

Komax Zeta 633/655

Highly productive, efficient and profitable

KES Czech Republic uses the fully automatic Zeta 633/655 block loader to produce wire harnesses successfully for its customers in the automotive industry. Jiří Zbořil, the Technical Director of KES Czech Republic, increased productivity and cut his costs at the same time by using the Zeta at his company.

«The high efficiency of the Zeta system cuts costs»



«To guarantee consistent quality, you have no choice but to shift from manual to automatic production.»

Jiří Zbořil, Technical Director of KES Czech Republic, in an interview conducted by Albert Schuster from Komax Germany.

What special conditions does your company KES Czech Republic face?

Our customers are well-known manufacturers in the automotive supply industry as well as leading automotive groups worldwide. This clientele demands products made to a high quality standard and stable production costs. To guarantee consistent quality, you have no choice but to shift from manual to automatic production.

How has KES met these challenges?

Our company, which celebrates its 15th anniversary this year, wants to comply with customer requirements. It respects the trend away from manual labor that has been unleashed by process automation. Manual labor constitutes an extremely large share of the work that goes into harness production. Given the design of our products, this switchover is technically complicated and demanding. Modern fully automated block loaders are used to automate traditional assembly, for example inserting terminals into contact blocks.

What advantages do fully automatic machines have over traditional manual loading?

We decided on using a fully automatic block loader because of the substantial advantages it offers us:

- Inserting miniature terminals in small contact blocks is a very monotonous task yet also very hard on and exacting in terms of employees' fine motor skills and their vision.
- Automated processing ensures a consistently high level of tested quality for the connection between contact and block.
- Productivity is increased while costs are reduced.

How successful is the fully automatic Zeta 633/655 block loader in satisfying these requirements?

In our case, it has basically meant qualitative changes in production technology. Besides standard testing of crimp quality, the Zeta 633/655 positions the terminals in the blocks

faultlessly while checking the quality of the insertion. That way we ensure that even terminals without secondary interlocks are correctly loaded in the block chambers.

For which markets does KES produce harnesses using the Zeta 633/655?

The wire harnesses we produce on the fully automatic Komax Zeta 633/655 are intended for a number of different end customers. They can be found in various models of vehicles made by Audi, BMW, Daimler Chrysler, Volvo, Ford, Škoda, VW and Citroën. The annual output of semi-finished products we manufacture on the Zeta machine exceeds five million units.

What increases in quality and output have you noticed?

The figures on rejects, which we also analyze for the Zeta 633/655 machine, say it all: Last year we did not record a single rejected part in production with the Zeta system. I'd therefore say the use of this machine has had exceedingly positive effects.

To what extent were the performance results with your first Zeta 633/655 a decisive factor in your purchase of a second machine?

We gained a lot of technical expertise during the productive phase of the first Zeta 633/655 and our specialists became thoroughly familiar with all its functions. I can say that we integrated the Zeta system successfully into the production process and discovered new possibilities for using it at the same time.

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Bobl feeder for automatic housing feeding

In deciding whether or not to buy the second machine, we asked ourselves the following questions:

- > Did the first system fulfill our expectations?
- > Do we have enough orders to make full use of the extra capacity?
- > Do we have enough new projects in the years ahead to make the investment worthwhile?

The previous positive experiences from production operations served as further arguments in favor of investing in a new Zeta system.

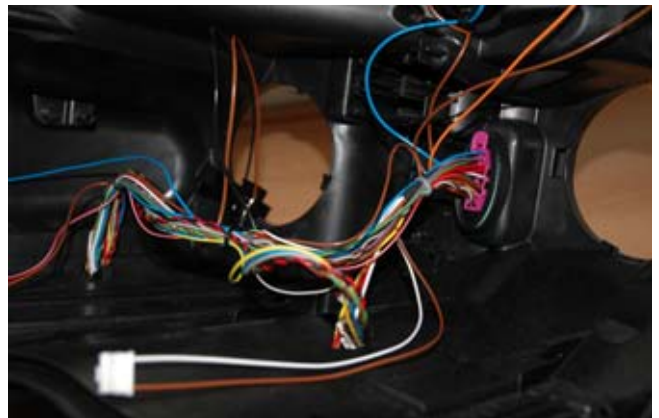
What market advantage did you hope to gain by investing in the Zeta 633/655?

The efficiency of the Zeta system cuts costs. A key criterion in rating a supplier to the automotive industry is its ability to develop and grow along with technical innovations. Customers can tell whether or not their supplier is interested in further developing their products. It is important for the supplier to remain competitive and to make an effort to successfully prevail in the marketplace.

Komax Zeta 633/655

The fully automatic Zeta 633/655 block loader was developed to process wire harnesses fully automatically. With its flexible machine design and backing from the Zeta 633 as the basic machine, this model has virtually unlimited flexibility.

- > Fully automatic production of complex wire harnesses at the press of a button
- > Chaotic insertion pattern possible
- > Non-contact measurement of crimps
- > Up to 36 cables potentially ready for production, with no conversion required
- > Up to 10 processing modules for processing both ends of the wire, with no conversion required
- > All Komax processing modules can be configured
- > Modules from other manufacturers can be integrated
- > Fully automatic marking head changer operates while production is underway
- > Both ends of the wire can be processed with the same station
- > Fully automatic block feed is possible
- > Fully automatic block deposition is possible
- > Customer-specific feed/deposit approaches
- > Gentle wire handling for conductors with special insulation (halogen-free, silicon)
- > High process quality thanks to integrated quality checks
- > End-to-end quality control for the loading process
- > User friendly operation with Komax TopWin



Harness produced at KES



The Zeta 633/655 in action: a block loader with automatic feeding of the housings.

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