

Zeta 633/656 – Automatic Processing of Miniaturized Components



Conductors with cross sections of 0.13 mm² and miniaturized housings with a grid element spacing of 1.25 mm pose a great challenge to harness production. Manual loading of these housings is difficult and error prone. Komax meets this challenge with the Zeta 633/656, a model for producing even harnesses with small components fully automatically.

Roland Liem Product Manager

Cables with ever-smaller cross sections are being used in vehicles. This trend is in response to demands for reduced weight, more compact installation space and increased packing density in the connector. The miniaturization of contact parts, housings and conductors, in turn, increases the demands on harness production. Conductor and housing chamber labels are no longer possible for these components, and incorrect insertions are virtually unavoidable in manual harness production.

Zeta 633/656 – Insertion of miniature components

The Zeta 633/656 is just the solution for the fully automatic manufacture of harnesses with miniaturized components and conductors with a cross section of 0.13 mm². With the

ultra-precise spindle drives on all insertion axes, blocks with a grid element spacing of 1.25 mm can be loaded reliably in a controlled process.

The precise force sensor monitors the entire insertion process, continually comparing the measured forces with the specified values. This approach ensures high degree of process reliability and seamless monitoring of the loading process.

User friendly

The innovative quick-change pallet system can replace the harness-specific insertion application and convert to another harness within seconds. The machine operator's main work area, the pallet system, is designed for ergonomic work and freely accessible at all times.

Open to other work steps

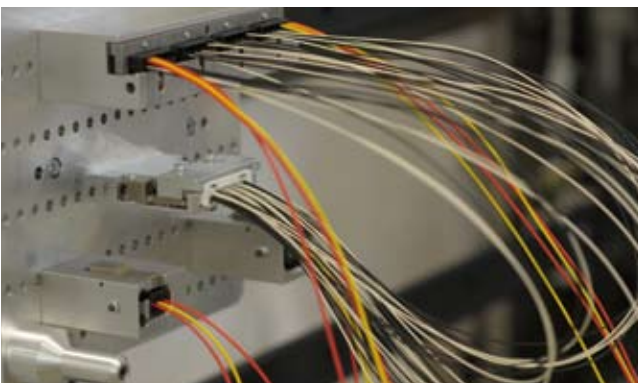
A customer specific extension can be added to the pallet system to obtain maximum benefit from automatic harness production. This extension allows further manual work steps to be carried out prior to harness removal from the machine and even greater benefits to be derived from automation.



Harness being produced on Zeta 633/656



Housing with small grid element spacing



The Zeta 633/656 for insertion application of 0.13 mm² conductors

YOUR BENEFITS

- Fully automatic harness production even when miniature components are involved
- Seamless monitoring of all process steps
- Fully automatic manufacture combined with manual work steps