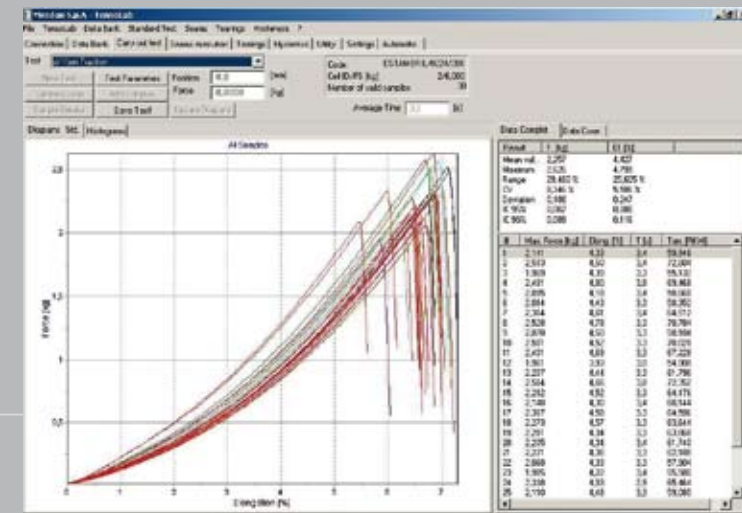


The control software of our instrument is:

- easy to operate,
- open towards the most common application software,
- in compliance with international textile standards.



The operator can perform generic tests by setting all the parameters or by selecting the routine corresponding to a specific International Standard. In this case the operator must set only the parameters called for by the Standard and the results are produced in conformity to the same. Presently, there are more than 30 modules available in the software allowing:

- traction tests on yarns, hanks, industrial yarns, fabrics and non-woven
  - hysteresis loop tests
  - fabrics tearing tests
  - covering adhesion tests
- in compliance with ISO, ASTM, BS, DIN, IWS, UNI and M&S standards.

An on-line guide gives the operator information on the chosen Standard.

All values can be either printed or directly exported into an Excel sheet in case the operator is interested in statistical results different from the ones requested by the International Standards which are automatically calculated by our software.

The set cycle and the result can be stored in a databank ready to be recalled.

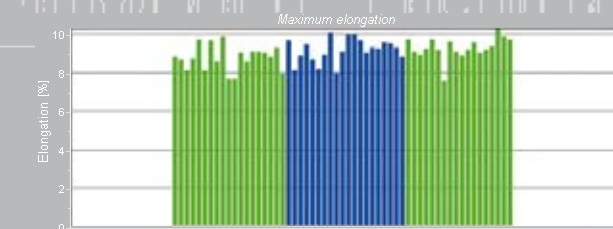
The software works in several languages, and the Data Bank can be personalized by the enduser according to his specific needs.



Strength distribution graph

List of available numerical results:

- Maximum strength peak measured in cN, N, daN, g, kg, lb
- Maximum elongation in mm or % referred to the maximum strength
- Tenacity: maximum strength related to the sample count (cN/tex, cN/Dtex, RKM). CLSP for hanks (lb x Ne)
- Work in joule: area below the strength/elongation curve
- Breaking time in sec. from test start until sample breakage



Elongation distribution graph

List of strength and elongation statistical results:

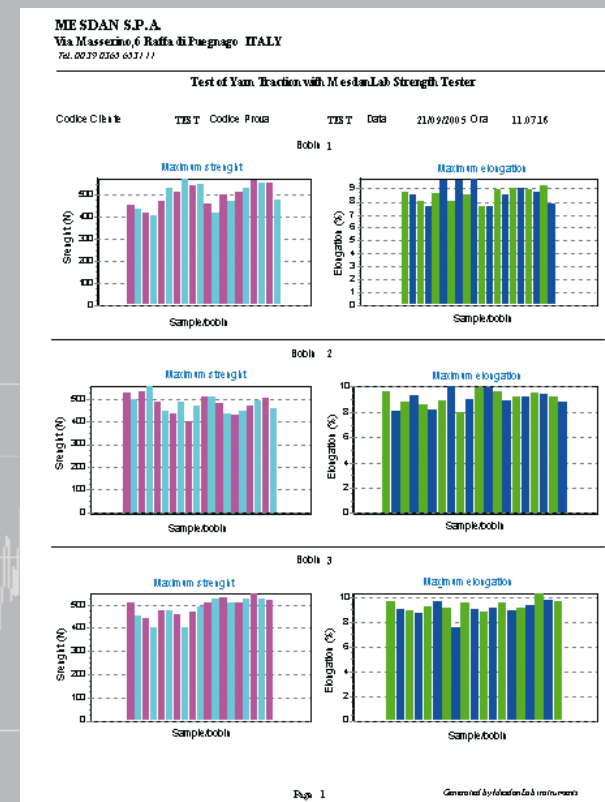
- Maximum value
- Minimum value
- Mean value
- Standard deviation
- Coefficient of variation CV%
- Interval of Confidence 95%

