



TECHNICAL DATA ELMATIC CODE 275D	
Automatism	pendulum weight identification - pendulum calibration - test execution - pendulum brake - pendulum raise to its starting position - pendulum reset
Safety	total safety cover with auto-locking system
Measuring pendulum range	1.600 - 3.200 - 6.400 - 15.000 - 30.000 cN
Unit of measurement	cN - N - daN - mN - gr - Kg - lbs - oz
Clamps opening	Max 4,5 mm
Cut length	20 mm +/- 1
Tear length	43mm
Tolerance range	20-80 % of each full scale, settable range or full scale
Angular resolution	high resolution digital optical encoder
Calibration verification	2 optional check weights
No. of samples in the specimen	specimen made of several samples can be tested
Display	128x64 LCD display backlight
Blade	tungsten steel
Data port	2 RS 232 C ports for PC and printer connection
Language	italian-english
Statistics	force min. max. mean, CV%, St. Deviation, Range%
Weight	66 kg
Dimension	700 (H) X 400 (L) X 610 (W) mm
Power supply	230V 50Hz - 110V 60Hz

	ELMATIC
TEXTILE	EN ISO 13937-1 EN ISO 4674-2 (coated fabrics) ASTM D 1424 ASTM D 751 (coated fabrics) EN ISO 21974 ISO 1974 ISO 9290 AFNOR G07-149 GB/T 455 ASTM D5734 (non-wovens)
PLASTIC	JIS K 7128-2 ISO 6383-2-method 360A GB/T 6383-2
PAPER	TAPPI T414 GB/T 455 UNI EN 21974

STANDARD ACCESSORIES		OPTIONAL ACCESSORIES	
WEIGHTS KIT complete with 2 weights with measuring range 1.600-3.200-6.400-15.000-30.000cN	code 275D.300	CHECK WEIGHT KIT complete with 2 check weight and calliper for clamp's check	code 275D.400
SPECIMEN PREPARATION KIT complete with one die for cutting, one cutter and one cutting board	code 275D.310	set of 5 spare blades	cod. 275D.402
one spare blade	code 275D.52	mini thermal printer	code 275D.136
ELMATIC CD software		110V power supply for mini thermal printer	code 275D.142
		calibration certificate	code 275D.CCI



ELMATIC 300N

ELMENDORF AUTOMATIC DIGITAL TEAR-TESTER

- Measuring range from 1.600 to 30.000 cN for measurement of specimens with low and high tear resistance such as textiles, leather, plastics and other materials
- Automatic test execution
- Automatic pendulum calibration and reset
- Total safety protective cover with auto-locking system
- Large LCD display
- PC & PRINTER connection
- High accuracy and repeatability of results
- High productivity

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Automatism

Test

After pendulum and specimen loading, the operator can press **START** to start testing: the test sequence is automatically executed in total safety

- STEPS**
- 1 CUT OF SPECIMEN
 - 2 PENDULUM RELEASE
 - 3 TEAR OF SPECIMEN
 - 4 MEASUREMENT OF TEAR FORCE
 - 5 PENDULUM BRAKING
 - 6 PENDULUM RAISING TO ITS STARTING POSITION WITH RESET

The automatism ensures high testing efficiency and high accuracy and repeatability of results.

Pendulum Calibration

ELMATIC automatically detects pendulum weight and executes pendulum calibration with saving of results.

Automatic pendulum identification and reset eliminates human error.

