

Standardized semiautomatic machine

Economical connector assembly



Special premium quality connectors are processed frequently in countless variations and tiny batches. Semiautomatic manufacture is ideal for assembling connectors to contract specification. This method keeps throughput times low while still meeting the tough quality requirements involved.

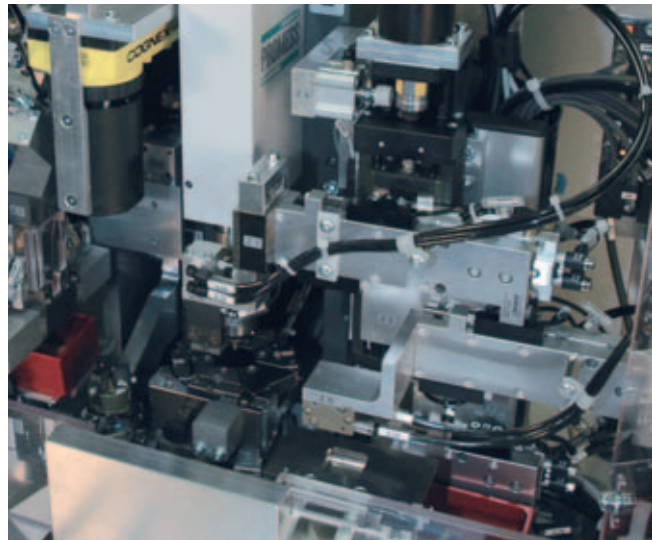
Komax Systems provides innovative solutions for this purpose distinguished by a high degree of standardization and good value for the money.

Armin Gwerder Area Sales Manager

Compact machine design

A vibratory bowl feeder supplies the pins and a vision system detects their position. After being separated, the gripper places the pins in a radial arrangement (vision system). Then the operator places the housings in a fixture. The insertion cycle is started and the housing fixture is moved by the x-y linear motors to the insertion and press-in position. Next, the pins are inserted one after another in the housing and pressed into place by means of a servomotor-driven press, complete with force and path monitoring. Assembled connectors are then automatically fed back to the operator. The machine automatically removes faulty parts.

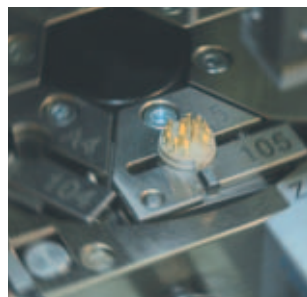
All process parameters are adjustable and are saved under the given article number. Moreover, the machine can be converted in less than two minutes to process a new product variant. With its portable base, the machine can be re-integrated again easily if the manufacturing layout is changed.



Feed, insertion and press-in unit



Connector example



Connector example

YOUR BENEFITS

- > Economical connector assembly to contract specification
- > Integrated quality controls
- > Convenient operation
- > Recording of production data
- > Minimum changeover times
- > Compact design



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*Technical data**

Quality functions

- Longitudinal orientation of the pins
- Angular orientation of the pins ($\pm 5^\circ$)
- Press-in process with force and path monitoring

Press-in process

Servomotor-driven with pressing force of up to 1000 N

Insertion time per contact

2 s/contact

Placement of housings

Manual, approximately 2 s

Changeover time

< 2 minutes (for new connector model)

Control system

- PLC with touch panel
- Graphical user interface
- Separate screen for vision system and servo press
- Central recipe and article management

Dimensions (W×H×D)

800 × 2000 × 1100 mm

* *Depends on the application*



Pin orientation, insertion unit and housing fixture

Customer-specific add-ons

- Fully automatic housing feed
- Pin feed from strips or tape
- Pin blanking and bending
- Alternative pin feed