











The "touch light" function allows for the rapid and precise use of the optic key in the different procedures. Bright (red and green) LEDs are used for control condition and alarm signalling.

The very reduced size facilitates installation for any kind of application.

A narrow measurement angle (15°) guarantees an accurate measurement, without changing the characteristics of yarn collection.

Possibility of putting them alongside each other for high density yarn control.

Possibility of using the sensors in different applications with any type of yarn and, through the support or either external SMART 200 TSS or integrated control terminals, the sensors can be adapted to various needs.

Universal Yarn Tension Measurement And Monitoring

The SMART 200 TSS & TS55 System, consisting of a SMART 200 TSS terminal and TS55 series programmable sensors, represents the most advanced BTSR solution for tension measurement and monitoring of a yarn put under control in the course of a textile process.

This product has been designed for applications on **yarn preparation processes**, such as spiral covering, texturing, doubling, knit de knit winding machines, etc..., which, during the product processing, require an accurate control, aimed at the yarn quality.

The accurate control is made possible by the use of **TS55 Tension Smart Scanning Sensor** device, capable of performing an exact measurement and analysis of the yarn tension.

High accuracy and repeatability are assured by the exclusive new digital technology (Digital Signal Processor) developed by BTSR, based upon the use of a loading cell which converts the tension exerted by the yarn into a digital signal.

The **SMART 200 TSS** Management Terminal, combined with the TS55 devices installed along the process, provides several and **advanced programming functions**.

It is possible to easily program the rated tension of the yarn, as well as the maximum and minimum tensions, beyond which the position shall be stopped, thus allowing the control of multiple yarns through a single TS55 sensor, and signalling with utmost certainty and timeliness any lack or excess of filament.

The System also detects the peak tension, which allows you to locate the detailed causes of sudden tension variations.

TS44 - THE ANALOGIC SENSOR SOLUTION

BTSR also offers an analogic solution through the TS44 sensor, a precise instrument for **yarn tension measurement**.

The TS44 analogic device makes possible to implement yarn collection or processing systems capable of actively reacting to any tension variation the yarn may undergone, thus allowing you to achieve new quality standards in the textile fiber processing.

TS44 features new **Auto-Offset Function** for self-calibration and **fully electronics sealed** for water / oil protection.



21057 Olgiate Olona (Varese) ITALY - Via S. Rita Tel. (39) 0331/323202 - Fax (39) 0331/323282 Internet: www.btsr.com E-mail: info@btsr.com