

## Better Ways of Doing Things

Automation in control cabinet construction – Individual approaches from Komax



*There is great room for optimization in wire processing for control cabinets. You can dramatically reduce the time and costs required not only for wire processing but also for the wiring itself. Komax offers a variety of individual solutions in this area.*

**Matthias Schulthess** Head of Product Marketing

### Wire processing in control cabinet construction today

Even today, cables in control cabinet construction are largely cut to length and terminated without any assistance from machines. Skilled electricians do the processing and wiring manually using wiring diagrams. Cables are cut to length, stripped, crimped, labeled and wired individually and by hand.



Manual production, wire by wire

Wire processing in control cabinet construction has enormous potential for optimization, in series and in individual production. New technologies are making automation in control cabinet construction attractive.

The key to optimum automation in control cabinet construction is having production data in electronic form and the suitable Komax machine. This data is usually converted from a wiring list to a cut job or even generated directly in an ECAD system.

Automatic wire processing results in ready-to-install conductors cut to the right length and fitted with the appropriate components, e.g. ferrules, crimp terminals, MIL crimps, etc. and individually marked. The customized marking satisfies marking requirements and greatly simplifies the wiring of stranded wires in the control cabinet. That means even semi-skilled employees can do the wiring quickly and cheaply without a diagram.

### Reduced costs

Depending on the solution and type of production involved, you can cut costs by as much as 50 percent with automated wire processing compared with today's conventional methods. You can dramatically reduce the time and costs required not only for wire processing but also for the wiring itself.



Automatic production of complete harnesses

## Customized solutions from Komax

### Kappa fully automatic stripper for small volume jobs

The machines in the Kappa family allow you to cut to length, strip and mark stranded wires and cables with perfection. The data can be imported conveniently over a network, from a database or from an ECAD system. The produced conductors are then contacted manually or using a bench-top module and then wired in the control cabinet.



Semi-automatic production sorted by cross section

### Gamma processing machine for medium volume jobs

The fully automatic crimping machines in the Gamma family are flexible, fully automatic processing machines for cutting to length and processing wire ends and marking stranded wires. The conductors can also be automatically fitted with end ferrules, crimp terminals or MIL crimps or ultrasonically compacted. Here, too, data can be imported over a network, from a database or directly from the ECAD system.

### Zeta wire processing center for large volume jobs

The Zeta 633 is a highly flexible wire processing center specially suited to jobbing production. The machine can process sequences of as many as 36 different stranded wires in any order and accommodate eight different processing stations for ferrules, ultrasonic compaction, crimp terminals or MIL crimps. In most cases, this setup eliminates the need for any machine changeovers or conversions. The individual cable sequences are produced by module or panel, bound in the optimized order and laid in the deposit tray. With subsequent



Fully automatic production sorted by cross section



Fully automatic production sorted by module or by panel

automatic job loading, the machine operates independently. Data can be imported at will over a network, from a database or directly from the ECAD system.

All automation solutions from Komax are perfect for use in individual or series production of control cabinets. The potential savings are tremendous. With its comprehensive product range and great experience in control cabinet construction, Komax can address customers' specific needs and offer optimum automation solutions to address them (refer also to: [www.panelwiring.com](http://www.panelwiring.com)).

### YOUR BENEFITS

- > Cut costs by up to 50 percent
- > More efficient wiring of control cabinets
- > Faster delivery times for harnesses
- > Harnesses of improved, traceable and consistent quality