

THE WAY TO MAKE IT



KOMAX WIRE ROTARY STRIPPING
MACHINES

3

KAPPA 331 – FLEXIBLE CABLE PROCESSING
OF TOP QUALITY

4

PRECISE BENCHTOP UNITS FOR
TOP QUALITY STRIPPING

6

FLEXIBILITY AND MAXIMUM PRECISION

Customized stripping with rotating blades

As a world leader in comprehensive wire processing solutions, Komax Wire is also a competent partner when it comes to special applications. We offer a range of solutions for economically and efficiently processing a wide variety of cables which, owing to their high-precision processes, fulfil the highest quality standards for cutting and stripping and are distinguished by their excellent user friendliness.

The Kappa 331 is based on the tried-and-tested Kappa 330 and complements the range of applications. Thanks to a rotating cutting unit and modular machine design, it offers flexible configuration options. Cosmic's insulation strippers are an ideal addition, offering an affordable introduction to automation. Their rotating blades make them ideal for processing very thin and tough insulating materials, and also for coaxial or triaxial wires and micro coaxial cables.

We invite you to find out more about these products and look forward to hearing from you. <



Matthias Schulthess, Head of Marketing
Marc Schürmann, Head of Sales

KOMAX WIRE ROTARY STRIPPING MACHINES

Komax Wire launches New Kappa 331 and presents successful Cosmic series

Kapton and Teflon insulations and coaxial cables are among of the toughest challenges in the automated wire processing industry. With its rotary stripping machines, Komax Wire has the solution for this challenge. To expand its rotary stripping capabilities Komax Wire launches the new Kappa 331 with rotating blade unit.

In order to ensure a quality strip, most of these wires and cables must be processed with a rotating blade head such as Komax Wire's rotary stripping machines. Hard to strip wires and cables are commonly found for example in products for the medical or aerospace industries. As the North American market possesses a diverse mix of customers who serve industries which require rotary blade stripping solutions in its production process; Komax Wire is looking to supply customers with a strong product offering of rotary stripping solutions. Customer testimonials, such as Nortech Systems, demonstrate the strong quality of Komax Wire's rotary stripping solutions.



Kappa 331 presentation at the Electrical Wire Processing Technology Expo this May in Milwaukee

Nortech Systems is a full-service electronics manufacturing services (EMS) provider of wire and cable assemblies, printed circuit board assemblies with a heavy concentration in the medical device market. As Nortech struggled with stripping its small gauge coaxial cable, Project Engineer Brett Behnke, turned to Komax Wire for a solution. According to Brett, he has always considered Komax Wire a fully automatic crimping machine supplier and did not even know Komax Wire offered coaxial stripping solutions in its product portfolio. The decision to select Cosmic's 42R was based on the fact that various manufacturers in the North American market are now requiring smaller gauge cables. When Nortech gave Komax Wire the opportunity to quote the Cosmic 42R; the Cosmic 42R outperformed its competitor.



Komax Cosmic 42R in Komax USA Product Showroom

Expanding Rotary Stripping Product Portfolio

Komax Wire launches the new and innovative Kappa 331 at the Electrical Wire Processing Technology Expo this May in Milwaukee, Wisconsin/USA. The Kappa 331 with its rotating blade unit makes a clear statement regarding ease of use, precision and flexibility for difficult to process cables. Customers will have an opportunity to view the Komax Wire rotary stripping product portfolio at the International Microwave Symposium in June in Tampa, Florida/USA and several International trade shows worldwide. <

Copy: Zachary Kozak, Sales & Marketing, Komax Wire USA

"While our current supplier offered a product similar to the Cosmic 42R, the justification process was simple as the price-performance for the Cosmic 42R was considerably better"

Brett Behnke,
Project Engineer of Nortech Systems

Your advantages

- Excellent price/performance ratio
- Extensive Global sales and service network
- Capable to process your most difficult wires and cables for any industry
- Extensive rotary stripping product solutions

KAPPA 331 – FLEXIBLE CABLE PROCESSING OF TOP QUALITY

Modular cut and strip machine with integrated rotating blades module



Precise and flexible processing that is gentle on the cabling thanks to module with rotating blades, length measurement and roller or belt drive

The Kappa 331 is a cut and strip machine with rotating blades. The rotary module enables precise, multi-step stripping of round, multi-layer cables with and without shields.

This flexible module eliminates the need to buy and replace form blades for the corresponding cables. The wire guides are quick to replace so small batches can be produced economically. The modular design accommodates options as they are needed.



