

# Coil winding unit

RINGROL 300 / 400 / 560



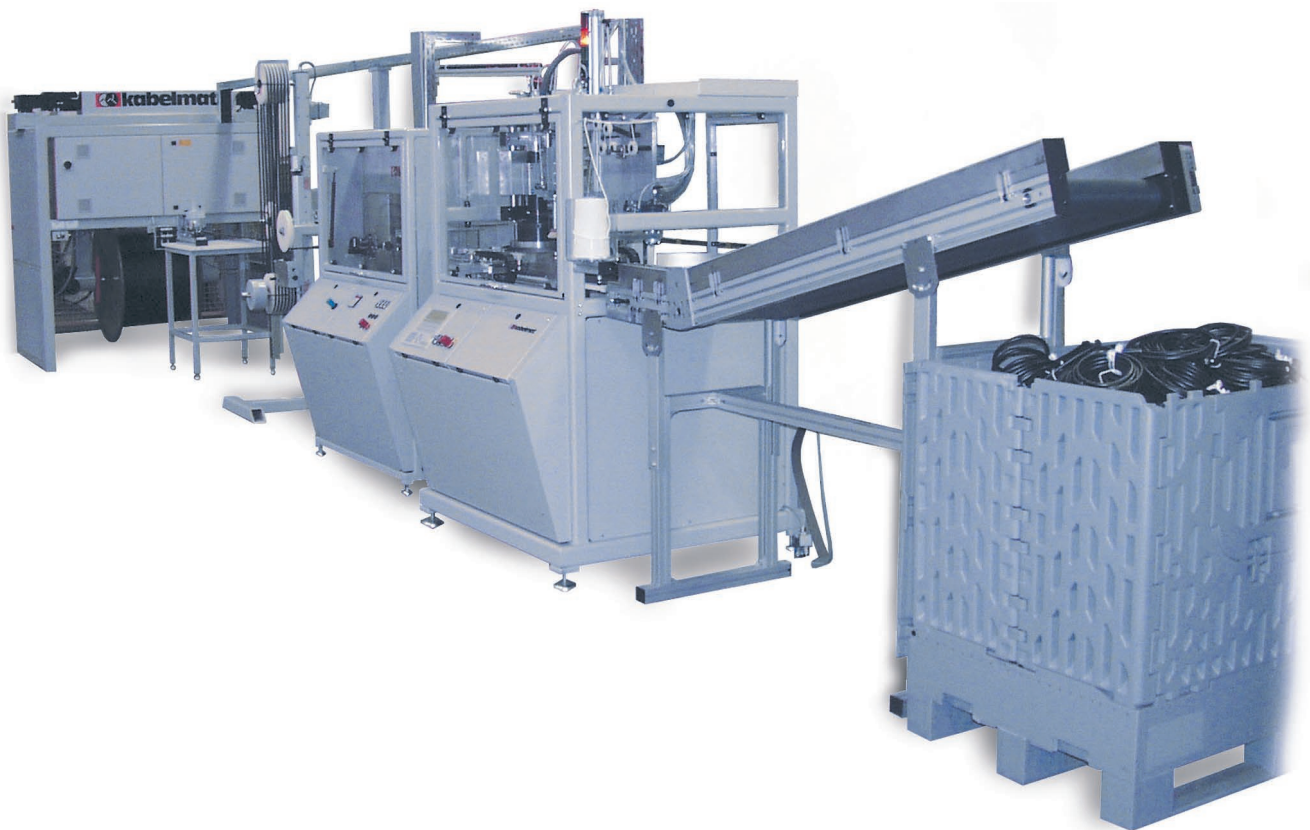
Winding up | Unwinding | Rewinding | Measuring | Cables | Wires | Ropes | Tubes | Hoses

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# Coil winding unit

## RINGROL 300 / 400 / 560



RINGROL 300 series with PORTROL 1000  
and ACUMATIC 240 (Outlet conveyor belt optional)

### RINGROL 300 / 400easy / 400 / 560

Our series RINGROL allows efficient cutting-to-length, coiling, binding and packing of cables, lines, wires, ropes, profiles or tapes with kabelmat®-system components. The following elements can be composed to a complete, fully automatic coiling line according to the individual requirements of the customer.

