



# ROTAR 300 SERIES

AUTOMATIC  
TAPING MACHINES

**komax**

## **ROTAR 300 SERIES**

### **Well-known technology in a compact design**

With the Rotar 300, Komax was successful in integrating the reliable technology of the Rotar 500 in a table machine.

Cable harnesses with up to 10 branches can be handled with the programmable taping machines of the Rotar 300 series with no difficulty at all.

The visualization of the process steps makes production significantly easier. The free positioning of the linear system contributes to flexibility: Individual positions can be approached when needed.

Cable harnesses with up to two branches can be optimally produced with the operator-controlled taping machines of the Rotar 300 series.

The Rotar 300 series also meets the highest safety requirements and reduces downtime.

Depending on the configuration, the machines of the Rotar 300 series are available with an open or closed winding head.

## **THE OUTSTANDING FEATURES OF THE ROTAR 300 SERIES AT A GLANCE**

### **Right-justified winding head**

#### **Open winding head**

#### **Extended winding head area**

#### **Smart process cover**

#### **Processing of tape rolls with an outside diameter of up to 220 mm**

#### **Intuitive machine programming**

#### **Digital machine manual**

### **Right-justified winding head**

- No collision points.
- Cable blocking is prevented.
- Simple and fast handling of the cable.
- Ideal integration in a production line.

### **Smart process cover**

- The smart process cover meets the toughest safety standards.
- The process hood opens and closes fully automatically and independently detects handling errors.
- The cable entry area can be adjusted to either 25 mm or 50 mm using different inlets.

### **Extended winding head area**

- More space for handling the cable.
- Optimized handling time.





# A NEW GENERATION OF TAPING

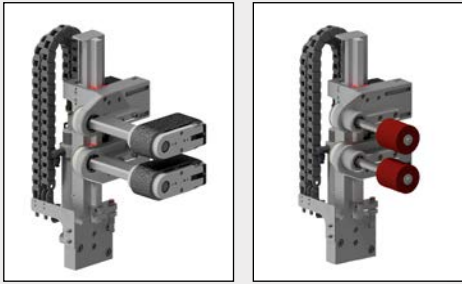
## **Open winding head**

- Ideal for large cross-sections with long branches.
- The winding head opening makes it easier to insert and remove the cable harnesses.

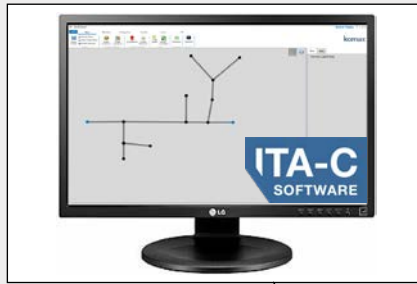
## **Processing of tape rolls with an outside diameter of up to 220 mm**

- Less machine downtime.
- Optimized setup time.

**FEED SYSTEM**



**ITA-C SOFTWARE**



**MES & REMOTE**



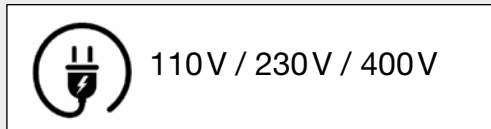
**LINEAR SYSTEM**



**PULLING TOOL**



**VOLTAGE VARIANTS**



**TABLETOP**



# ONE MACHINE AS A PLATFORM

USING ONE BASIC MACHINE VERSION AS A PLATFORM, SEVEN STATE-OF-THE-ART MACHINE VERSIONS CAN BE CREATED WITH FEATURES THAT ARE CURRENTLY UNIQUE ANYWHERE IN THE WORLD. VARIOUS OPTIONS ALLOW YOU TO CUSTOMIZE THE MACHINE.

