

HANDLING SYSTEMS

BoDo The SAHM BobbinDoffer

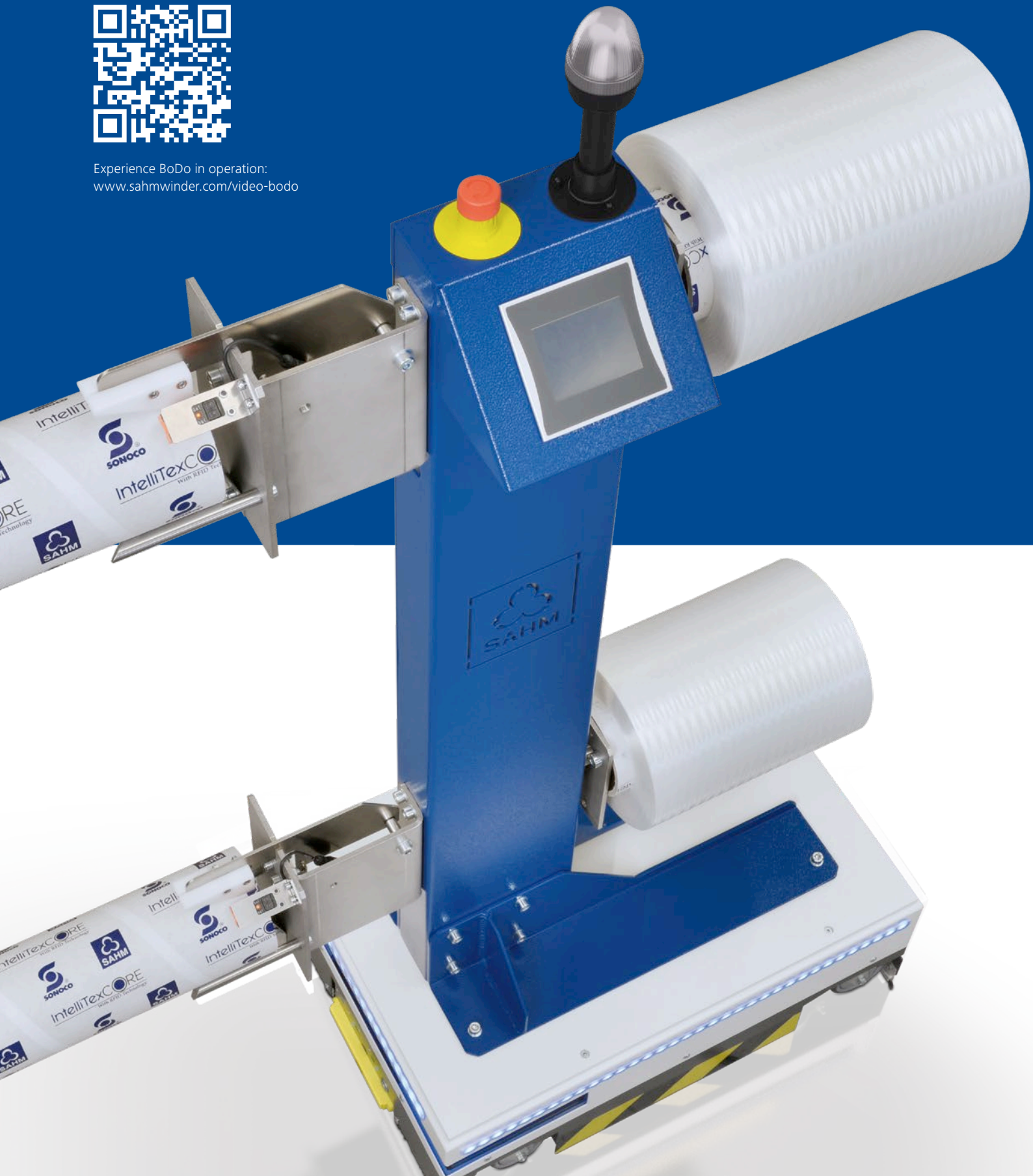
Mobile, fully automatic doffing and transport system



WINDERS + SYSTEMS
a member of Starlinger Group



Experience BoDo in operation:
www.sahmwinder.com/video-bodo



BoDo The SAHM BobbinDoffer

Next generation workflow

The mobile, fully automatic doffing and transport system BoDo is set to revolutionize bobbin and tube handling within your workflow. The handling robot picks up bobbins, transports them and stores them at the locations you define. At the same time, it loads your winders with empty tubes, ensuring a continuous, efficient workflow.

BoDo – Your reliable new service provider.

Pioneering

Precise, optical position sensing

BoDo's laser scanner registers routes and positions quickly and precisely.

Flexible

Freely definable range of motion

Operating routes and the pick-up and storage points for bobbins and tubes can be freely programmed – making BoDo compatible with any production environment.

