VANDEWIELE
AUTOMATION

EN |

KR7

Knotting Robot 1

Suitable for a large yarn panel

DTY

76 dTex F 24 PET

167 dTex F 48 PET DTY

300 x 11 den PET DTY

600 x 2 den PET DTY
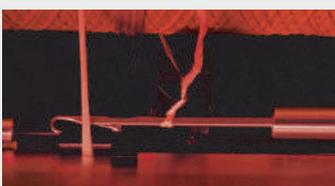

1800 x 2 den PET DTY

CARPET YARNS

900 x 2 dTex PA6

1000 dTex PP

1550 dTex PET

2285 dTex F 420 PET BCF

2550 x 2 dTex PET

ARTIFICIAL TURF

5200 dTex 8 monofilaments texturized PE

7200 dTex 8 monofilaments PE

TIRE CORD

1600 x 2 dTex PA6 Tire Cord

TAPE

800 dTex Tape

KR1 is an automatic knotting system that can be used in many industrial applications, enabling to **knot** bobbins, from the finest to the most sophisticated yarns.

VANDEWIELE
AUTOMATION

AUTOMATION SOLUTIONS FOR BOBBIN HANDLING & KNOTTING

KNOT | **LABEL** | **CONTROL** | **WEIGH** | **PACK**

SUITABLE FOR EVERY TYPE OF TECHNICAL YARN :

Material

ARAMID   **GLASS FIBER**   **CARBON**   **ALL POLYMER YARNS**

Yarn Presentation
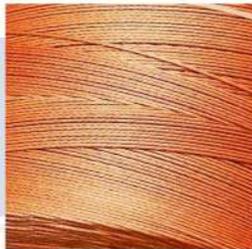
TAPE   **FILAMENT**   **FDY**   **TWISTED**

AND MORE ...
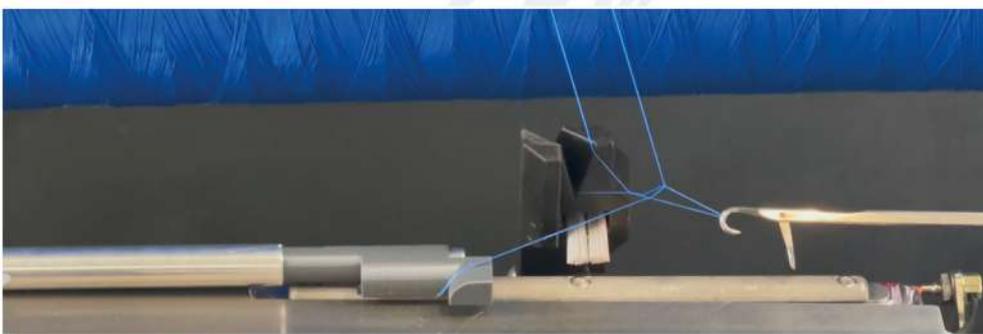
SEND US YOUR SAMPLES

▶▶ info@vandewiele-automation.com

KR1

Artificial Intelligence at the Service of Automatic Knotting

KNOTTING AND BOBBIN HANDLING

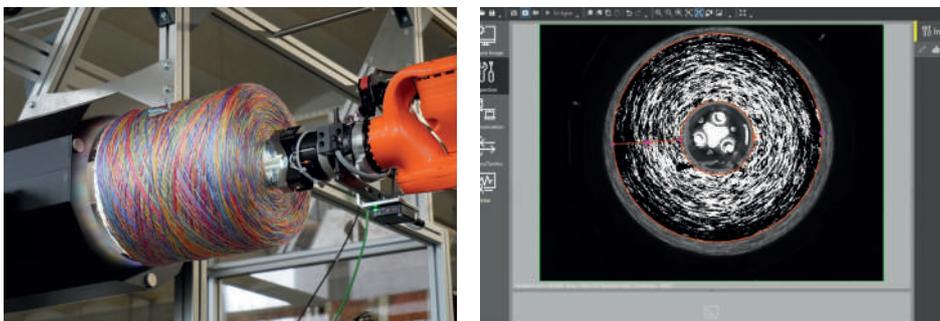*KNOTTING*   *LABELING*   *PACKING*

KR1 automates bobbin knotting for all yarn types, from fine to technical fibers. It handles up to 240 bobbins per hour, reducing manual work and increasing productivity.
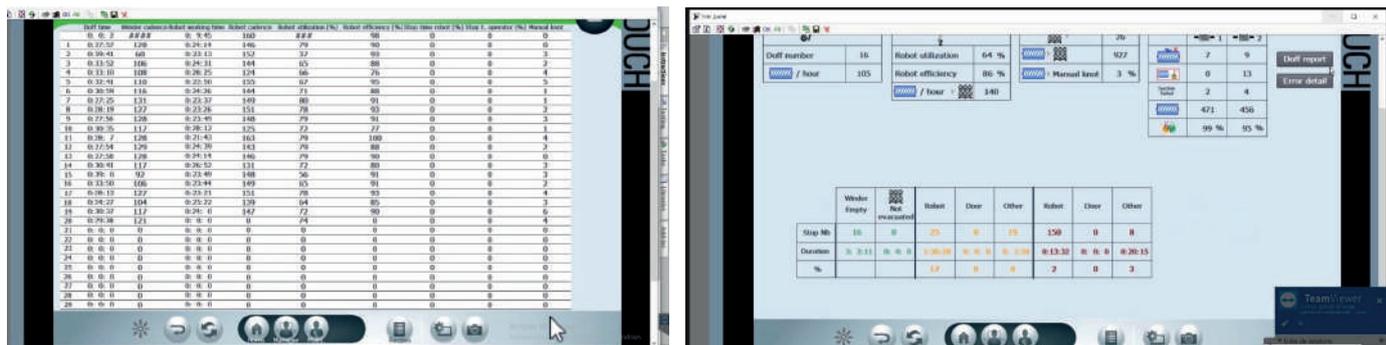
VISION AND AI-ASSISTED QUALITY CONTROL

Its deep-learning vision system detects defects instantly (mix-ups, twists, impurities), ensuring superior quality control beyond human capability.

OPC-UA COMMUNICATION & CONNECTIVITY

The KR1 can collect the necessary data for your Manufacturing Execution System (MES) to best optimize your production.

A smart solution for optimized production
With AI-driven automation, KR1 makes textile production faster, more precise, and cost-efficient.

KR7

KR1 knotting cell can benefit from customizable extensions, increasing the level of automation of your process.

What about complete cell ?

The KR1 complete cell is composed of 2 knotters, 1 labeller and 1 robot.
With the use of this industrial robot running 24/7, this advanced automation system will allow to reduce overall costs, as well as energy and labor.

Characteristics & Technical Infos

Cadence :
Complete cell : Up to 144 bobbins per hour
Knotting unit : Up to 240 bobbins per hour

Dimensions (mm) :
Complete cell : 6101 x 3660 x 2732 (L x l x h)
Knotting unit : 1233 x 890 x 790 (L x l x h)

Energy consumption (pneumatic) :
Complete cell : 190 Nm³/h
Knotting unit : 270 Nm³/h

Energy consumption (electric) :
Complete cell : 1 kWh
Knotting unit : 0.2 kWh

Revolutionary solutions for the factory of the future in textile machines and mechatronics

We imagine, build and integrate innovative textile systems for flooring qualities, home linen, fashion fabrics and technical textiles. Sharing inspiration and expertise with our customers worldwide, we shape the textile industry of the future. Creating success for them all, from yarn to finished product.

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