Kappa 331 featuring integrated module with rotating blades for economical cable processing of batches large and small

"The need to process a big variety of cables in small batches efficiently, i.e. with minimum conversion time, has really grown in recent years. The Kappa 331 featuring a module with rotating blades, integrated length measurement and intuitive operation sends a clear signal with regard to user friendliness, high precision and flexibility for optimized work processes."



Martin Bossart,
Product Manager

The Kappa 331 uses the reliable Kappa 330 as a base and expands the range of uses in the 0.22 to 35 mm² cross section range. Thanks to the rotating cutting unit and modular machine design, this product has flexible configuration capabilities for a wide variety of cutting and stripping needs.

Kappa 331 – Flexible and precise

The module with rotating blades cuts precisely into single-layer or multi-layer cables with thin layers, shields or braided insulation. The integrated length measurement system ensures reproducible and precise cable lengths. High-performance drives with a roller or belt drive transmit forces optimally for the widest variety of jackets. The applied pressure is optimized for transport and stripping. This feature spares the drive unit and minimizes cable deformation, which in turn, increases the quality of stripping.

Configuration and use

The basic configuration for the Kappa 331 consists of a module with rotating blades, a stripping unit and reliable length measurement. The swivel guide principle enables the broadest range of uses. Everything can be easily programmed and precisely processed, from short and long stripping lengths to multi-layer materials (jacket cable with and without shield). Cable marking with inkjet is placed near the blade area so production entails almost no waste cut. Numerous accessories and options expand the processing range even more, e.g., the slit unit or the inkjet marker.




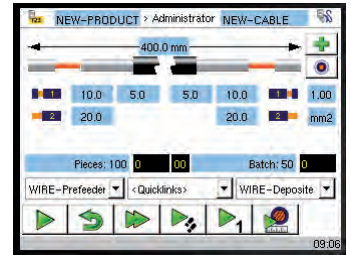
The Kappa 331 is compelling with its broad range of cable processing

TopTouch Kappa 14.1 – New interactive design for the Kappa 3xx series

The user interface for the Kappa 3xx series was revised in Version 14 and is highly compelling. It features controls that are even more intuitive plus a multitude of programming possibilities. The new interactive design incorporates a number of suggestions from users. Easy stripping tasks can be defined and produced with a minimum of previous knowledge.

Four main features make this optimized user interface a real stand-out:

- A single page for recording an entire product
- Quick definition of a product using the  button
- The incision values are calculated automatically with the cross section entry
- Quick access to key parameters such as speed, upstream devices, etc.



The new TopTouch 14.1 screen offers user friendly operations for simple and more complex stripping tasks




Inkjet connection options from entry-level solution to fully integrated solution

Three inkjet connection options to meet different needs

Inkjet has established itself as the preferred marking solution in cable processing. It has the advantages of high marking speeds, product changes requiring no conversion time, and flexible arrangement of the content marked on the cable.

Different use profiles mean different requirements for marking. That is why the Kappa 3xx series now offers three different inkjet connections:

- The basic Kappa I/O interface enables simple marking and is affordable even for those with a lean budget. The marked text is entered at the inkjet and initiated with the print-go signal from the Kappa at the defined position.

- Direct connection of the inkjet to the Kappa is now available as a new option. It combines simple operation with solid basic functionality and offers great value for the money. The inkjet direct connection to TopTouch enables one marking at each end of the cable and to be repeated in the middle section of the cable. The marking texts and their positions are automatically deposited in the product memory.
- The TopWin inkjet connection meets even the highest demands. This solution incorporates an additional PC and offers the comfort and convenience that come with using a PC monitor with keyboard. It is not available for the Kappa 310. 



Inkjet marking near cutting head – Compact machine design with inkjet marking near cutting head for minimum waste cut in production

Your advantages

- Stripping of hard-to-process cables without form blades
- High flexibility thanks to modular design and fast changeovers
- Broad range of uses thanks to multi-step stripping with rotating module
- Belt or roller drive for optimum transmission of forces
- Good value for the money

PRECISE BENCHTOP UNITS FOR TOP QUALITY STRIPPING

Excellent stripping quality even on a tight budget

The quality requirements placed on wire processing continue to increase, especially with respect to functional safety and reliability. It is crucial in stripping to avoid cutting into stranded wires or damaging the insulation. With the right stripping machines or conductor damage detectors (CDDs), even benchtop units can attain high quality standards.

Due to tougher quality requirements for end products, the quality requirements for processed wires continue to mount. Electrical systems and connections are so important in many products that their failure can have grave consequences, e.g., in aircraft or vehicles, control systems or safety equipment.

These requirements can apply to mass production and small-batch production. Benchtop units offer an attractive stripping option for production involving frequent article changes. They boost output over manual work while enabling better quality.