List of available graphs:

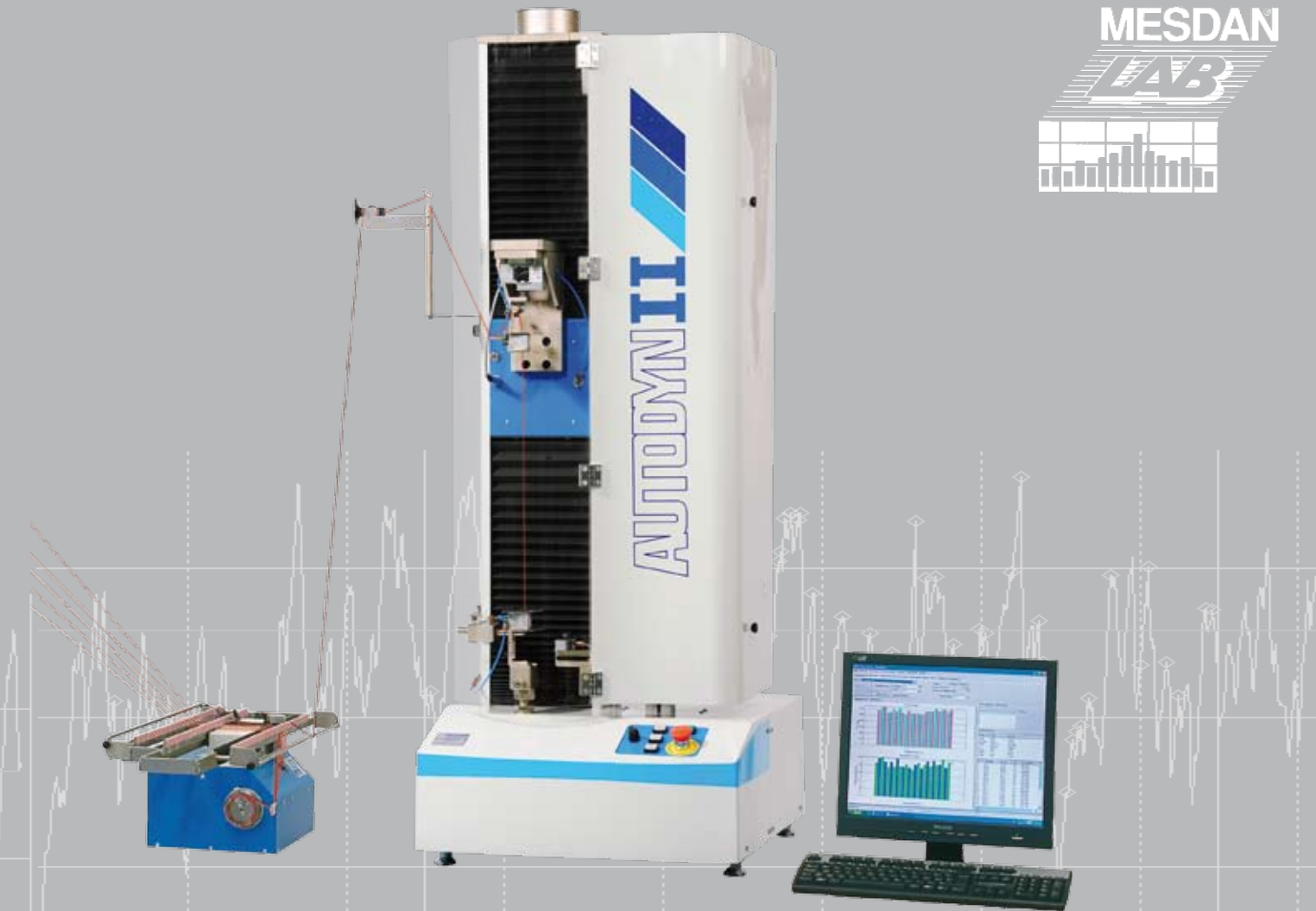
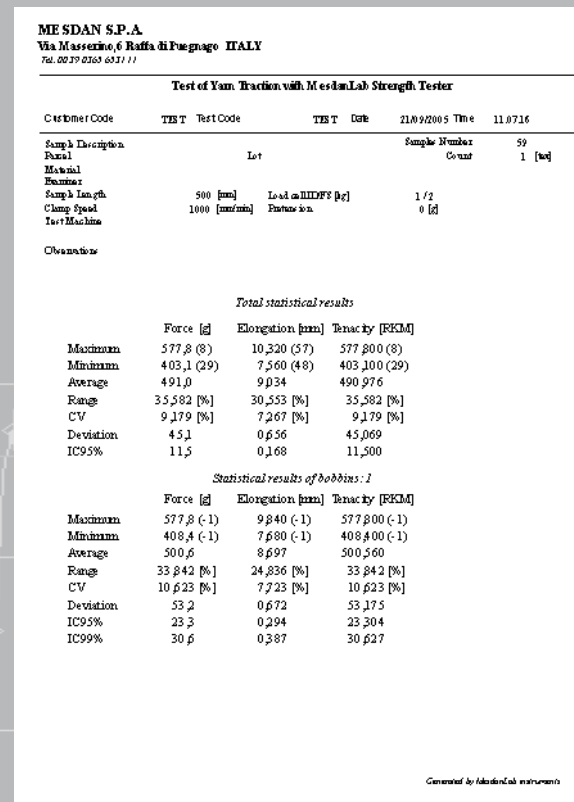
- Strength/elongation
- Strength histogram
- Elongation histogram
- Strength/elongation mean curve
- Strength distribution
- Elongation distribution

