



Soma^{tec}

The world of winding



Surface winders



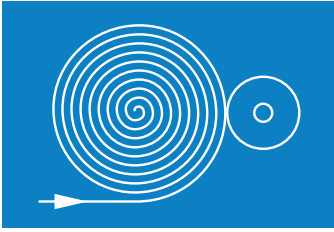


The SOMATEC range

- In-line and off-line winders and unwinders
- Re-reelers and web processing machines
- Accumulators
- Finished reel and winding shaft handling
- Single winding components

What SOMATEC offers

- Support
- Technical development
- Project planning
- Design and manufacture
- Assembly and commissioning at SOMATEC and on site, worldwide
- Full automation and integration into new or existing machinery
- Modification and retrofitting of existing machinery and equipment
- After-sales service



Surface winders

SW-E | SW-S | SW-R

SW-E

The competitively priced solution for winding nonwovens, film, and tobacco behind production machinery | [Page 4](#)

SW-S

Versatile, can be used for sophisticated in-line winding and slitting with extra support roller | [Page 6](#)

SW-R

Reel winder for winding reels with huge diameters | [Page 8](#)

Options

Optional features | [Page 10](#)

SOMATEC surface winders (contact winders) can be used behind nonwoven production lines, in film lines and paper finishing. They excel at winding tension-sensitive materials gently.

Thanks to automatic reel change, in-built edge trimming and/or multi-web slitting, they are a compact and cost-efficient alternative to turret winders and multiple-station winders with accumulators.

The three basic designs offer a range of optional features and are adapted to meet the requirements of your machinery.

Please contact us if you would like a demo, or some advice.



SW-E surface winder

The economical solution. The compact design focuses on the core functions, which makes this automatic surface winder an exceptionally cost-effective choice.

The basic version just needs one single drive and has everything required of reliable and state-of-the-art winding technology.

- Compact design
- Automatic reel change
- Contact winding from the first to the last layer
- Winding tension and contact pressure can be preselected

Advantages

- Automatic reel change at full production speed onto adhesive cores
- The compact design makes large-diameter finished reels possible in tight spaces
- Superior winding results due to contact winding from the first to the last layer, which means that the material doesn't mistrack at the side during multi-web winding
- Winding tension and contact pressure can each be preselected with a characteristic curve
- Basic machine can be upgraded. The SW-E surface winder can come with various optional functions (edge trimming and multi-web slitting, reel and shaft handling – see page 10/11)

The winding process



Winding carriage with centre drive



Reel change



Technical data

Reel diameter:	1,500 mm max.
Reel weight:	1,000 kg max.
Material width:	2,000 mm max.
Speed:	200 m/min max.
Inner core diameter:	from 76.2 mm (3")

Other designs with different data are possible.



SW-S surface winder

Universal and versatile. The stand-out feature of this type is the support roller that shores up the reel from below during the winding process. This effectively prevents deflection, especially during multi-web winding. The support roller's own drive improves the winding outcome considerably. The tension and pressure force can also be controlled during reel changes. As a result, the way the material is wound onto the reel can be influenced.

- Compact design
- Driven support roller
- Automatic reel change
- Contact winding from the first to the last layer
- Particularly easy to upgrade

Idle support roller



Support roller during winding



Advantages

- Full production speed with automatic reel change on cores prepared with adhesive tape. Electric TAC reel change system means no web foldback
- The winding tension and contact pressure can each be pre-selected with a characteristic curve
- The compact design makes large-diameter finished reels possible in tight spaces
- A driven support roller shores up the winder superbly
- Superior winding results due to contact winding from the first to the last layer, which means that the material doesn't mistrack at the side during multi-web winding
- No extra slitter-rewinder is required for slits up to a sheet width of 70 mm
- Basic machine can be upgraded. The SW-S surface winder can come with various optional functions (edge trimming and multi-web slitting, reel and shaft handling)
 - see page 10/11)

Winding carriage with centre winder



Technical data

Reel diameter:	1,800 mm max.
Reel weight:	1,500 kg max.
Material width:	3,000 mm max.
Speed:	200 m/min max.
Inner core diameter:	from 76.2 mm (3")

Other designs with different data are possible.



SW-R surface winder

For very large reel diameters. The reel winder is designed to cope with massive reel diameters – particularly behind nonwoven production lines. The layout of the contact rollers means that winding is even carried out in contact mode during reel change. The pressure is constantly controlled by a two-dimensional pressure measuring system. Automatic reel change is carried out at full production speed. The additional central drive of each winding station ensures gentle winding of each new reel.

- Winding diameter of up to 3 metres
- Automatic reel change
- Controlled contact winding from the first to the last layer

Advantages

- Fewer reel changes required due to large winding diameters
- Full production speed with automatic reel change on cores prepared with adhesive tape
- Excellent winding results thanks to regulated contact winding from the first to the last layer
- Winding tension and contact pressure can each be preselected with a characteristic curve
- Air automatically blows the sheet of material in at high speed via a swivel-mounted conveyor support
- Basic machine can be upgraded. The SW-R surface winder can come with various optional functions (a winding shaft magazine, automatic feed of the shaft to the winding position, multi-web and edge slitting, reel and shaft handling – see page 10/11)

Winding carriage



Technical data

Reel diameter:	3,000 mm max.
Reel weight:	3,000 kg max.
Material width:	3,000 mm max.
Speed:	500 m/min max.
Inner core diameter:	from 152.4 mm (6")

Other designs with different data are possible.

Central drive



Options

Our basic machines are designed to handle the production environment concerned. What's more, our optional features mean further potential for new machines and retrofits:

- **Higher productivity**
- **Automation to save costs**
- **More flexible machinery**

Slitters with the EPOS automatic positioning system



Slitters

Greater productivity due to edge and multi-web slitters

- Blade-, shear- or crush-cut
- Knives are adjusted manually or fully automatically via the EPOS automatic positioning system
- In-line slitting means that expensive slitter-rewinders aren't needed

Fully automatic unloading carts



Reel handling

More efficiency when handling the finished reels on the winder and during subsequent processes.

- For manual removal with a crane
- With a fully automatic unloading cart
- With an automatic swivel mandrel and removal by robot
- Via an interface to packaging lines downstream

Winding shaft magazine



Winding shaft handling

Automatic winding shaft handling means improved set-up and cycle times

- Automatic feed of the winding shaft from the magazine
- Automatic insertion of the winding shaft with XY handling
- No staff need to be in hazardous areas, no heavy loads for personnel, exceptional reliability

Central drive



Central drives

Greater flexibility because the contact roller is driven in the centre.

- Can influence lots of process parameters and achieve the perfect winding result
- Meets the requirements of a wide range of materials
- Enables gap winding of adhesive materials

Preparation of winding shaft
with automatic application of adhesive



Winding shaft preparation

A high degree of automation due to state-of-the-art winding shaft preparation

- Automatic core positioning
- Automatic application of adhesive
- An interface to ERP systems and production orders is possible



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