- Drum pay-off
- Winding material accumulator for synchronization and tension force control of the unit
- Feeder with length measurer and cutter
- Printing of winding material
- Fully automatic coil winder with integrated traverser unit
- Binding station with elastomeric cord or PE-band
- Labelling unit for cable coil and loaded pallets
- Film wrapping, cartoning equipment
- Palletizing unit with automatic provision of empty pallets and removal of loaded pallets
- Film stretching unit for wrapping of loaded pallets
- Testing unit for puncture and insulation, diameter and knots

In the last few years the amount of coils to be wound by cable manufacturers and cable traders became more and more varied regarding diameter and length. Simultaneously supply times become shorter and shorter. By means of this new generation of coiling lines, kabelmat® is able to meet with all requirements. Due to standardized components kabelmat offers an efficient and convenient solution for all customer specific requirements.

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### Basic equipment:

#### **Basic machine**

- Stationary, closed base frame, steel construction
- Electric control cabinet with all control elements and winding processor
- Control panel for central control of all functions by Siemens S7 - Control, Siemens OP-177 Display with user-friendly keyboard
- Software for managing about 99 different materials and all machine parameters
- Central pneumatic cabinet with pneumatic valve unit
- Protective doors made of Makralon with electrical safety interlock
- Powder-coated sheet casing

#### **Traversing unit (RINGROL 300 + 400easy)**

- Mounted to the inlet of the winding unit
- Guide of the nozzle requested for the pushing-in of the material
- Traversing grade and winding speed synchronized
- Traversing width and reversing position adjustable
- Suitable for round conductors

#### **Coil winding module**

- Winding unit driven by three-phase servo geared motor
- Winding height adjustable by handwheel with scale (concerning RINGROL 300 + 400easy)
- Pneumatically operated closing device with quickly adjustable winding height via three-phase servo geared motor and fine adjustment for clamping the start of the cable (see RINGROL 400 + 560)
- Pneumatic stroke of the counter plate
- Pneumatic lifting and lowering of the winding core
- Ball-bearing winding plate integrated in the machine table.
- Foldable winding cores in different sizes



#### **Coil gripper system**

- Pneumatically operated bilateral gripper unit for grabbing the wound coil and transporting it to the binding station.

#### **Intermediate feeder unit**

- Pneumatically operated feeder unit with spring-suspended tappet and brushes necessary for transporting the coil after the initial binding station to the second binding position (only concerning RINGROL 300)
- for highly qualified cutting of short lengths



# Coil winding unit

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### Selectable binding stations

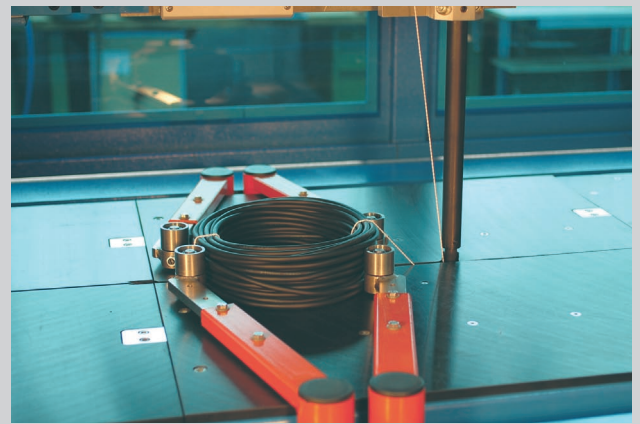
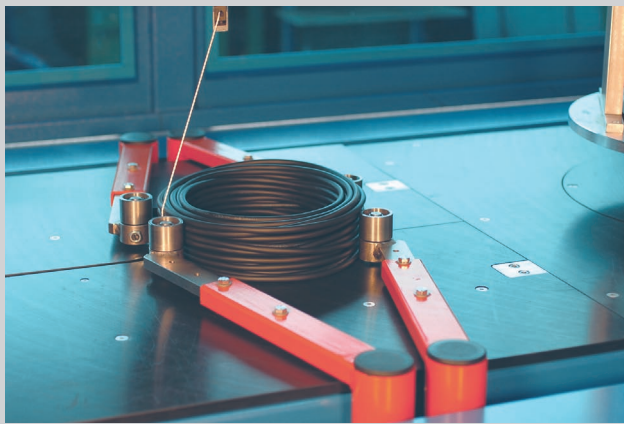
#### 1.) Binding station for twistband (concerning RINGROL 300)