At the end of a test the operator can choose the report to be printed:

- report with statistical results referred to single test
- report with total statistical results
- report with graphical representation of the results.



example of report with statistical results and graphical representation referred to 60 tests executed on 3 different yarn bobbins



# AUTODYN II

Automatic Strength Tester for testing the tensile strength of yarns up to 24 positions. It can also test yarns, hanks and fabrics in semi-automatic mode.

AUTODYN II is controlled by a flexible and easy to operate software, complying with all the current International Textile Standards.

Versatile, accurate and reliable, thanks to a complete range of interchangeable clamps and load cells.



# M

## Modular testing features

Thanks to its modular features, AUTODYN II can automatically perform traction tests on 24 different yarns or it can work, in the semiautomatic modality, on industrial yarns, hanks and fabrics. Two models are available:

**AUTODYN II code 2514:** one position automatic strength tester for testing one single bobbin of yarn;

**AUTODYN II PLUS\* code 2514A:** 24 position automatic strength tester for testing up to 24 different yarn bobbins using the exclusive bobbin changing device "Auto cop changer".

Multiple testing can be carried out either between bobbins of a same lot and yarn count or by grouping bobbins of different lots and/or with different yarn counts.

### AUTOMATICALLY AUTODYN II carries out:

- Tensile tests on yarn bobbins
- Hysteresis tests on elastic yarns

### SEMI-AUTOMATICALLY AUTODYN II can perform :

- Traction, compression, tearing and adherence tests on fabrics
- Seam slippage tests

