

ON - LINE YARN QUALITY CONTROL ON SAHM WINDING MACHINES



BARCO'S absolute optical yarn clearer BARCOPROFILE is now available for SAHM winding machines for technical yarns.

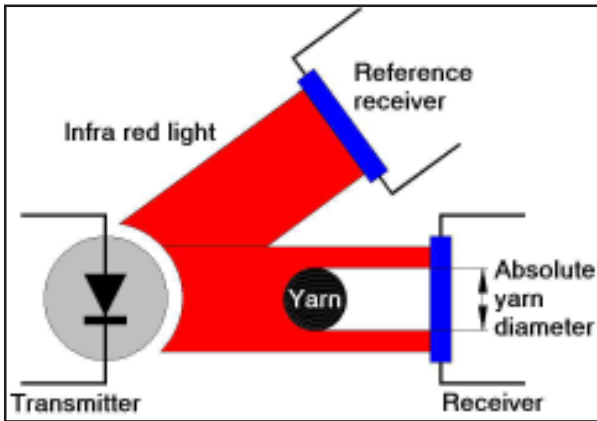
The sensor detects yarn defects such as thick and thin places, knots, bad splices,... When the position produces an off-quality product BARCOPROFILE flags immediately an alarm.

BARCOPROFILE substitutes time consuming laboratory-based spot checks with a 100% on-line real-time quality assurance

Additional features offered include length measurement and accurate reporting of production parameters such as produced weight, efficiency,... Exception reporting provides a sound approach to preventive maintenance.

Integration into a BARCO'S CIM systems such as SpinMaster is also possible.





OPTICAL AND ABSOLUTE YARN DIAMETER CONTROL

Operating principle

The sensor measures the shadow cast by the yarn on the photoreceiver. State of the art opto-electronics ensure a supreme stability in even the most adverse environments. This allows an absolute measurement and leads to a detector capability of even the faintest gradual diameter changes. From the rapid succession of measured diameter the yarn profile is reconstructed and digitally analyzed using sophisticated software algorithms.



Specifications

- yarn count range : 5 – 3500 Tex
- speed range : 0 – 1000 m/min
- diameter measurement accuracy 0.01mm
- detection and classification of thick and thin places such as slubs, knots, splices,...
- detection of thick and thin yarn caused by e.g. bad dipping, a missing yarn component, ..
- control of the overall yarn irregularity, detection of irregular dipping and twisting
- immediate alarm, production stop or package doff in case off-quality yarn is detected
- position based efficiency monitoring
- off-standard or exception reporting providing diagnostics and machine performance improvement tools
- fully integrated into the machine control logic
- option: position based length measurement



BarcoProfile benefits

- no more expensive and time consuming off-line lab spot testing and sampling
- superior and fault free yarn guaranteed
- reduction of 2nd quality yarn and waste
- satisfied customers
- high flexibility and quality trouble shooting
- at any time up-to-date and well maintained machines