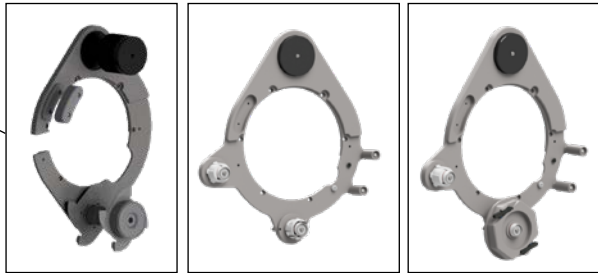
## WINDING HEAD LIGHTING



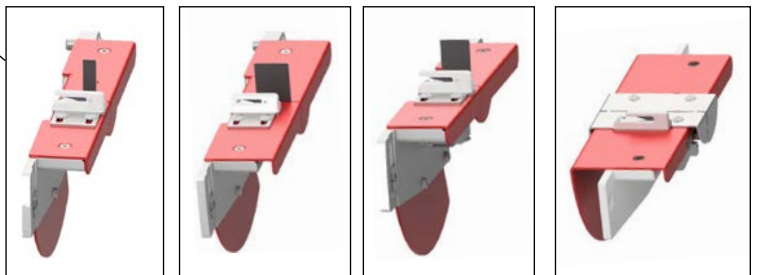
## Applications at the customer's request

The Rotar 300 series machines offer various configuration options that can be selected by the customer according to his product requirements. Komax Taping has a wide range of additional equipment options to meet specific customer requirements.

## CLAMP RING



## WINDING TABLES



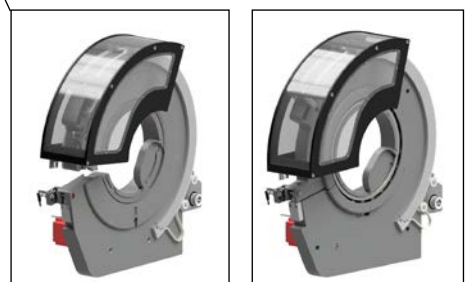
## HEIGHT ADJUSTABLE STAND



## UNWINDING DEVICE



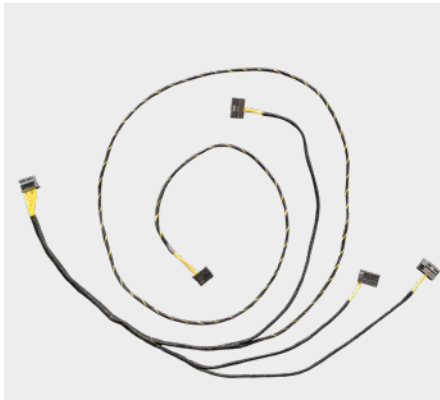
## WINDING HEAD





### Outstanding process quality and repeatability

Automated taping with the Rotar 300 series results in up to 25 % adhesive tape savings when compared to manual production. The robust feed system ensures low wear and thus a longer service life. The choice of feed, using either rolls or belts, ensures the ideal cable transport and optimal tape overlap for a wide range of cable qualities and thicknesses. This means a wide range of cable cross-sections can be processed.

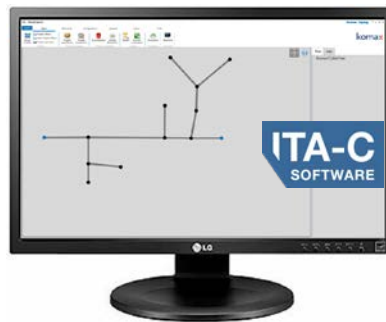


### Intuitive machine programming

The new Rotar 300 is also compatible with the well-known and tried-and-tested ITA-C desktop license. Using this software, the program sequence can be created using a table or based on a drawing of the cable harness structure, with the parameters being adjusted intuitively. The software automatically calculates the optimum process sequence.

