



KTB 50 EK

Electric bundling machine

komax

KTB 50 EK

Proven technology

The EK series of electric bundlers are based on the technology and components used in the KTB 50 E PLUS. In addition to the proven benefits of the KTB E PLUS - such as short process cycles, flexibility in processing a wide variety of tape materials and low maintenance, the KTB 50 EK can be integrated into the production process together with the welding module. This ability to communicate results in higher process reliability and shorter process cycles.

The EK series is Komax's response to the increasing demands of the automotive industry when it comes to insulating welded joints.

Space is precious

The shortened dimensions of the EK series together with the option of installing the control unit under the welding table deal with the problem of an acute lack of space in production and thus represent a significant advantage.

Two versions

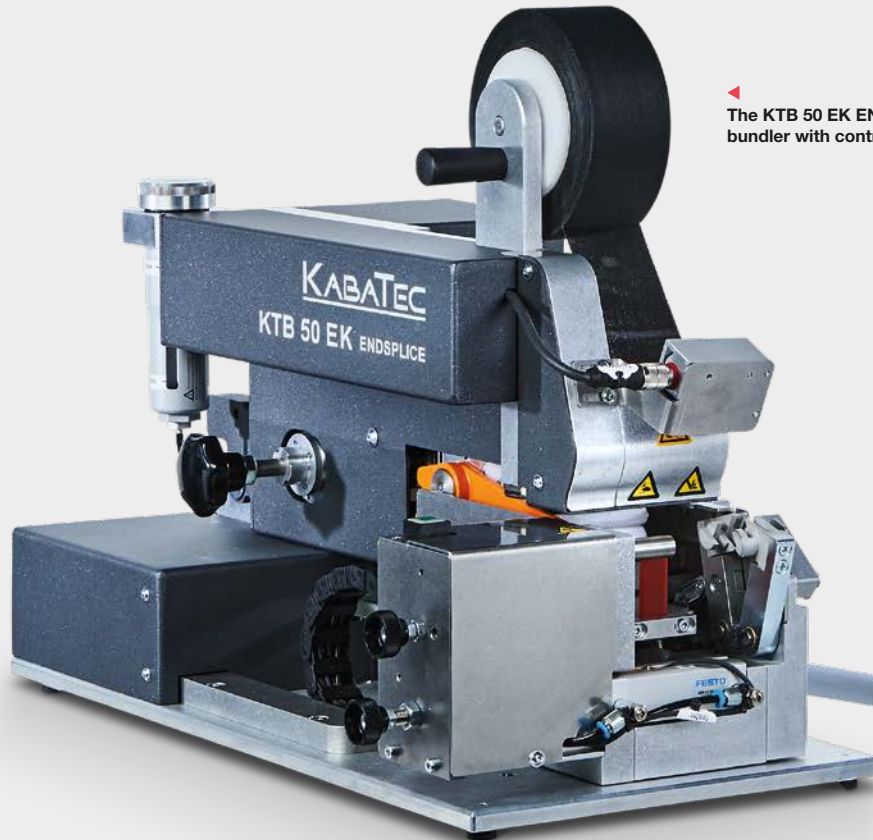
Two versions of the EK series have been developed to produce different splicing applications. Whereas the KTB 50 EK was designed for the insulation of inline splices, the KTB 50 EK ENDSPLICE is used for the insulation of end splices. Essentially, these two versions differ in the holder and in slight dimensional deviations. They combine the benefits offered by a machine series that have been continuously improved and geared to market requirements.





◀ Electric bundlers in the EK series were specially developed to be integrated into a welding table.

FAST, POWERFUL AND SPACE-SAVING



◀ The KTB 50 EK ENDSPLICE electrical bundler with control unit.



Integration into the welding table

Of course, the option of installing the bundling device into a welding table has the advantage of completing both processes in one workstation at the same time. The next weld is already being made while the bundling process is taking place. This saves time and thus achieves higher throughputs. The automatic cable ejector also shortens the work cycle by one handling step.

The welding device and the bundler work semi-automatically in that the welding device transmits the outside diameter of the cable to the control unit of the bundler. The control system determines the required tape length from the predefined number of windings and the thickness of the adhesive tape. In this process, it is only the cable that must be inserted manually.



Constant production quality

The semi-automatic KTB 50 EK bundling equipment performs three process steps in the shortest possible time: Dispense tape, cut and wrap the cable.