Networked

Your Industry 4.0 solution

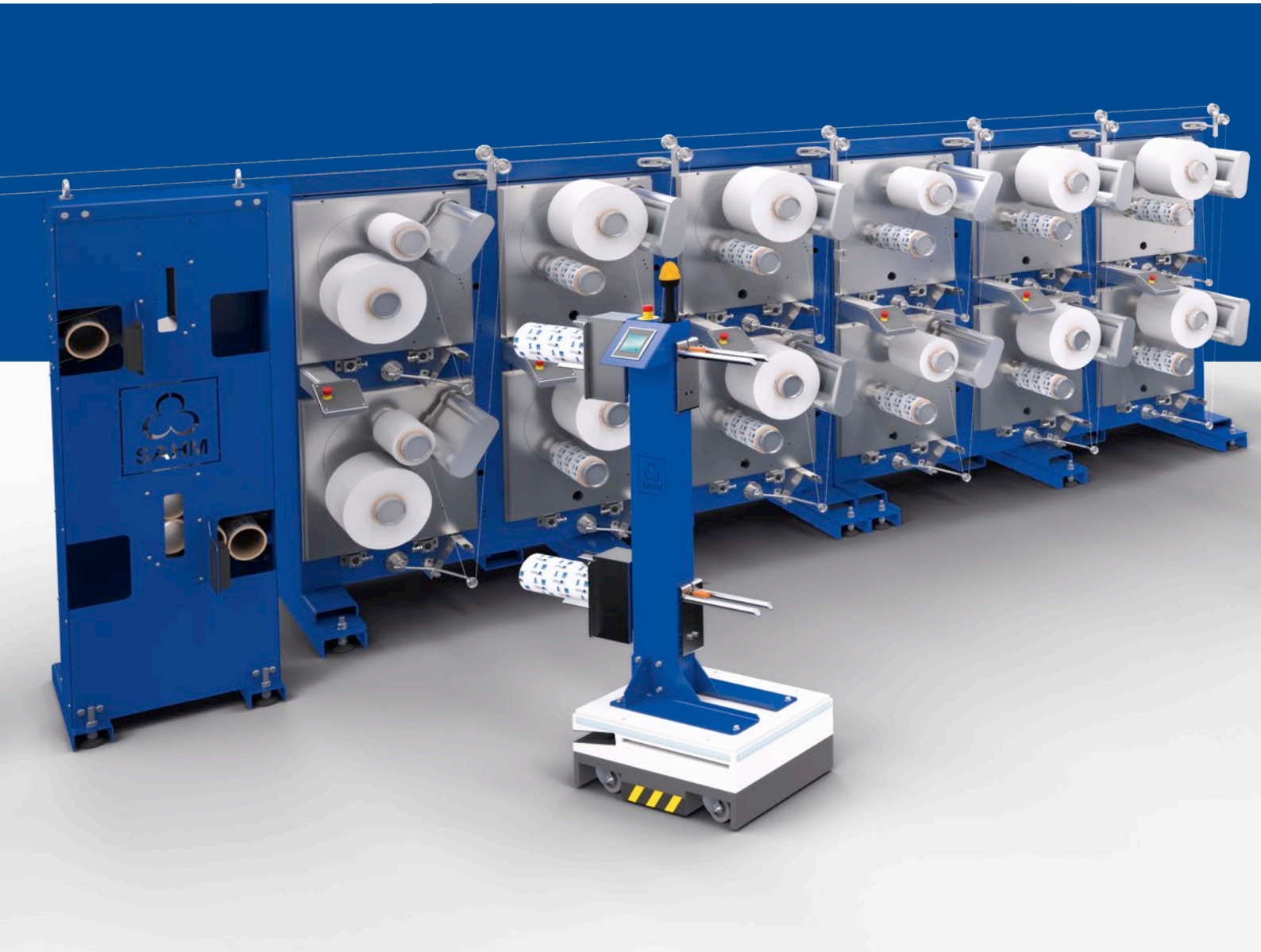
Networked with SAHM winders, the BobbinDoffer supports logistically optimized workflows, enhanced with our optional RFID system.

Safe

Detects persons and objects

BoDo guarantees safe operation alongside personnel, vehicles and machines. Its safety laser scanner monitors the environment. As soon as it detects an obstacle, the robot reduces its speed. If the object is within its defined protected area, BoDo stops immediately, avoiding a collision.





» TUBE DEPOT

Waiting for doffing request,
routing to tube depot,
pick-up of empty tube(s).

OPTIONAL

Registration of the RFID tags
for the collected tubes.



» BOBBIN DOFFING

Driving and positioning in
front of the full bobbins.
Waiting for the doffing signal.
Bobbins are collected.



» TUBE PLACEMENT

Placement of empty tube(s).

OPTIONAL

RFID tags are matched to the
winding head.





Bobbin handling. Fully automatic.

The mobile BoDo is an innovative solution for fully automated bobbin and tube handling. It is easily integrated into existing processes and offers maximum flexibility. Physical strain on operators is reduced, processes are optimized – all with increased speed, efficiency, cost-effectiveness and ergonomic optimization.