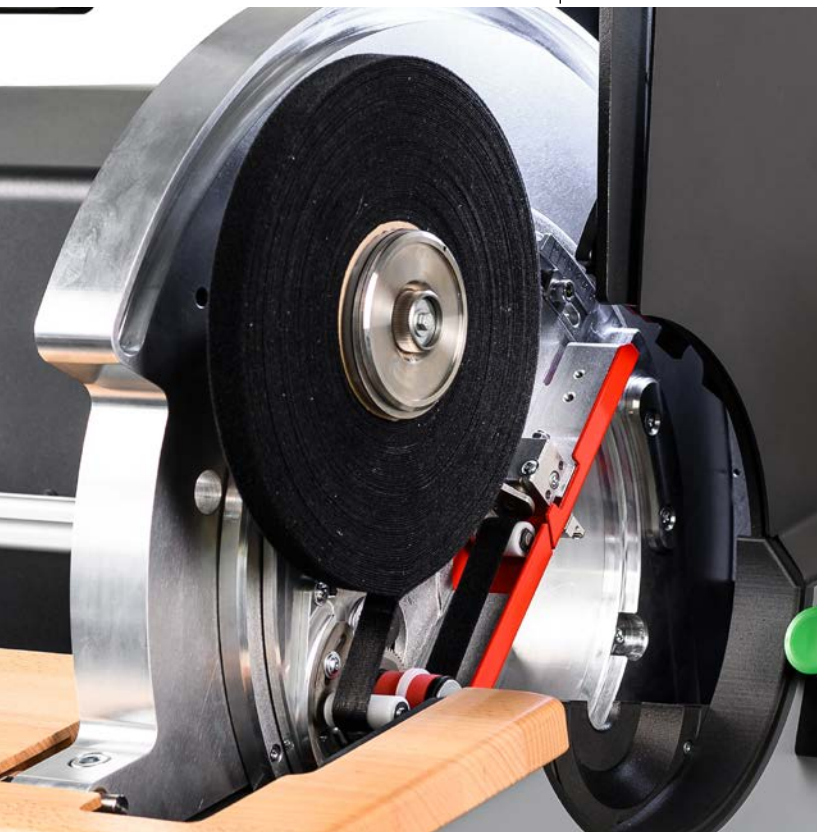
The software can be installed on a desktop PC in the production planning office, so there is no need for programming the machine. Thus machine downtimes are reduced to a minimum.

A digital user manual appears directly on the panel, meaning that it is available at all times and facilitates rapid problem solving. In the event of faults during operation, problems and solutions are displayed automatically.



### Inlets on the winding head

Two different inlets on the winding head can be selected,  $\varnothing$  25 mm or  $\varnothing$  50 mm. This allows the clearance around the incoming cable harness to be maintained as low as possible. This increases the acceptance of the machine by the operator and ensures greater safety.



### Processing of rolls of tape with an outer diameter of up to 220 mm

One of the outstanding features of the Rotar 300 series is the increase in the processable maximum diameter of the tape roll to 220 mm. Up to now, the maximum tape roll diameter was 180 mm. The use of larger tape rolls reduces the number of tape changes required, with machine downtimes reduced by 45 %.

Where a tape length of 1000 mm has to be processed, a tape roll diameter of 220 mm requires just 7 tape changes, whereas conventional roll diameters of 180 mm require the tape to be changed as often as 13 times.

### The perfect pace

After saving the maximum speed of the winding head in the program, the speed can be continuously regulated with the foot pedal. By using the foot pedal, your hands are free, allowing for an even better and faster handling.



### Avoid twisting: unwinding device

The unwinding device is an option that helps in pulling off the tape while minimizing twisting the wires.



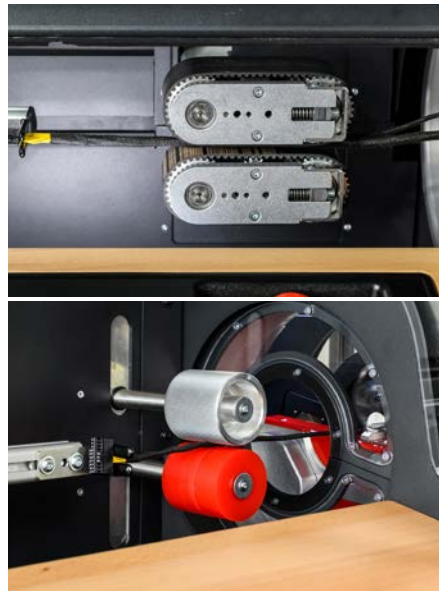
### Feed system

Depending on the type and nature of the cables to be processed, the basic machine can be equipped with either a roll feed, belt feed or no feed.

