

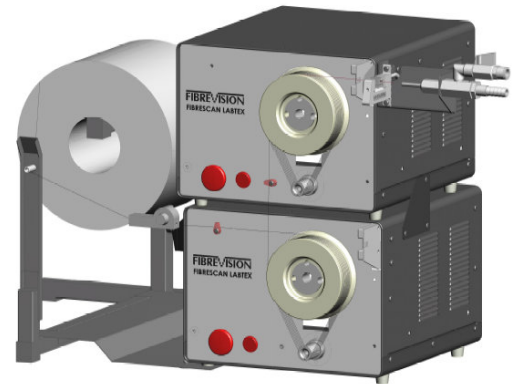
## Labtex

### Product Characterisation and QC

The **Labtex** range of dedicated laboratory instruments provides both product Characterisation and high volume QC testing.

All **Labtex** instruments provide state of the art analysis of the running yarn, with detailed quality data produced in a database format that can be exported into a plant QC system.

A wide range of parameters can be tested on **Labtex** instruments with up to 4 parameters being tested on one **Labtex** unit. This provides extensive data on key quality parameters that is not available on any other testing equipment.



### Range

<b>Labtex P</b>	Package Unwinding
<b>Labtex PI</b>	Package Unwinding, Interlace, Broken Filaments
<b>Labtex I</b>	Interlace, Broken Filaments
<b>Labtex IR</b>	Interlace Retention, Broken Filaments
<b>Labtex PIR</b>	Package Unwinding, Interlace Retention, Broken Filaments

### Cost Benefits

Reduced Process Costs	Process optimisation by full product characterisation
Multi Function Testing	Up to 4 parameters tested on one unit

### Quality Benefits

Product Characterisation	Ensures products are fully optimised for application
Extensive Data Analysis	On all Key Quality parameters

### Technology

The **Labtex** instruments are made up of a range of advanced technology components including:

<b>Optical Sensors</b>	Used to measure Interlace and Broken Filaments. Measurement accuracy is assured with fully digital analysis and automatic calibration checking.
<b>Tension Sensors</b>	Used for Package Unwinding analysis. These ultra high frequency response sensors are sampled at 1000 times per second allowing the shortest-term variation to be identified.
<b>Yarn Feeds</b>	Transport the yarn accurately at speeds between 200 and 2,000 m/min and allow very accurate dynamic control of yarn stretching.
<b>Signal Processing</b>	Dedicated processing and communication card handles the signal processing, allowing a standard Windows XP PC to be used.  State of the art signal processing and data analysis software ensures extremely accurate measurements and provides a wide range of statistical data that can be exported to plant QC management systems

### Monitoring Excellence



<b>Labtex Applications</b>			
Labtex Type	Analysis	Main Components	
		Drives	Sensor
<b>Labtex P</b>	Package Unwinding	1	Tension
<b>Labtex PI</b>	Package Unwinding, Interlace Analysis Broken Filaments	1	Tension & Optical
<b>Labtex I</b>	Interlace Analysis, Broken Filaments	1	Optical
<b>Labtex IR</b>	Interlace Retention, Broken Filaments,	2	Optical
<b>Labtex PIR</b>	Package Unwinding, Interlace Retention Broken Filaments	2	Tension & Optical

<b>Labtex Sensors</b>		
<b>Interlace Sensor</b>	<b>Analysis Options</b>	Interlace, Broken Filaments
	<b>Range</b>	20 to 1,500 denier
	<b>Measurement</b>	Data acquisition at up to 50kHz
	<b>Calibration</b>	ISO Calibration, including automatic contamination compensation with automatic condition monitoring and warning when recalibration is required
<b>Tension Sensor</b>	<b>Analysis Options</b>	Package Unwinding
	<b>Range</b>	0 to 200g with 0.1g resolution
	<b>Frequency Response</b>	450Hz with Data acquisition at 1kHz
	<b>Calibration</b>	The sensor is automatically zeroed prior to each test and facilities for software checking and calibration of gain are provided

<b>Labtex Yarn Drives</b>	
<b>Yarn Transport</b>	Godets with capstan wrap. The two godets are driven by a 0.37kW inverter controlled synchronous motor.
<b>Speed Range</b>	200 to 2,000 m/min (normal test speed 400 m/min), digital set-points down loaded to inverter from PC
<b>Waste Disposal</b>	A high efficiency compressed air suction system delivers the waste yarn to the rear of the unit for collection.
<b>Wrap Protection</b>	A non-contact end break detector is located between the godet and the suction system. When a yarn break is detected the drive motor is stopped
<b>Dimensions</b>	780mm wide (including Creel) + Suction (about 250mm), 530mm deep x 500 high (excluding Creel). Weight 56kg
<b>Creel</b>	400mm diameter x 300mm long, different tube diameters are accommodated with an adjustable balloon eyelet

<b>Labtex Services Required</b>	
<b>Computer</b>	A PC running Windows 2000 or XP Pro is required to run the application software; the minimum PC specification is Pentium 2Ghz with 512mb Ram, XvGA graphics. A free PCI slot is also required.
<b>Power</b>	110 or 240 volt AC 50-60 Hz, Connected Load = 1000W, Typical Running Load 200W
<b>Compressed Air</b>	Clean dry compressed air should be supplied at a minimum of 5 bar. The volume of air used will be approximately 40m <sup>3</sup> /hr.