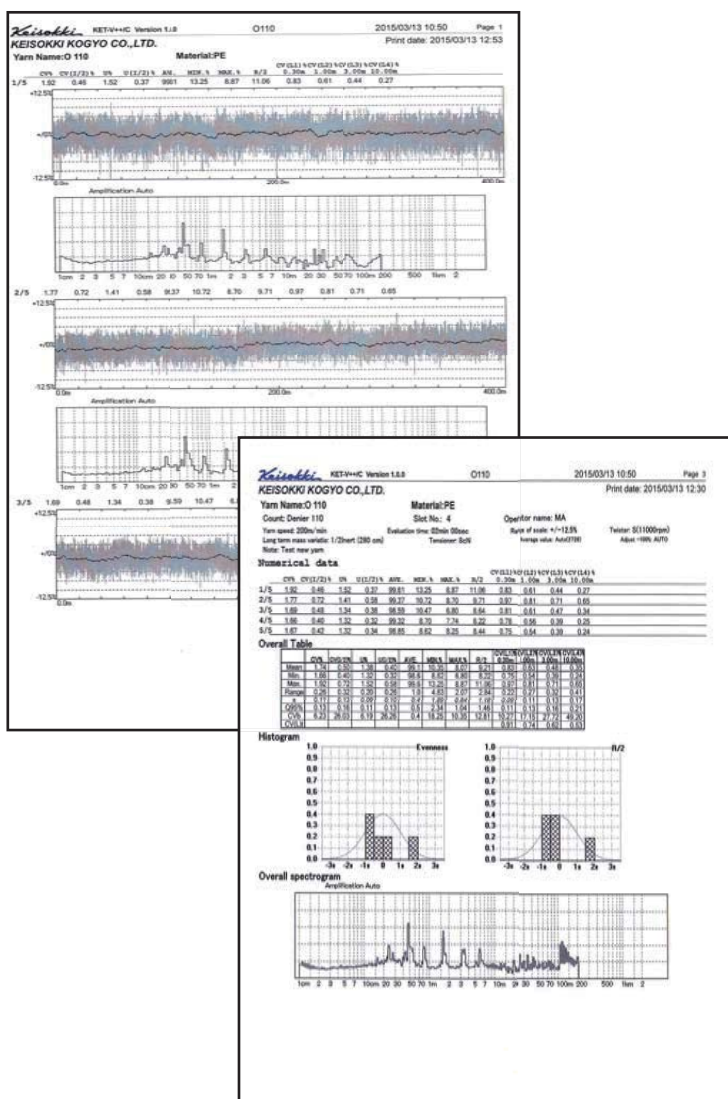
340 (W) x 490 (H) x 450 (D) mm and approx.14kg

Electronic tension device

320 (W) x 240 (H) x 147 (D) and approx 5.5kg

Auto cop changer:

535 (W) x 250 (H) x 259 (D) mm and approx.30kg



KEISOKKI EVENNESS TESTER

model **KET-V++ / C & KET-QTV**

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 deviations (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



*The specifications and design are subject to change without notice

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