- Binding station for twofold binding/twisting of the cable coil with twistband
- Twisting of the twistband by means of pneumatic function unit
- Twistband consisting of plastics with internal metal core
- Feeding of the twistband is carried out by a spool
- During the winding procedure the previous coil is bound



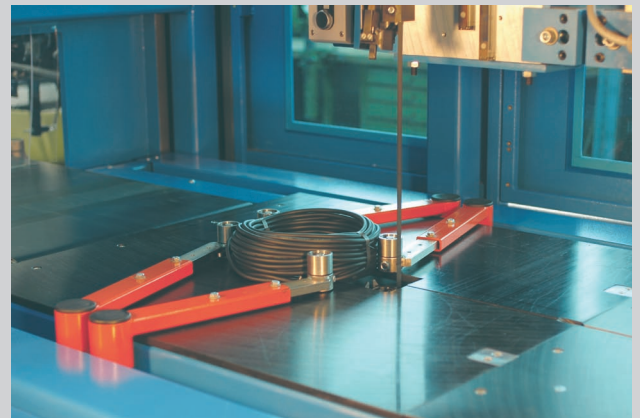
#### 2.) Binding station for elastomeric cord (RINGROL 300 / 400 / 560)

- Binding station for twofold binding of the cable coil by means of elastomeric cord
- Pneumatic binding arm and cord brake
- Knotting device with electrical drive



#### 3.) Binding station for strap band ( RINGROL 400 / 560)

- Binding station for twofold binding of the cable coil with strap band
- Welded connection
- The upper and lower welding head are guided on rails and are electropneumatically moved together
- Equipped with two bands
- Regulation of the band tension
- Band back-run safety device
- Band end control
- Band unwinder outside the machine



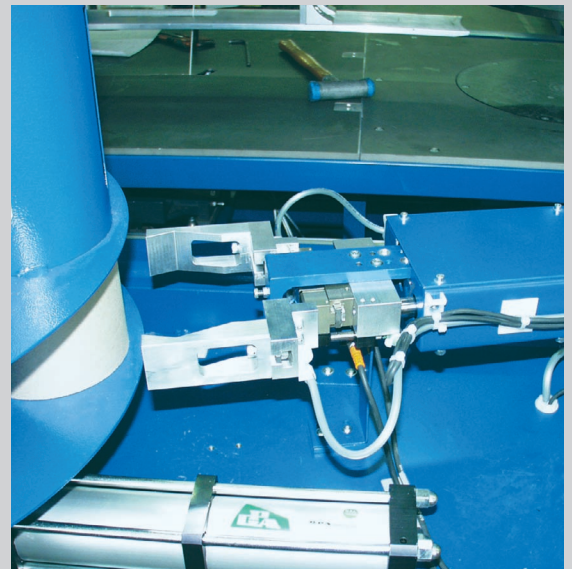




RINGROL 400 with 4-fold binding by elastomeric cord



cardboard core magazine



Gripper to insert small spools or cardboard cores automatically

# Coil winding unit

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### Accessories

#### **ACUMATIC 50-1 P** (RINGROL 300 and 400easy)

Small dancer for RINGROL for the synchronization with a cutting machine. Due to this patented dancer the coil winding unit is suitable for the use after any cutting or dismantling machine (of various manufacturers) and no data transfer etc. is requested. It is only necessary to provide a length measuring system and a street locking mechanism.

#### **WORKMAT 10** (RINGROL 300 and 400easy)

suitable for flexible and massive cables and lines.