First the cable is inserted. The gripper grips it and runs it into the machine. At the same time, the prescribed amount of adhesive tape is pre-dispensed. The cable is run up against the adhesive tape and then immediately passes the feed rollers. These ensure that the cable is completely enclosed.

Adhesive tape continues to be dispensed up to the required length as the cable continues to travel into the bundling head. The KTB 50 EK automatically determines the optimal tape length based on the set number of wraps and the thickness of the cable that has been transmitted from the welding device. The adhesive tape is then cut.

The cable has now reached the centre of the bundling head: Here, depending on the input instructions, it is wrapped by rotating the bundle head and then ejected.

With the end splice version, an adjustable stop ensures an exact positioning of the tape on the cable. A guide needle supports the protruding end of the cable. When winding is complete, an ejector removes the adhesive tape from the needle.

Optional clever details for easy handling

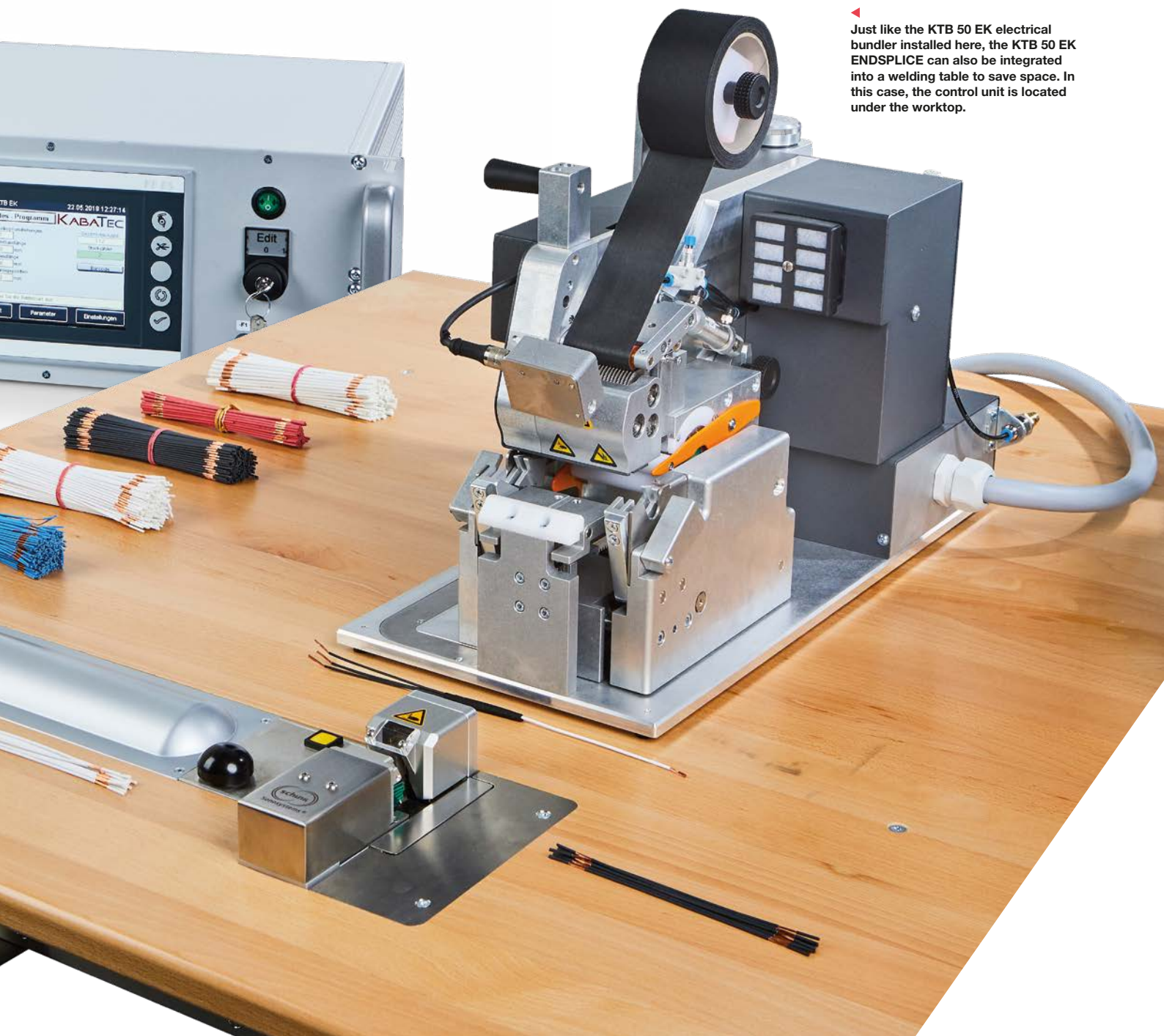
- Tape pulling aid facilitates the processing of PVC adhesive tape.
- Pressure device prevents the tape from being pulled out.
- Compressed air nozzle for stabilising thin tapes.

