



MT-5

EVENNESS TESTER

For all type of natural, artificial and synthetic spun yarns

MT-5 is designed to measure with high accuracy the mass evenness and imperfections of the yarn. MT-5 stands up for the high quality capacitive sensor which is suitable to test yarns, rovings and slivers without need of another external sensor.

It's therefore very easy to control mass variation in all the spinning process and analyse the spectrogram to identify the origin of the fault in the spinning process.

Optional connection to Automatic cop changer for automatic testing of 24 cops.

Components

Evenness tester code 2341: measuring frame complete with capacitive sensor suitable for yarn, roving and sliver

Personal Computer: pre-configured PC with Windows O.S. and MT5 software in English & Italian language

Auto Cop Changer code 299A: optional auto cop changer (A.C.C.) for automatic testing up to 24 bobbins

Creel code 3102: optional vertical creel 24 bobbins for supply to A.C.C.

Results of each individual test

CV% coefficient of mass variation

U% mean deviation of mass variation

AVE relative yarn count

IPI with 4 channels for nep, thick place, thin place

DR% with 4 channels

CV(L)% with 4 reference lengths

Graphic data of each individual test

Diagram of mass variations

Diagram of mass variations in inert of half inert mode

Spectrogram up to 160 channels

Statistics and other results

Mean

Range

Standard deviation (s)

CV_B%

95% confidence limits (Q95%)

IPI per 1000m (1 km) of yarn length

DR_r%

CV(L)_r%

Overall spectrogram

Data and graphics saved in MT5 databank, printable and exportable to MS excel format

Measuring Specification

Range of Material: Nm 250 (yarn) to 80g/m (sliver)

Dynamic measuring Range: 100%, ±50%, ±25%, ±12,5%

Measuring mode: normal and half inert mode or normal and inert mode

Material speed: 8 - 25 - 50 - 100 - 200 - 400 m/min

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

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

Spectrograph

Number of channels: max.160 channels

Wave lengths analyzed:

2 cm to 1225.9 m at 400m/min and 6 mins

1 cm to 613.0m at 200m/min and 6 mins

IPI (imperfections)

Number of channels: 4 channels

Thin place: - 60%, - 50%, - 40%, - 30%

Thick place: +100%, +70%, +50%, +35%

Nep: +400%, +280%, +200%, +140%

Deviation rate DR%

Number of channels: 4 channels

Reference length: 0.01 to 10 m

Level: ±0.01% to ±99.99%

CV(L)%

Number of channels: 4 channels

Reference length: 0.01 to 10 m

Auto cop changer ACC (optional)

Maximum number of cops: 24

Type of knotter: automatic fishermen's knotter

Power supply

Voltage: 110-240 Vac

Frequency: 50/60 Hz

Air Supply

Measuring frame: 0.2 Mpa and about 4m³/h

Auto Cop Changer 0.6 Mpa and about 4m³/h

Size and Weight

Evenness tester code 2341:

320 (W) x 730 (H) x 490 (L)

Auto cop changer code 299A:

535 (W) x 250 (H) x 259 (L)

Creel code 3102: 600 (W) x 2000 (H) x 600 (L)