The roll feed is characterized by its low-wear design and simple maintenance and scores with its long service life (life cycle).

The belt feed is used for large cable packages consisting of several strands. It prevents slip and is gentle on the cables thanks to the elastic material used for the tape.

In the case of simple cable harnesses with up to 5 branches and a maximum length of one meter, our smallest program-controlled machine without roll or belt feed reveals its strength.



### Perfect performance for enhanced product safety

All machines in the Rotar 300 series have at least one roll feed, belt feed or a linear system. The latter ensures compliance with a specified overlap.



### Integrated cutting device for fast production

The adhesive tape does not need to be cut off with scissors – this saves time and prevents any damage to the cable.



### Ergonomic cable guiding

With the open winding head, the handling of long cable branches is child's play. The branches can be fed to the machine simply and ergonomically. Handling times are reduced to a minimum.







**komax**

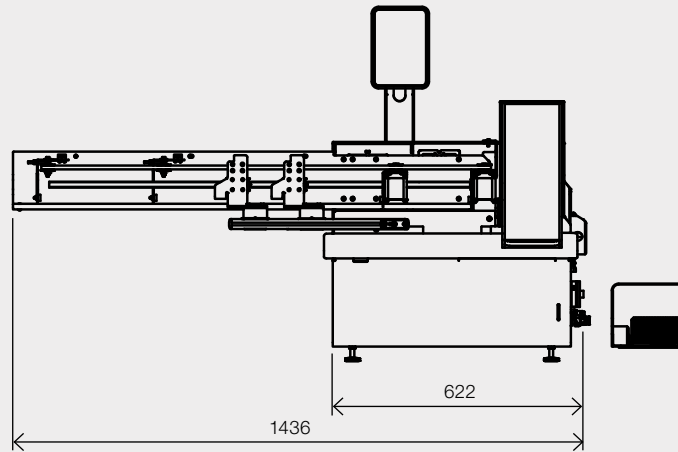
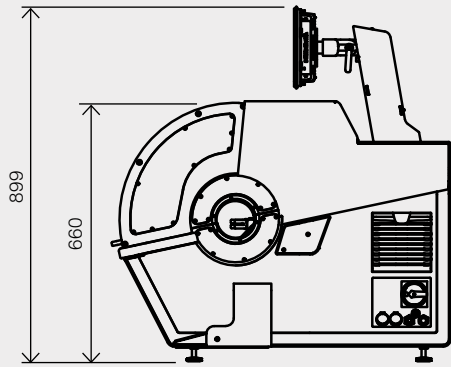
**Applications at the customer's request**

Komax offers a wide range of additional equipment options to meet specific customer requirements. At the request of the customer, many other applications are also possible with the Rotar 300 series.

**MES-capable**

The Rotar 300 series is ready for connection to an MES. We are happy to offer our support in creating optimal integration.


