» BOBBIN DELIVERY

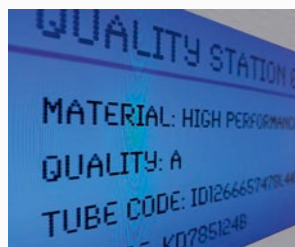
Transport and delivery of full bobbins to a suitable receiving system (e.g. creel trolley).

OPTIONAL

Automatic or manual checking of bobbin quality at a quality station. With the RFID option, the data of the current bobbin is shown on a monitor and can be saved there.

» CHARGING STATION

Automatic navigation to the waiting position or – when the battery is low – to the charging station.



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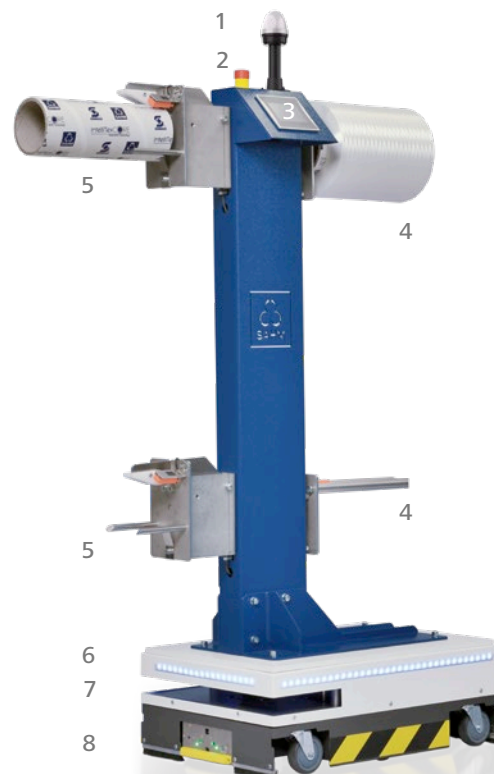
APPLICATIONS

- Continuous processes in combination with automatic SAHM winding machines, e.g.:
 - TWINSTAR II
 - CarbonStar II
 - LinStar

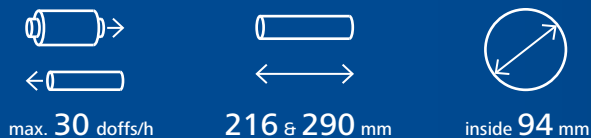
● FEATURES ○ OPTIONS + ADD-ONS

- Simultaneous removal/placement of bobbins on two adjacent winding heads
- Safety laser scanner
- Creel trolley
- Tube depot
- Touch panel on vehicle
- SLAM process (main routes without lines)
- Remote control for teaching of the BobbinDoffer
- Second safety laser scanner at rear of the BobbinDoffer
- Possibility of integration with higher-level process control system
- + IntelliTexCORE RFID

- 1 Signal lamp
- 2 Emergency stop
- 3 Touch panel (manual mode, automatic mode, error messages and battery charge)
- 4 Bobbin uptake
- 5 Tube uptake
- 6 LED status strip
 - In operation
 - Alarm
 - Warning or protective field active
 - Chaser light/rotation direction
- 7 Safety laser scanner monitoring area in front of and next to the vehicle
- 8 Lane recognition with safety sensor edge and WiFi antenna



stem



TECHNICAL DATA

Load capacity	50 kg
Speed	Max. 1 m/s
Battery runtime	4 hours, charging time 60 min.*
Changes	Max. 30 doffs per hour
Safety equipment	Safety laser scanner, audible warning signals
Tiers	2 (standard)*
Routing	Lines, bar codes; optional SLAM
Tube inside diameter	94 mm*
Tube outside diameter	100 - 108 mm*
Tube length	216 mm & 290 mm*

*) Additional values available on request



Scalable

Solutions for any production capacity

BoDo is a flexible, scalable system which offers a suitable solution for every production operation and for any output. Several handling robots can be interconnected to work as a team. The mobility of the system also enhances its scalability: Each robot's operating range can be freely defined and extended.

This makes BoDo a future-oriented solution!



IntelliTexCORE RFID

Total supply chain transparency

Today's supply chains are global and increasingly complex. Together with our partner SONOCO, we have developed a flexible RFID system (radio-frequency identification) which enables traceability from production to final use.

IntelliTexCORE RFID enables automatic inventory localization as well as automatic data collection through the various production steps. Manual entry errors are eliminated and manual inventory control is reduced to a minimum.

Enlarging our focus.
For exciting solutions.

Constructing winders that are among the world's best requires a comprehensive approach to systems and processes. This know-how is a special strength of SAHM. Our sales team, our partners, our agents and, not least, our development department engage in direct dialogue with our customers, seeking to work out the best possible solutions for their individual requirements.

The mutual exchange of know-how and experience, always on an equal footing, opens up new perspectives and new possibilities for all parties involved. Out of this trusting co-operation arise pioneering technological developments which make our customers' processes simpler and more efficient – thereby giving you a competitive edge.



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