

Processing a wide variety of wires without changeover

Zeta 633 – Automation for increased economy and efficiency



“Automation is the only way we can carry out series and single-piece production in the requisite quality at competitive prices,” says Walter Althaus, Jun., managing director of W. Althaus AG in Aarwangen. In this interview, he discusses his company’s successful use of the Zeta 633.

Walter Althaus, managing director of W. Althaus AG, interviewed by Victor Martinez, Komax AG

Mr. Althaus, what are the greatest challenges you face in manufacturing harnesses for control cabinets?

The diversity of models, the huge amounts of data we have to handle, and efficiency!

We develop and produce control units to customer specification and the wiring involved is correspondingly diverse. The smooth transfer of data from our design engineers’ CAD stations to the wire processing machines is therefore absolutely essential. Along with series production, we do an ever increasing number of small-scale jobs, where efficient, flexible processing is crucial to success.



Two markers with automatic head changer for white and black marking

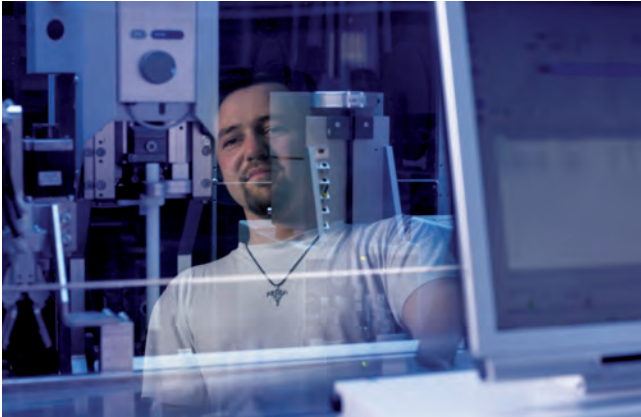
How has W. Althaus AG been responding to this situation?

With a high degree of automation. About 30 percent of control unit production today is automated, from the processing of some 250 kilometers of wire into harnesses and sequences, to the production of mounting plates, to the mounting of rails and wire conduits.

Up until a few years ago we were processing wire in the conventional manner by hand. Then we began using automatic cutting, stripping and crimping machines. We have to automate if we want Switzerland to survive as a production location in international competition. That is what motivated us to purchase the Zeta 633 in December 2005.



The Zeta 633 is the only machine capable of processing 36 wires simultaneously.



“We are very satisfied with the service Komax has provided.”

Has the automatic crimping machine met your expectations?

Fully and completely. It enabled us to cut our production costs by some 20 percent!

The Zeta 633 is highly flexible and can produce the widest variety of harnesses without conversion and with just one operator. That means we can do single-piece production jobs at competitive prices. Thanks to automatic change between white and black printers during production, its much more easier to assembly the wires into the control cabinets. In the past all wiring was done by diagram; today only the final inspection is based on diagrams.

And, as I mentioned earlier, data transfer is smooth and trouble-free. That has greatly boosted our efficiency and flexibility. Automation has had a positive effect on quality and the rate of defects.

How has your collaboration with Komax been?

Excellent. Komax has met our every expectation, from the advice we received prior to purchase to commissioning. And if a problem arises today, Komax solves it within a useful period of time.

What plans does your company have for the future?

Our goal is to achieve a degree of automation of well over 40 percent. To that end, our next step will be to automate insertion operations.

Komax Zeta 633

The Zeta 633 fully automatic crimping machine was specially developed for processing small jobs and sequences. The flexible machine design opens up virtually unlimited flexibility:

- > Production of complex wire sequences at the press of a button
- > Up to 36 different wires ready for processing with no change over required
- > Up to ten different Komax processing modules available for processing both sides with no changeover required
- > All Komax processing modules can be integrated
- > Non-Komax modules can also be integrated
- > Processing on both sides with the same station
- > User friendly operation thanks to Komax TopWin
- > Consistent data handling throughout, from CAD development to production on the Zeta 633
- > Fully automatic change between two printers (black/white) during production
- > High level of process quality thanks to integrated quality controls.

The Zeta 633 can be expanded successively. In tandem with the Zeta 655 fully automated block loader, the Zeta 633 can process entire wire harnesses and special applications fully automatically.

Zeta 633 machine configuration at W. Althaus AG

- > Wire selector for 36 different strand wires
- > Two markers with automatic head changer (black/white)
- > Four processing stations for ferrules
- > One crimp station
- > Bundling of processed sequences – removal while production is underway
- > Network interface provided by Komax WPCS and TopConvert



Production of complex wire sequences at the press of a button