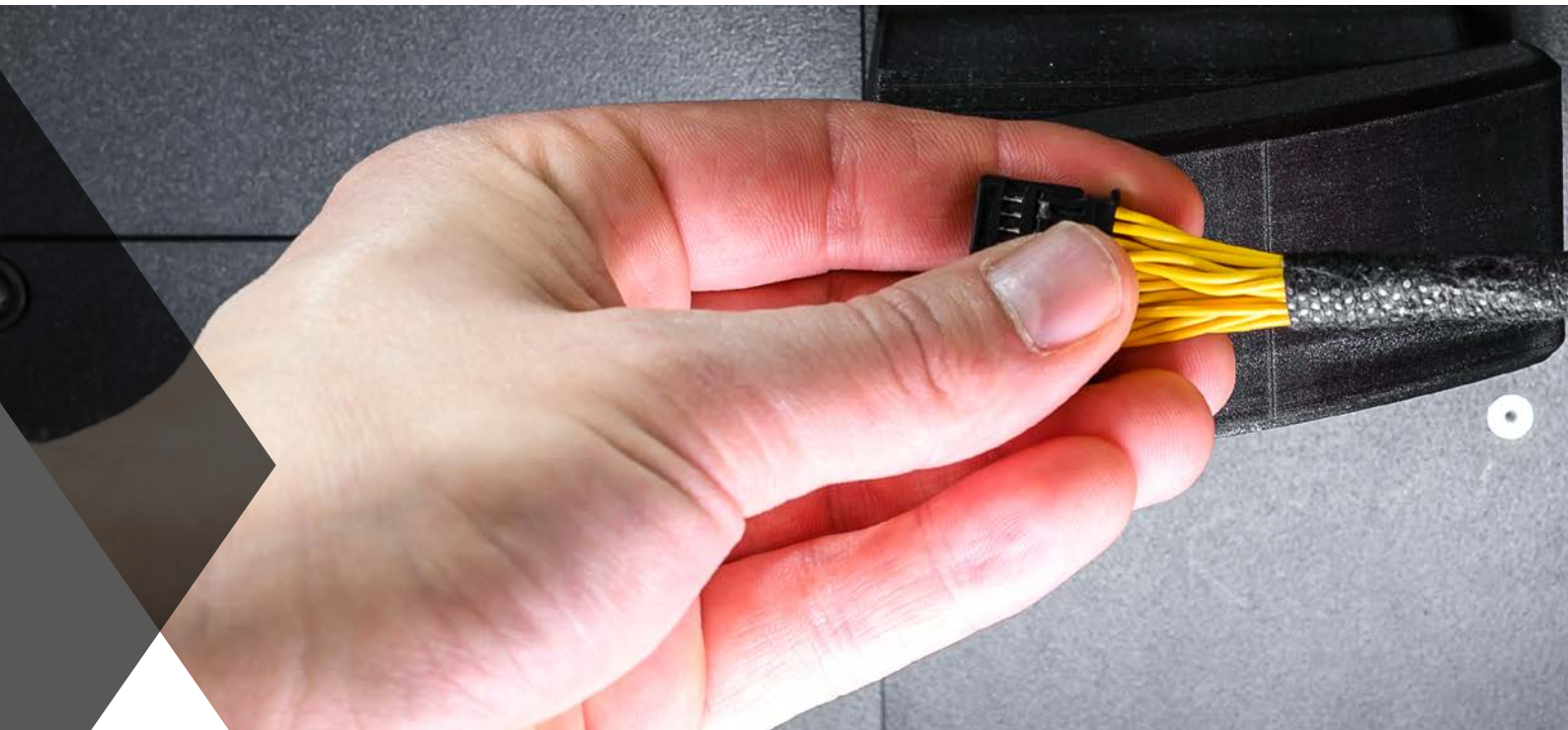


## Technical data – Rotar 300 series

Application	Taping long cable harnesses with a large number of branches
<b>Adhesive tape and cable harness data</b>	
Cable harness diameter	2–35 mm
Max. winding length	Rotar 303: max: 1000 mm Rotar 310–380: 50 mm to endless
Length deviation per winding step	max. +2 %
Tape materials	A wide range of automotive and industrial adhesive tapes (optional: double taping with non-adhesive aluminum tape)
Adhesive tape width	9–25 mm
Tape roll core diameter (standard)	1.5" und 3"
Tape roll external diameter	max. 220 mm
<b>Machine data</b>	
Winding head speed	Closed head: 100–1,000 rpm Open head: 100–800 rpm
Feed type	Linear arm Roll feed Belt feed Combined feed
Feed	0–70 mm/turn, program-controlled
Taping length with linear unit	Rotar 303: 1,000 mm Rotar 315, 335: 450 mm
End-of-tape detection	by optical sensor
Electrical connection	Closed head: L/N/PE = 100–130 V AC, 50/60 Hz Closed head: L/N/PE = 170–264 V AC, 50/60 Hz Open head: L1/L2/L3/N/PE = 380–480 V AC, 50/60 Hz
Back-up fuse	100–130 V: 32 A 170–264 V: 16 A 380–480 V: 16 A
Power input	Closed head: 2,9 kVA Open head: 4,9 VA
Control voltage	24/48 V DC
Operating pressure	6 bar (0,6 MPa / 87 psi)
Dimensions (H/W/D)	Rotar 303: 899 mm/1,436 mm/843 mm Rotar 315, 335: 899 mm/1,162 mm/843 mm Rotar 310, 360, 380: 899 mm/645 mm/843 mm
Weight	approx. 144–160 kg

