



## Long Staple Processing and Textile Testing

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### ABSTRACT

*Several vendors in the long staple processing area and the textile testing unveiled some improvements to their existing offerings. The long staple improvements came in the form of better design, more productivity, more electronic controls, less maintenance requirements, versatility, and cross compatibility with automation of all types. Improvements from some testing vendors mainly concentrated on yielding more information from the same tests; like the sticky cotton measurement from Lintronics and Weavability from Uster.*

*Keywords: Long staple processing, short staple textile testing,*

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### Introduction

This ITMA 2003 review will concentrate on long staple cardroom processes, textile testing equipment, and a miscellaneous section. As a general rule, there were no “new” technologies exhibited in most areas; however, there were design trends in equipment and new players entering some technology fields. Machinery related trends included ease of maintenance, use of servomotors, increased productivity, and improved quality.

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### Long Staple Cardroom Processes

#### Tatham

Tatham introduced the “Magnum” woolen cards, which are produced in 2.5, 3.0, and 4.0 meters in width. Other features included:

- Modular frame assemblies with no cross-rails.
- Statically and dynamically balanced cylinders, doffers, and top rollers for more precise setting.
- Quick release mechanisms for easier maintenance.
- Air control collars to reduce fly and improve fiber yield.
- Modular design of feedroller and taker-in arrangements allowing more versatility.
- Metal detection systems on board (some models).
- “Underspeed” sensors to prevent chokes at the taker-in.
- All drives with toothed belts for positive transmissions to carding components.
- Tatham introduced an auto doffing mechanism for tape condensers that has been successfully operating for over a year in some installations.