Economic benefits

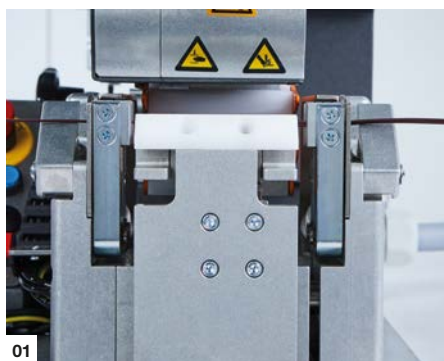
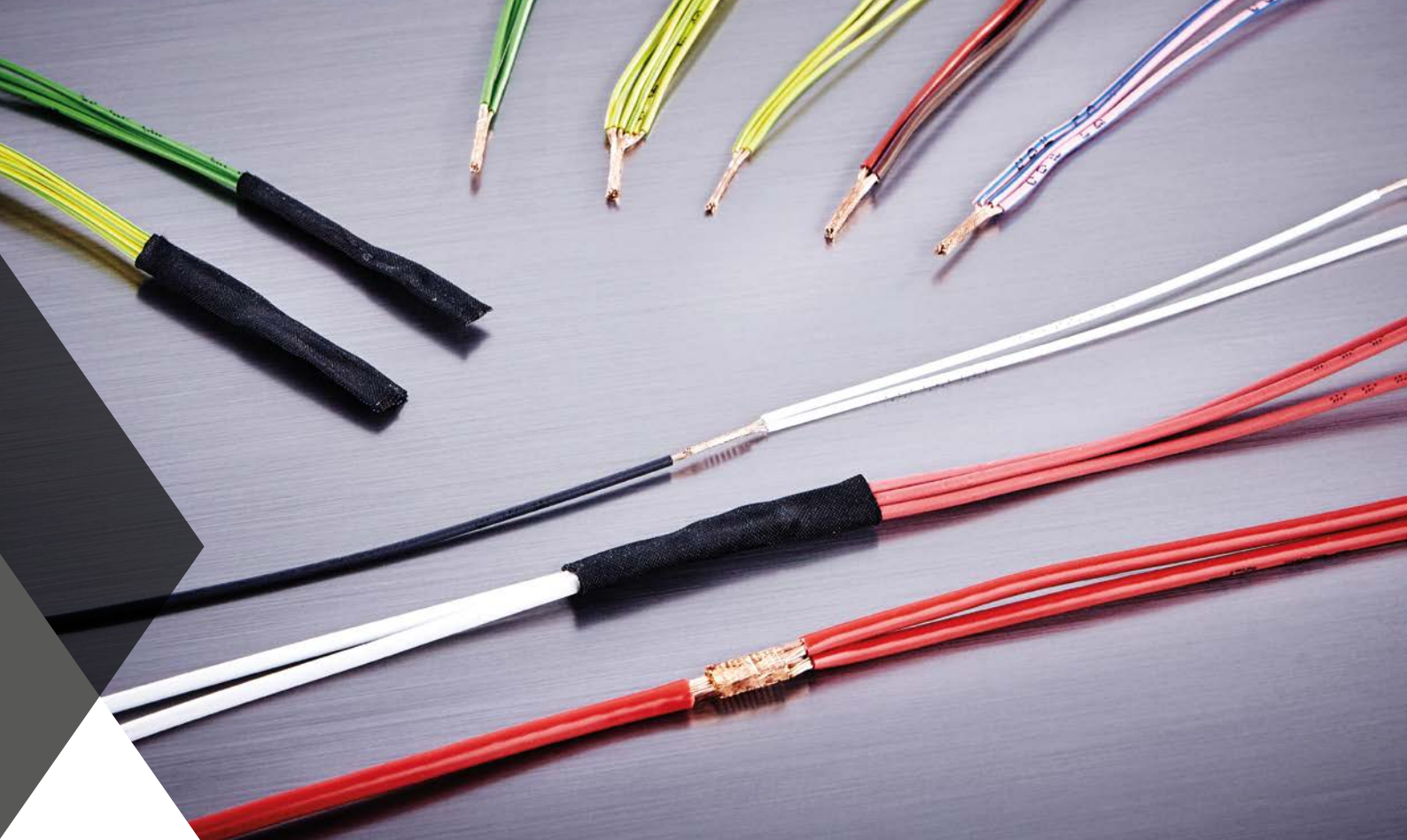
- The consumption of adhesive tape can be calculated precisely thanks to the programmable number of turns.
- High efficiency: up to 80 percent reduction in material costs compared to shrink tubing - also faster processing.