# Basic machine versions

	Installed	Must be selected	Can be selected
<b>Rotar 303</b>	 Closed winding head  Linear system	Clamp ring   	 Pulling tool  Height adjustable stand  MES & Remote  ITA C machine software
<b>Rotar 310</b>	 Closed winding head  Roll feed	 	 MES & Remote  ITA C machine software
<b>Rotar 315</b>	 Closed winding head  Roll feed  Linear system		 ITA C machine software
<b>Rotar 330</b>	 Closed winding head  Belt feed	Voltage variants  110 V 230 V 400 V	 ITA C machine software
<b>Rotar 335</b>	 Closed winding head  Belt feed  Linear system	Winding table  	 Extended tabletop  Unwinding device  Winding head lighting
<b>Rotar 360</b>	 Open winding head  Roll feed		 Unwinding device  Winding head lighting
<b>Rotar 380</b>	 Open winding head  Belt feed		 Winding head lighting



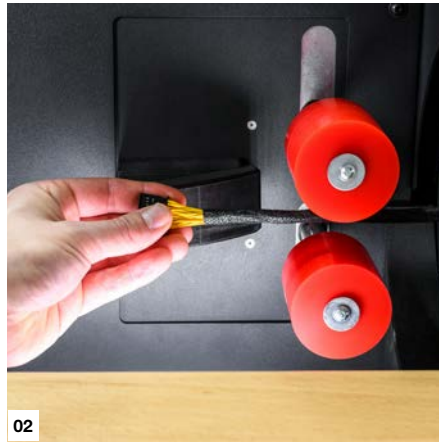


# YOU HAVE THE CHOICE

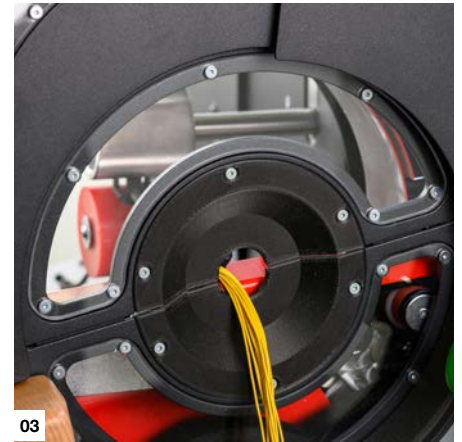
YOUR PERSONAL ROTAR – CUSTOM-TAILORED TO YOUR REQUIREMENTS AND EASILY ADAPTABLE



01



02



03



04



05



06

01 Large handling area  
02 Feed unit actuator  
03 Process cover

04 Right-justified winding head  
05 Intuitive machine operation  
06 Minimum distance from the connector to the taped product



## Komax – leading the field now and in the future

As a pioneer and market leader in automated wire processing, Komax provides its customers with innovative solutions. Komax manufactures series and customer-specific machinery, catering to every degree of automation and customization. Its range of quality tools, test systems, and intelligent software and networking solutions complete the portfolio, and ensure safe, flexible, and efficient production.

Komax is a globally active Swiss company with highly qualified employees and development and production facilities on several continents. It provides local support to customers worldwide through its unique sales and service network and offers services that help them get the most out of their investments.