



*For a Total Solution to all of your
Materials Testing Needs*

Home furnishings manufacturer tests with ADMET

A leading manufacturer of cords, stringtapes and woven tapes for window blinds and treatments requires measurement of tensile strength during the development process. Tensile strength is the maximum force of braided polyester cords and other textiles when pulled to fracture. In the past, the company would develop yarn fibers or braided cords and send samples out to an independent third-party lab for testing. The test results would be returned in a few weeks and added into the database. The General Manager and Chief Development Engineer wanted to speed up the process. He researched alternative suppliers and ultimately selected ADMET's eXpert 4501 universal testing machine. The result is that he now has instant feedback on cord strength and is able to develop new products more quickly.

A manufacturer of cords, stringtapes and woven tapes for window blinds and treatments has traditionally tested its polyester cords and specialty fibers at the yarn and braided levels during development. Testing determines the force required to cause the yarn or cord to break.

The company develops new products as materials become available or as customer requirements dictate. Since the plant weaves, knits and braids cords, the engineer wanted to pull samples to failure at each level of the process.

In the past, the development engineer would send the fiber or braided sample to an outside testing lab. "It typically took two to three weeks to get the test results back," said the engineer.

The engineer had occasionally looked into bringing the testing in-house but could not justify the investment.

About two years ago, when market conditions required that the company develop products more quickly, the engineer decided to look again.

He searched on the Web for tensile testing equipment and found ADMET and a few other suppliers of universal testing machines. After he

narrowed it down to a few companies, he invited the ADMET sales engineer in for a demonstration. The company also sent some materials samples to ADMET for testing. ADMET tested the materials and sent back sample reports.

Explained the engineer, "I looked again and chose ADMET based primarily on cost. If it had been more expensive, we would have stayed with the outside testing lab. I only did it because I felt it to be cost effective."

eXpert 4501 fits the need

The engineer ordered an ADMET eXpert 4501 220 lb tabletop universal machine with a built-in digital controller.

The ADMET eXpert line of table-top test frames ranges from 1KN (225 lb) to 4.3KN (1,000 lb) and offers a range of features.

The standard user-programmable digital controller displays test parameters as well as date, time, specimen number, peak load and stress on a Liquid Crystal Display (LCD). Load deflection curves and results can be printed locally or can be exported to a Microsoft Windows-based computer.

SOLUTION OVERVIEW

Industry: Home furnishings - textiles
ADMET Product: eXpert 4501

Application: Tensile testing window cords
Customer: International manufacturer

The eXpert line performs closed-loop position controlled tests to sample break or to a user-defined load or position. It is available in vertical, horizontal, detached controller and actuator-only configurations, and has a full range of grips and actuator accessories.



eXpert 4501 with Digital Controller

The eXpert line is also available with ADMET's complete tension and compression test control and reporting system, MTESTWindows.

Easy to install – easy to use

The eXpert machine was delivered for customer installation. The engineer installed the

test frame and used the serial output port on the digital controller to connect with an older personal computer that was no longer needed at another place in the plant. The test results are exported to Microsoft Excel on the PC, which is also networked for printing.

“The setup was simple. The machine is fairly easy to use and we didn't need any onsite training,” said the engineer.

Now, the company runs all of its tensile tests in-house. The results, including peak stress, break loads and other indicators, are available immediately and downloaded to an Excel spreadsheet and copied to a master file.

It is easier and cost effective for the engineer to conduct more tests and build a larger database. “We had the information to some extent but now I can try all sorts of fibers and constructions,” he said. “We can test the yarn from right after it's made or immediately after it's finished.”

The engineer assigns a code to the sample so that he can track the characteristics of various materials, constructions and fiber content.

Since acquiring the eXpert machine, he has built a database that enables him to find materials, constructions and contents that match desired breaking strengths.

“It has definitely speeded up the development process and allowed us to respond more quickly to our customers' needs,” he concluded.

For More Information

For more information about ADMET products or services, please call us at 800-667-3220 in the US or Canada, email sales@admet.com or visit our Web site at <http://www.admet.com>.

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