Ensures process quality

The tape detector is an optical device for detecting the winding tape after the bundling process. A light beam detects the presence of tape on the cable. If the bundling is faulty, the process is interrupted and shown on the display.



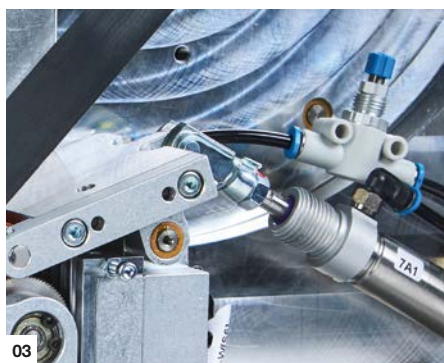
Just like the KTB 50 EK electrical bundler installed here, the KTB 50 EK ENDSPLICE can also be integrated into a welding table to save space. In this case, the control unit is located under the worktop.



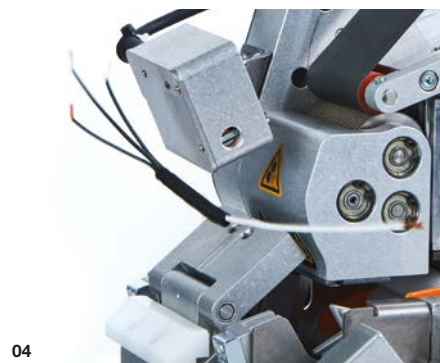
01



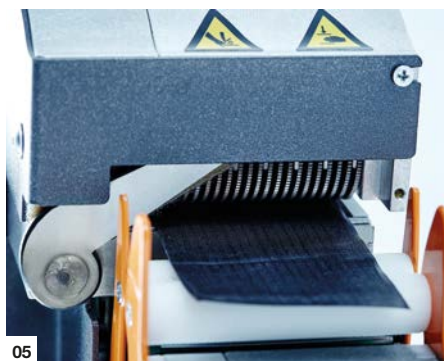
02



03



04



05



06

- 01**
Consistent quality thanks to constant transverse tension between the grippers.
- 02**
Automatic optical tape detection as standard.
- 03**
Air nozzle stabilises thin tapes.
- 04**
The automatic ejector ensures short cycle times.
- 05**
In-house manufactured upper and lower blades for high performance.
- 06**
Automatic display of maintenance and oil intervals.
- 07**
Enter the setting values using an easy-to-use interface.