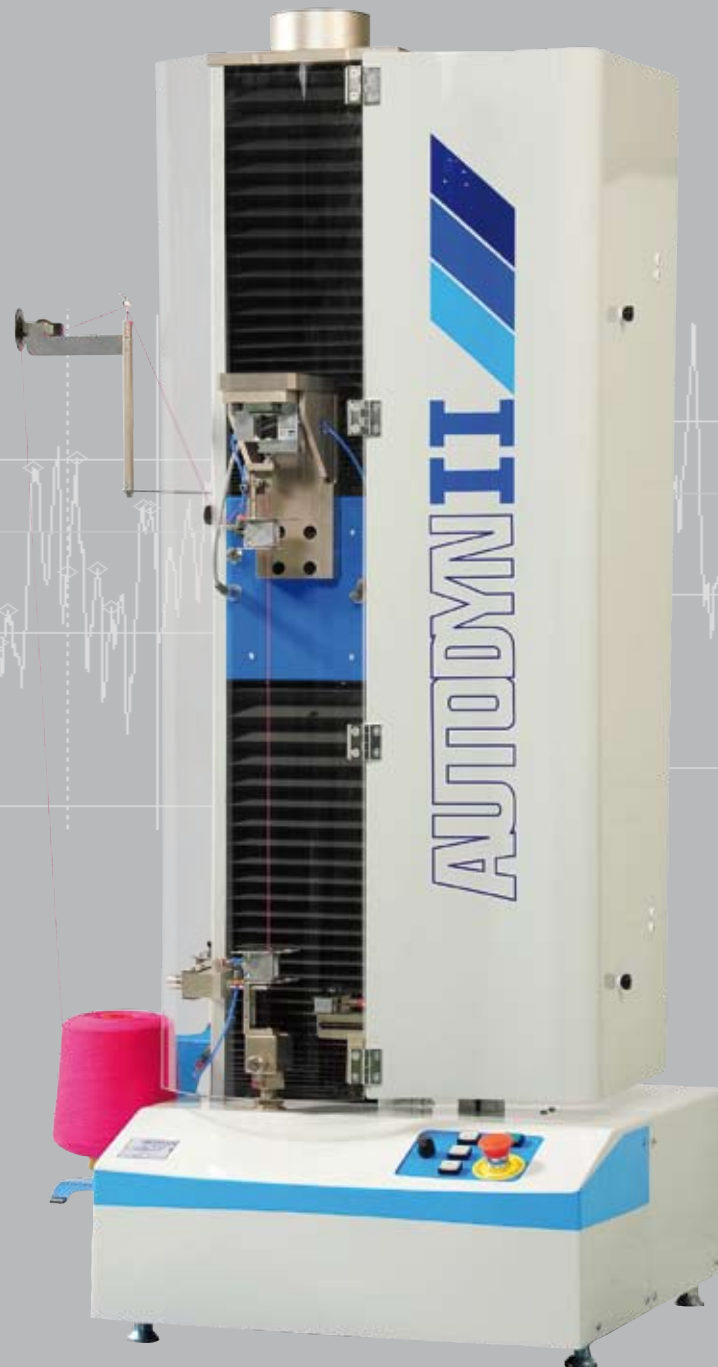
- Tensile tests on industrial, tyre-cord and kevlar yarns

- Tensile tests on yarn hanks (LEA TEST)

\* pay attention to AUTODYN II maximum capacity!

Thanks to the extreme modularity of the system, AUTODYN II can be upgraded into AUTODYN II PLUS by means of "Auto Cop Changer" and specific interface (code 2530U).

# AUTODYN II



# T

## Technical features:

- Testing principle: CRE (Constant Rate of Extension)
- Functioning mode: automatic and semi-automatic
- Maximum capacity: 1000N**
- Interchangeable load cells; capacity: 20N, 100N, 1000N; linear deviation 0,05%
- Maximum extension: 1000 mm (clamps and load cell not included)
- Adjustable distance between clamps
- Mechanical and pneumatic clamps for yarns, hanks and fabrics
- Adjustable testing speed from 10 to 5000 mm/min.**
- Settable and automatic pretension
- Movement resulting from one ball bearing screw
- Brushless motor with epicyclic reducer
- Operation controlled by Windows XP, Win 7, Win Vista
- Safety and protection: emergency button, automatic stop at the maximum capacity of the instrument, plexiglas protection cover, for the highest safety and protection of the operator
- Power supply: 110/220V-50/60 Hz single phase
- Absorption power: 400VA
- Pneumatic air supply: 6 bar
- Air consumption: 9 m<sup>3</sup>/h (approx., depending on the type of test)
- Noise level ≤70 db
- Weight: 85 kg
- Dimensions: 610x610x1340 mm
- Predisposed to be connected to the automatic cop changing device (Auto Cop Changer) with 24/36 yarns capacity
- Auto Cop Changer (17 kg-570x250x230mm) included only in AUTODYN II PLUS Code 2514A.

