

# RAPID 600 V



The quality of interlaced (entangled) yarns is determined by the number of nodes over a certain length, by their regularity and their tenacity.

**RAPID 600 V** tests interlaced yarn by means of a vertically moving pin. The pin is inserted into the running yarn, thereby detecting the entangled nodes. This physical testing method, enables simultaneous determination of the number of nodes per length unit, the absolute node distance as well as checking their tenacity in accordance with ASTM D4724.

The instrument itself is designed in a robust way. Therewith, it does not need to stay

exclusively in a laboratory - it can even be operated close to the production in order to test as early as possible after the filament has left the production. In that way the results of the interlace testing are evaluated faster and reactions to irregularities in the interlacing process can be taken much sooner, i.e. within minutes.

**RAPID 600 V** features total computer control with automatic servo controlled pretensioning, string up and sample removal. It allows faster, more accurate and efficient testing of entangled filament yarns, with major labor savings and exceptionally easy handling.

# RAPID 600 V

## VERTICAL AUTOMATIC PIN INTERLACE DETECTOR

### Scope:

Determination of the number of interlaces per meter filament yarn according to ASTM D4724.

By using the mechanical pin system also the quality of the interlaces is controlled, since only nodes which hold a tension defined by the operator are accepted as valid interlaces.

This tension keeping the single mono filaments together is an essential criterion for the behaviour of the filament during the following process steps like weaving and knitting.

### Method:

The yarn is automatically strung up and guided through the instrument. Permanent pretensioning is done by means of a servo electro-mechanical pretensioning device. Thereafter, the yarn passes a detection unit with vertical pin movement. The pin is inserted into the yarn for detection and counting of interlace nodes, their absolute split distance as well as for quality validation in terms of tension build-up.

### Filaments/Yarns:

POY, FDY, DTY, BCF,...

### Sample feeding:

Automatic string up and sample removal

### Denier range:

From 15 to 4000 den  
(other ranges on request)

### Nodes per meter:

0.5 to 180 n/m

### Power supply:

230 / 115 VAC  $\pm$  10 %,  
50 / 60 Hz, 1000 W

### Control system:

Totally computer controlled with an external evaluation unit

### Tensiometer

(for node's tenacity):

0 to 150 g, accuracy  $\pm$  0.1 g  
(higher ranges on request)

### Air supply:

90 psi instrument air,  
20 scfm (6 bar, 0.6 N<sup>3</sup>/min)

### Data base:

For long-term evaluations, statistics, graphical result interpretation and fast data access

### Testing speed:

Up to 50 m/min

### Testing time:

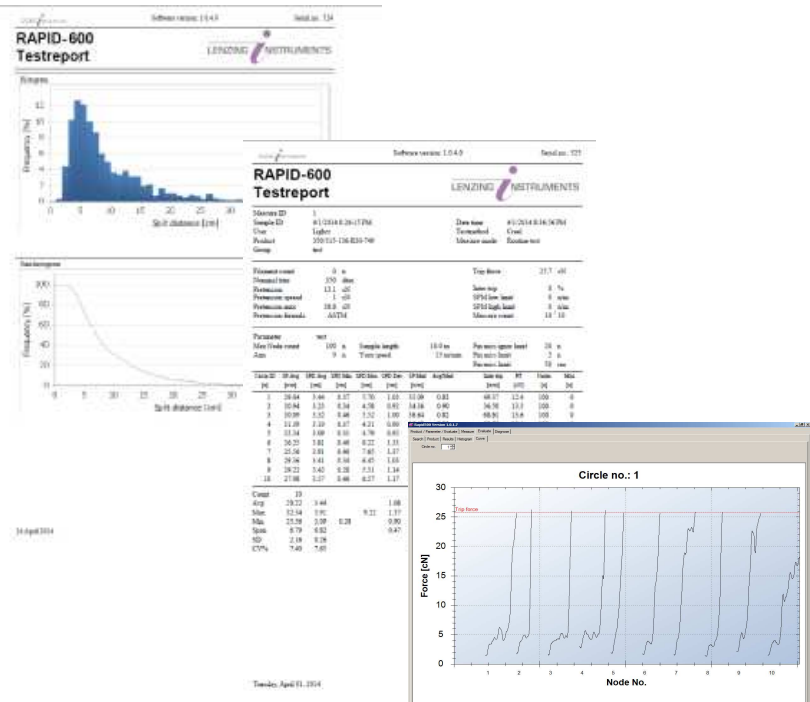
Approx. 30 sec./test

### Dimensions:

Height: 550 mm  
Width: 1100 mm  
Depth: 660 mm  
Weight: approx. 50 kg

### Options:

- Serial port communication with external source
- Interface for Lenzing Instruments SESS or other automatic bobbin changers
- Bar code sample identification



Technical data and pictures are subject to change!

## THE TEXTECHNO GROUP

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