Wire assembly suppliers must comply with specific standards requiring stranded wires and insulation to be preserved intact, e.g. the IPC/WHMA-A-620B standard valid for general applications and standards such as SAE AS50881, ASTM F2639 or EN 2812 applying to aviation.

A reliable process and a zero-error strategy are crucial in today's products given the myriad conductors and connections they contain. An Airbus A380, for instance, has about 100,000 conductors with a total length of 530km and about 40,000 connectors. To complicate matters, aviation often uses conductors that require special stripping because of their ultra-thin or ultra-tough insulation.



All-purpose and easy to operate: Cosmic 32M and 32M CDD

32M CDD: Sensors to prevent conductor damage

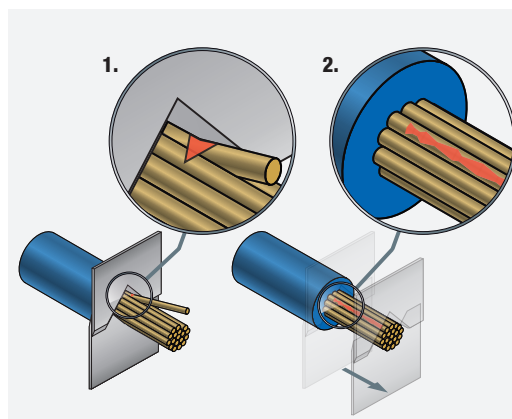
The Cosmic 32M stripping machine with all-purpose V-blades can process a broad range of conductors (conductors from 0.03 to 3.3mm²/AWG 32 to 12). The machine is triggered by a wire sensor or a pedal. The devices are easy as can be to operate.

The 32M model of the conductor damage detector (CDD) has a measuring system for detecting any blade contact with the conductor. Damage to stranded wires during stripping is therefore reliably detected. The integrated CCD is unique in this price category.

"With its Cosmic strippers, Komax Wire has a broad selection of products for wire assembly suppliers offering a diverse range of conductors. The Cosmic line has attractively priced models for entry into automation and enables much better productivity and stripping quality."



Reinhold Vollmer,
Product Manager



Two ways of using the CDD (Conductor damage detector):

- 1. Only notches at the root of the strand**
- 2. Notches and scratches along the whole pull off length**

Precise stripping with rotating blades

Stripping with rotating blades is the preferred method for extremely thin and tough insulation materials and for coaxial or triaxial conductors. A symmetrical cut is made around the entire circumference of the insulation in such a way that no ridge is created and a crimp or connector can be flush-mounted. In addition, no bending forces arise from blade displacement and the stranded wires can be twisted while being stripped.

Rotary stripping with 927R and RX

The two-bladed Cosmic 927R and particularly, the four-bladed Cosmic 927RX are ideal for stripping demanding insulation ranging from 0.013 to 6mm² (AWG 36 to 10), e.g. for Teflon, Tefzel and other hard or tough materials.

Rotary stripping for coaxial cable processing with the Cosmic 48R

The stripping of coaxial or triaxial cables also requires a high degree of precision to assure the quality of the connection in the connector. The Cosmic 48R with rotating blades offers the best prerequisites for the task and covers diameters ranging from 1.5 to 8mm.

The cable is fixed in place while the blade head moves to precisely the desired position and cuts through up to nine layers. The Cosmic 48RX model is optimized for stripping semi-flexible coaxial conductors.

Ultra-precise stripping machine for micro coaxial cables: Cosmic 42R

The Cosmic 42R is our pride and joy. It performs what might be called "microsurgery" on coaxial cables. This model precisely strips micro (coaxial) cables ranging from 0.005 to 1.5mm² (AWG 44 to 16) as well as conductors that can scarcely be processed manually.

A special head with three linearly-guided blades is inserted for these tasks. The integrated extractor removes any scrap particles and deposits them in a container.

Ideal for producing multiple product versions

Benchtop strippers from Komax Wire offer an interesting solution for producing multiple product versions, e.g., if the production quantity or quality of a wire processing operation is to be increased or if a large-series production operation wants to add a flexible department also geared to producing small batch sizes. <



The Cosmic 927R can also strip thin or tough types of insulation



Cosmic 48R for coaxial cables with up to nine layers and Cosmic 48RX for semiflexible cables



Coaxial cable with double partial stripping



The precision blade head of the Cosmic 42R for micro coaxial cables



Micro coaxial cable with double partial strip

Your advantages

- Benchtop strippers offer high quality at an affordable price
- CDD reliably detect damage to stranded wire
- Difficult conductors are also reliably stripped with rotating blades
- The Cosmic 42R ensures maximum precision for micro coaxial cables

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