#### Basic equipment:

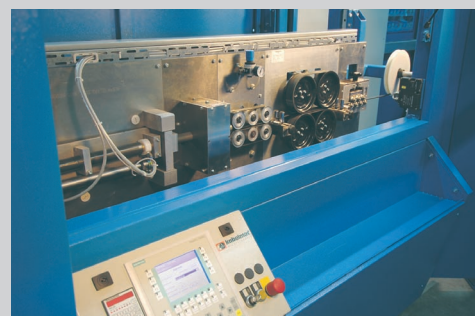
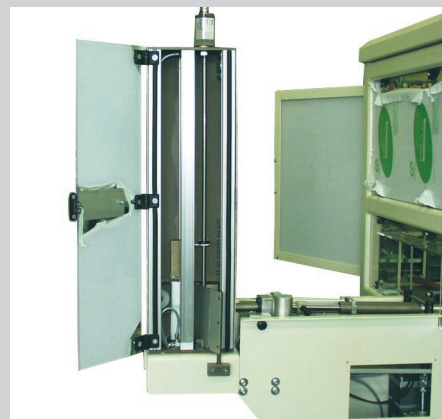
- Steel profile frame, free-standing
- Roller straightening device
- Length measuring unit MESSBOI 25
- Crawler feed with following specifications:
  - Pneumatic lifting and lowering function
  - AC driving motor with continuously variable, pre-selectable speed
  - Pneumatic cutting unit
- Protective door with electrical safety switch
- Switch cabinet with all functions and control units, installed
- Operator panel for ergonomic adjustment of pneumatic functions, user-friendly installation

#### **Extension unit** (RINGROL 400 and 560)

suitable for flexible and massive cables and lines.

#### Basic equipment:

- Steel profile frame installed at RINGROL
- Traverser unit via three-phase servo motor for exact traversing
- Roller straightening device
- Length measuring unit MESSBOI 40 Band
- Crawler feed with following specifications:
  - Pneumatic lifting and lowering function
  - AC driving motor with continuously variable, pre-selectable speed
  - Pneumatic cutting unit
- Protective door with electrical safety switch
- Switch cabinet with all functions and control units, installed
- Operator panel for ergonomic adjustment of pneumatic functions, user-friendly installation

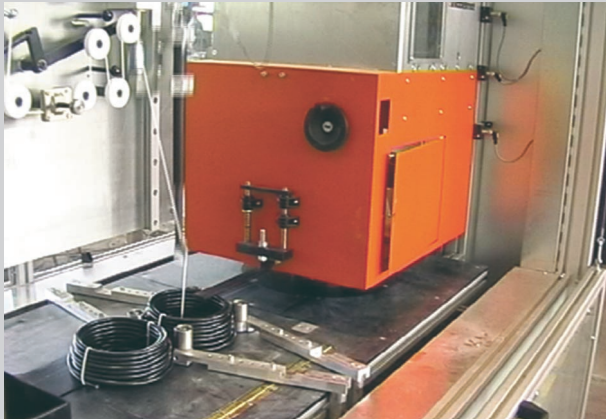




# Coil winding unit

## RINGROL 300 / 400 / 560

Example: closed driving unit for inline operation



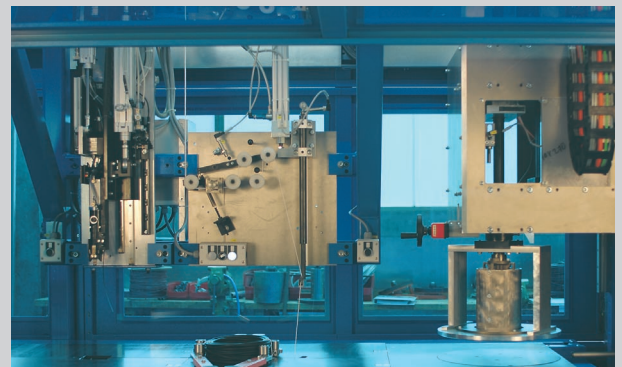
Example: Machine in service, inline operation



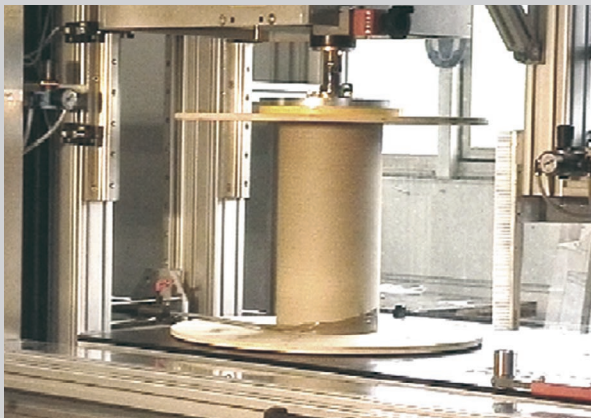
Example: RINGROL with integrated stripping unit