### PC minimum requirements:

AUTODYN II must be connected to a PC with the following minimum requirements:

- 2.8 Gb Pentium IV
- 256 Mb Ram
- 40 Gb HD
- 17" Monitor
- RS 232 serial port
- 1 USB port/1 parallel port
- Colour printer

### Configuration and standard accessories:

AUTODYN II is supplied with:

- Software
- Foot switch for pneumatic clamps
- Connection cables
- Input air filter with pressure regulator
- Yarn waste box

# A

## Accessories

### Load cells

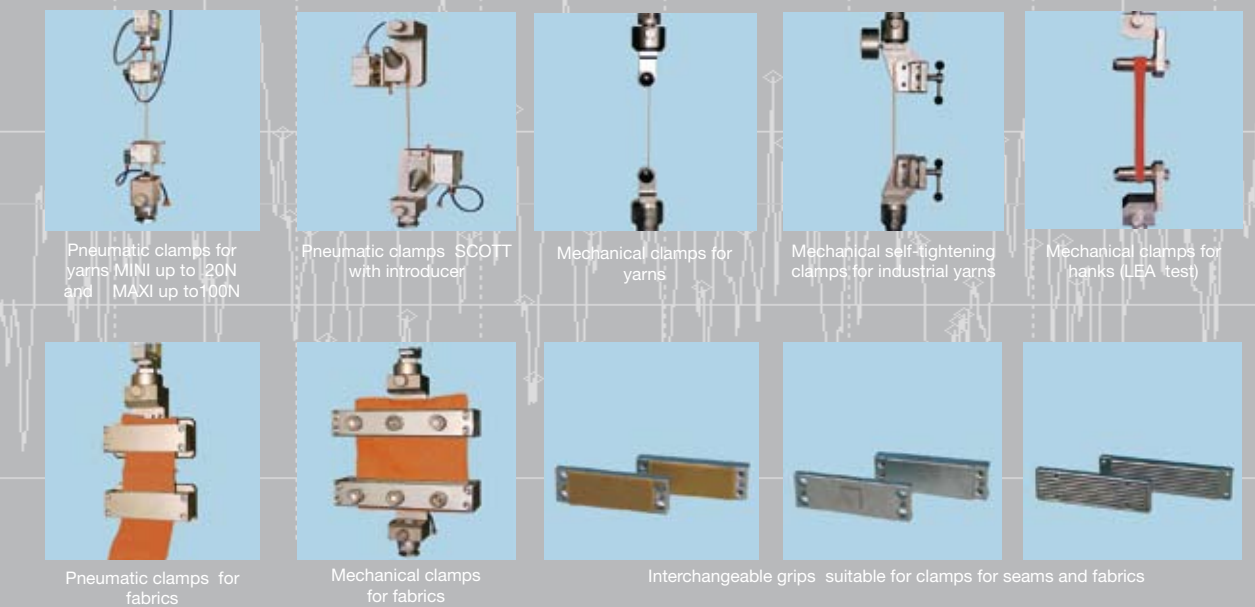
Capacity (N)	Accuracy (cN)	Accuracy (cN) in X10* mode	Capacity (N) in X10* mode
20	0,1	-	-
100	1	0,1	10
1000	10	1	100



\*the "x10" mode allows a 10 times increase of load cell accuracy within 10% of its capacity (for example 1000N load cell having an accuracy of 10 cN, can measure 1cN force, if used in "X10" mode, up to 100 N). For cells with 20N capacity such mode is deactivated.

### Clamps

Wide range of mechanical and pneumatic clamps for testing yarns, hanks and fabrics.



Fabric clamps of different width available (50-75-100-150 mm) with interchangeable gripping surfaces (knurled, rubberized and grab type).

In addition to the clamps illustrated above, lots of other models are available on request.

Foot switch is necessary to activate pneumatic clamps in case of semi-automatic functioning of AUTODYN II

MESDAN offers a service of calibration which can be requested by customer when purchasing AUTODYN II