EVENNESS TESTER FOR SPUN YARNS, ROVINGS AND SLIVERS

MT EVENNESS TESTER

MESDAN
LAB

MT EVENNESS TESTER code 2341

For all types of natural, artificial and synthetic spun yarns

Description

MT is designed to measure with high accuracy the mass evenness and imperfections of yarn.
MT stands out for the high quality capacitive sensor which is suitable to test yarns, rovings and slivers without need of another external sensor.
It is therefore very easy to control the mass variation in the whole spinning process as well as to identify the exact origin of the faults in the spinning process by analysing the spectrogram.

Technical Feauters

- Exclusive capacitive MT-sensor suitable to test from very fine yarns (Ne 200/1) to coarse slivers (80gr/mt)

- Modular system for fully automatic operation upgrade and for hairiness testing

- Equipped with stand for roving and slivers

- Engineered, designed and manufactured in Italy

- Automatic calibration before testing

- Windows MT software with statistics, graphs and data storage

- Numerical and graphical results compatible with the most popular world standards

Modular system

H-sensor code 2342 (optional)
Hairiness sensor to analyse yarn hairiness
Determination of Hairiness (H) and standard deviation of Hairiness (sH)
Statistical and graphical elaboration of hairiness testing
Diagram and spectrogram of the H value to verify the source of the hairiness in the spinning process

**Moveable yarn creel** 24 positions **code 3102** (optional)
24 position creel fitting wheels, easy to move Suitable for cones and cops
Equipped with adjustable yarn pretensioning disc

Automatic Cop Changer 24 positions **code 299A** (optional)
Fully automatic 24 position device suitable for all kinds of yarn and count
Enabling fully automatic yarn testing without operator's attendance
Suitable for cops and cones
Compatible with other Mesdan-Lab automatic testing equipment, such as "Autodyn" automatic strength tester, "Twistmatic" automatic twist tester, "Attrifil" yarn friction tester

UPS device code 2341.900 (optional)
Uninterruptible power supply device, always recommended to preserve the instrument in case of power supply fluctuations.
Input: 220-240 VAC, 50/60 Hz Output: 220-240 VAC (main) 230V (battery) Power: 1600VA; 960W

Yarn with/without hair
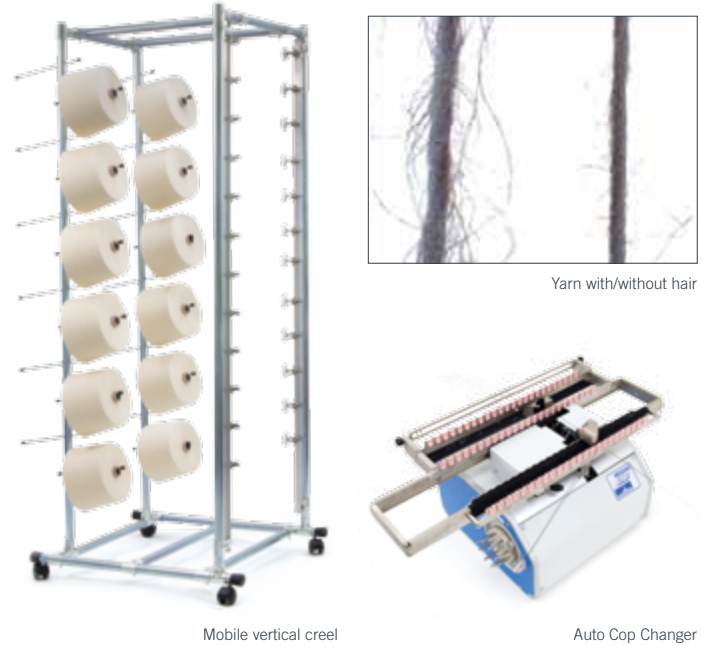
Mobile vertical creel

Auto Cop Changer

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 neps, thick places, thin places
· 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), CVB%
· 95% confidence limits (Q95%)
· IPI per 1000m (1 km) of yarn length
· DRT%, CV(L)T%, overall spectrogram
· Data and graphics saved in MT databank, printable and exportable to MS Excel format

Measuring Specifications
· Range of material: Ne 200 (yarn) to 80g/m (sliver)
· Dynamic measuring range: ± 100%, ± 50%, ±25%, ±12,5%
· Measuring mode: inert or half 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%

Spectrogram
· Number of channels: max.160 channels
Analyzed wave lengths:
· 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 places: - 60%, - 50%, - 40%, - 30%
· Thick places: +100%, +70%, +50%, +35%
· Neps: +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

print-out example
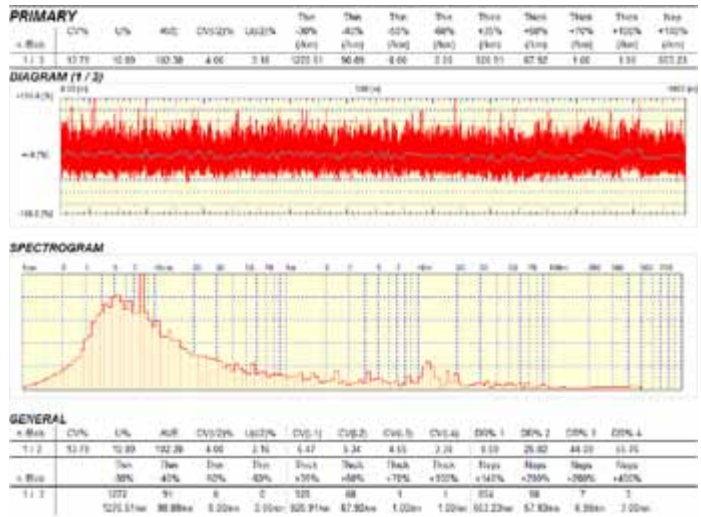
MT EVENNESS TESTER

DESCRIPTION

MT is designed to measure with high accuracy the mass evenness and imperfections of the yarn. MT 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

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 MT software in various languages
· Roving and sliver stands for suitable roving and sliver supply

OPTIONALS

H-sensor hairiness sensor	code	2342
Auto Cop Changer (A.C.C.) for automatic testing up to 24 bobbins complete with table support	code	299A
Creel vertical creel 24 bobbins for supply to A.C.C.	code	3102
UPS uninterruptible power supply device	code	2341.900

Photograph and description of present leaflet have to be considered as purely indicative and not binding
Rel. En 2014-05

DIMENSIONS / POWER SUPPLY

Evenness Tester **code 2341**: 400 (W) x 750 (H) x 500 (L) mm
Auto Cop Changer **code 299A**: 535 (W) x 250 (H) x 259 (L) mm
Creel **code 3102**: 600 (W) x 2000 (H) x 600 (L) mm
Ups **code 2341.900**: 100(W) x 270 (H) x 320 (L) mm
Single-phase 110/220V, 50/60Hz
Measuring frame: 0.2 Mpa and about 4m3/h
Auto Cop Changer 0.6 Mpa and about 4m3/h