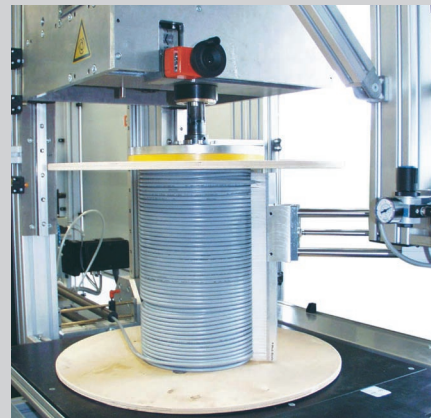
Example: Winder drive with movable core and binding system by means of elastome



Example: RINGROL also suitable for drums

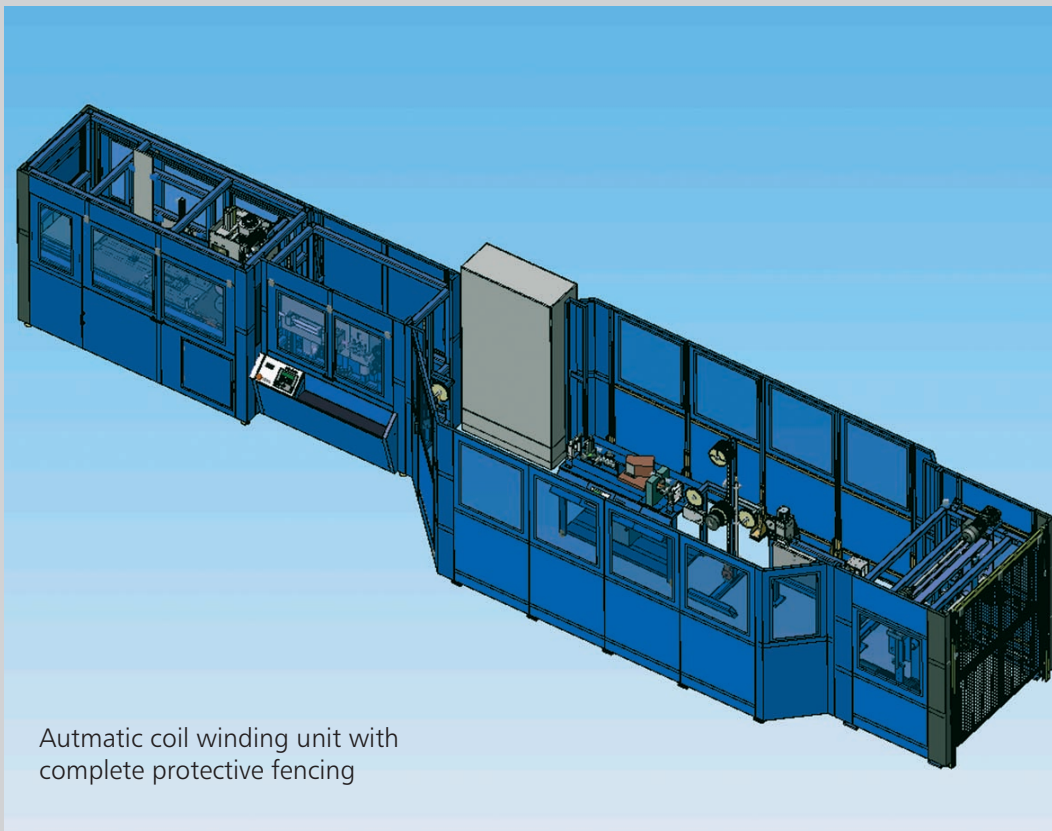


Example: Brush while winding



# Coil winding unit

## RINGROL 300 / 400 / 560



### Technical Data:

	RINGROL 300 T + E	RINGROL 400 B + E	RINGROL 560 B + E
Coil diameter	max. 300 mm	max. 400 mm	max. 560 mm
Coil width	max. 100 mm	max. 200 mm	max. 200 mm
Coil weight	max. 10 kg	max. 15 kg	max. 25 kg
Core diameter	100 / 120 / 150 collapsible (other sizes upon request)	120 - 250 mm (collapsible, different sizes)	120 - 250 mm (collapsible, different sizes)
Material diameter	1 - 10 mm	1 - 10 mm	1 - 15 mm
Winding speed	250 m / min	600 m / min	600 m / min
Binding module selectable	Elastomeric cord / Twistband	Elastomeric cord / strap band	Elastomeric cord/strap band

MSW 10/EN/03.2010 (Subject to change without notice)

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