KABATEC KTB EK {DateTime}

automatic mode-Schunk **KABATEC**

Number of cuffs tape thickness μm ☐ band detection

Total length of tape mm

+ Offset mm

Pre tape length mm

+ Winding turns Total length of tape mm

tape on tape length mm

☐ no home position

Repeat bundling Counter

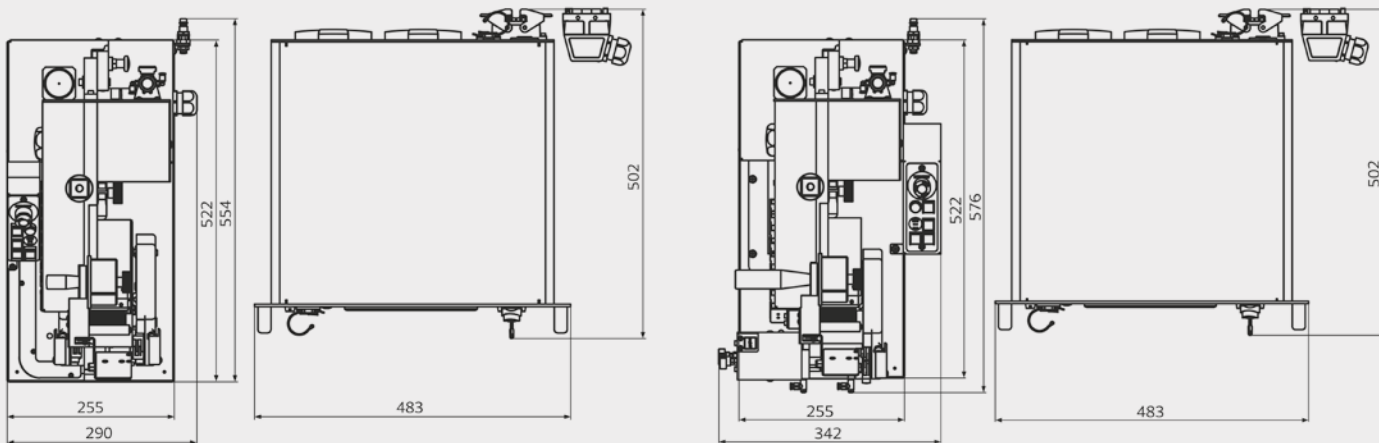
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Mode Parameter Settings

07

Technical Data

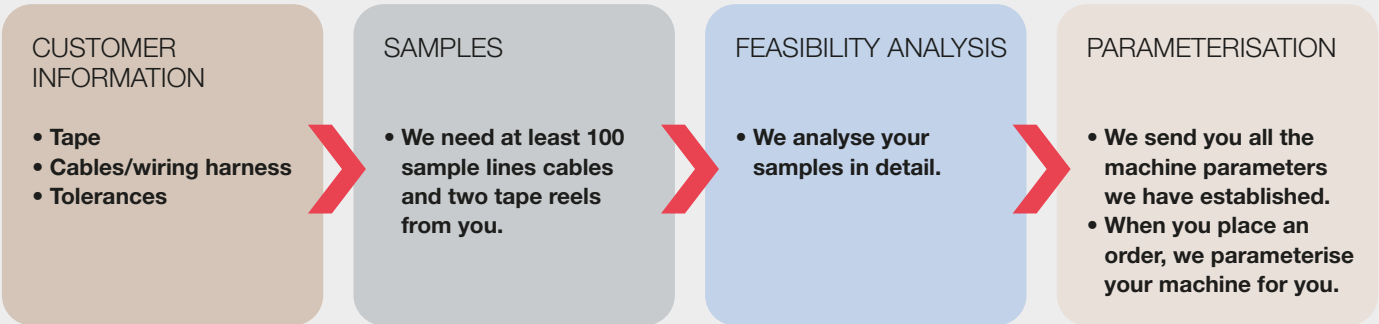
	KTB 50 EK	KTB 50 EK ENDSPLICE
Application	Spot taping, insulation	Insulating end nodes
Material	We recommend carrying out feasibility test	
Bundle diameter	2–13 mm	
Tape width	38 mm–50 mm	
Tape take-up mandrel	1.5“ und 3“	
Noise emission	<85 dB	
Dimensions (H/W/D): KTB EK KTCX 15 (control unit)	387 mm / 255 mm / 522 mm (depending on option) 177 mm / 483 mm / 502 mm	387 mm / 342 mm / 576 mm (depending on option) 177 mm / 483 mm / 502 mm
Pneumatic connection	6 bar (0.6 Mpa / 87 psi)	
Electrical connection	1-phase 120-230V, 50/60Hz	
Weight KTB EK KTCX 15	ca. 26 kg 12 kg	



FEASIBILITY ANALYSIS

OUR OFFER FOR YOU

The combinations of different cable variants and adhesive tapes have an enormous influence on the quality of the spot taping process. This is why we offer a feasibility analysis:



Komax – leading the field now and in the future

As a pioneer and market leader in the field of automated wire processing, Komax provides its customers with innovative and sustainable solutions for any situation that calls for precise contact connections. Komax manufactures series and customer-specific machinery for various industries, catering to every degree of automation and customization. Its range of quality tools, test systems, and intelligent networking solutions complete the portfolio, and ensure safe and efficient production.

Komax is a globally active Swiss company with development and production facilities on several continents. Komax uses its extensive distribution and service network, which includes local companies and their employees, to support customers across the world on site, thus ensuring the availability and value of their investments after equipment commissioning through standardized service processes.