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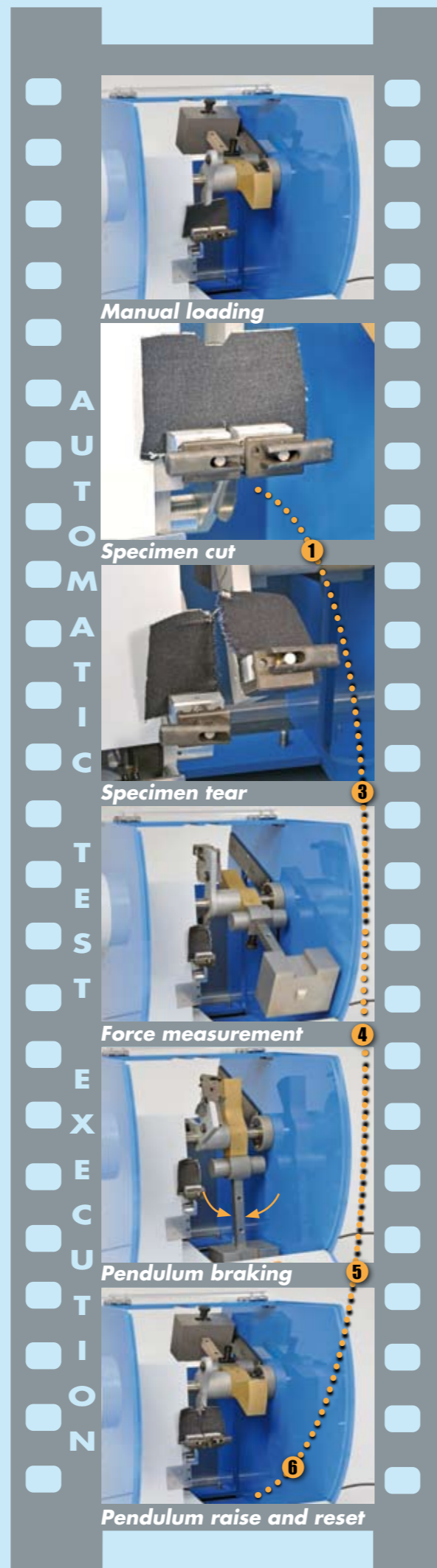
Safety

ELMATIC is built in accordance with safety CE rules .

Safety cover with auto-lock

Total safety cover allows access of the operator to the testing area only if the instrument is in safe condition: cut of the specimen and pendulum movement can be started only when cover is closed; the auto-locking system allows its opening only if the operation is stopped.

Pendulum front loading: pendulum is automatically positioned for loading . Weights can be easily positioned and blocked in the correct position by the operator. With cover closed, the pendulum is automatically released and then raised to the starting position for total safety of the operator..



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Setting and results

Key-board and large LCD display backlight are designed for use even in production environments. The user-friendly design enables intuitive selection of functions and easy test parameter setting :

- selection of Standards from pre-set list or input of new Standard and specific tolerance range
- input of customer name
- input of test reference
- selection of the measuring unit
- selection of weight
- input of number of samples in the specimen
- test direction (weft/warp, trasversal/longitudinal)



The display shows the tearing force with indication of "out of range" results which can be cleared or confirmed by the operator. Possible mistakes in pendulum loading are indicated by warning message.

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Connections

Connections to printer

To print test results and statistical data a mini thermal printer is available as optional

Connection to PC

ELMATIC software enables to transfer data to PC for further graphical and statistic elaboration, print and saving of test reports.

```

*****
#MESDANLAB
#DENIM TEST
*****
18/05/2010 16:59:06
-----
Measure Unit : N
Pendulum [cm] : 15000
Standard : EN ISO13937-1
Range limits : 20 -88 %
Direction test : WEFT
-----
TEARING FORCE STATISTIC
-----
S 12.9      Ran 10.42
Mean 48.79  Coef 2.66
Min 46.40   Max 51.49
-----
* = REJECT TEST RESULT
Out of range standard
-----
TEARING FORCE
1 47.81
2 48.86
3 49.04
4 51.49
5 49.21
6 49.39
7 47.98
8 48.86
9 46.40
10 48.86

```

EL-MATIC MESDAN-LAB

DATA: 11/05/2010

TEST REPORT

Test parameters/ Parametri di test

Company name/Ragione sociale:	MESDANLAB
Specimen code/Codice provino:	DENIM TEST
Measure unit/Unità di misura:	N
Pendulum/Pendolo:	15000
International standard :	EN ISO13937-1
Test direction/Direzione del test:	WARP

Statistical results/ Risultati statistici

	Tearing value
Min N	46.40
Max N	51.49
Mean	48.79
Cv(%)	2.67
Sigma	1.30
Range (%)	10.43

Single test/ Singoli campioni

Test	Tearing
1	47.81
2	48.86
3	49.04
4	51.49
5	49.21
6	49.39
7	47.98
8	48.86
9	46.40
10	48.86
11	
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