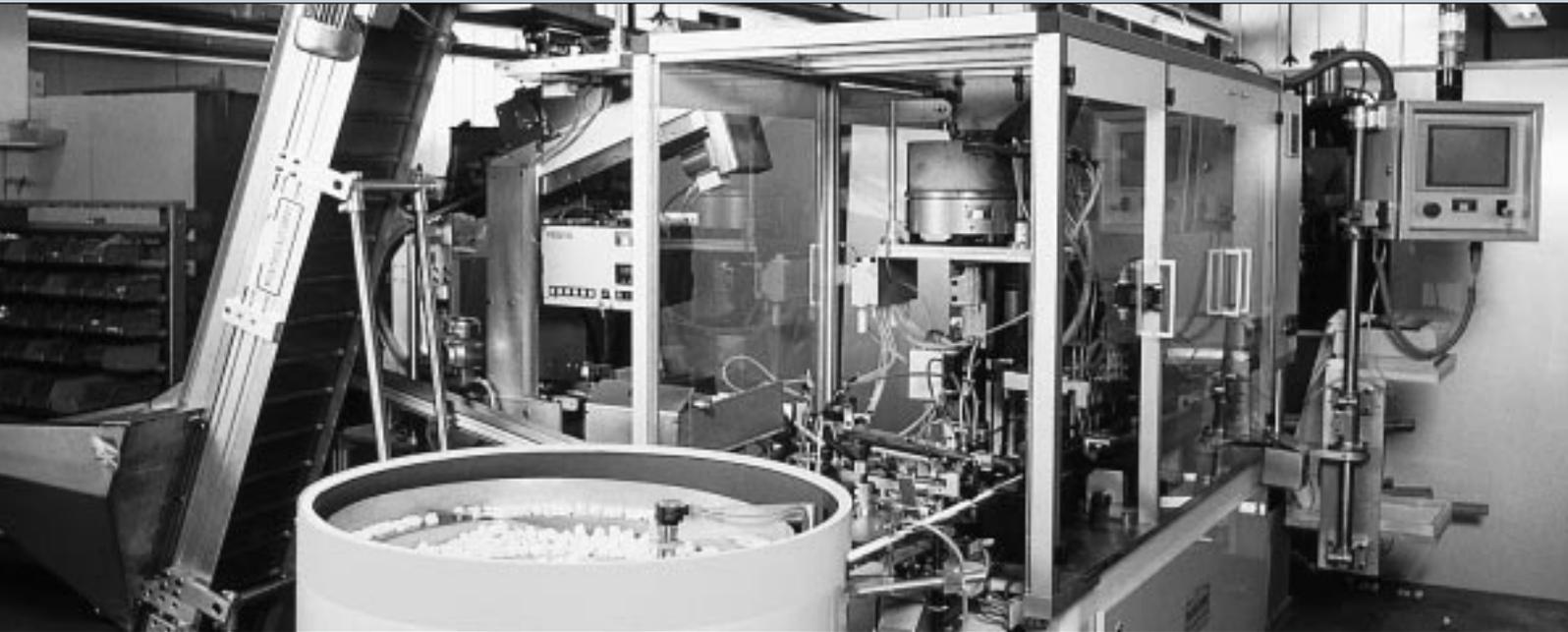


# The Festo Checkbox in practical application: Fast feeding of parts for highest productivity

**FESTO**



**EC-Montageautomaten GmbH, Schorndorf**

**Fully automatic assembly of insulating terminals with Festo's "Identbox"**

**The task**

- Increased production speed
- Improved system availability
- Reduction of rejects
- Quality assurance

**The solution**

- Festo Identbox – standard unit:
- Contactless alignment
  - detection
  - Compact system
  - Quality measurement
  - Only one inspection device for the complete system

**The benefits**

- Reduced project planning costs
- Shorter commissioning time
- Flexible and safe system operation

# High productivity, high quality!

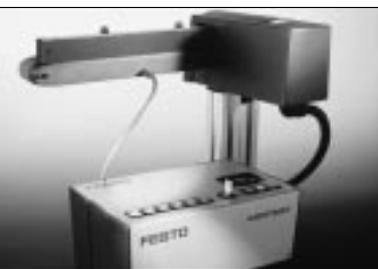
## 1200 parts per minute – 0 mistakes per shift



Customers profiting from the time savings made on their production processes, often ask the impossible of the assembly machine manufacturer. One of these companies is EC-Montageautomaten GmbH, a mechanical engineering company that manufactures assembly and handling systems. These systems are operating successfully throughout the world, in different branches such as electronics, medical technology, pharmaceuticals and industrial auto-



the parts...



the identbox...



the system...

motive and furniture applications. The prime productivity factor for assembly machines is Festo's Checkbox family. It guarantees a problem-free feeding technology applicable to the respective varied task requirements and is easy to operate by the end user.

### Feeding and checking in the assembly of insulating terminals

The reason for designing a new assembly machine for insulating terminals was the expansion of the manufacturing capacity. The requirements, compared to conventional solutions, were higher production speeds, increased system availability, reduced reject rates, simultaneous process for measuring of quality and production data. The plastic terminal casing, the metal insert and the screw have to be conveyed to the assembly machine fully automatically.

### The Identbox detects, inspects and conveys

The Identbox's optical detection function permits high checking and conveying speeds thus enabling all 3 buffers to be controlled by one testing system. This saves space, costs and time. The conveying of the insulating terminals is effected via a feeding system consisting of a discharge facility, parts hopper and conveyer belt. Deformed inserts or unacceptable parts are ejected via air blast into a reject bin. Incorrectly aligned acceptable parts are returned to the parts hopper.

### The task

- Higher production speed
- Increased system availability
- Processing of simultaneous measuring of production rates
- Reliable feeding according to component quality and alignment
- Time and cost savings

### The solution

- Fast commissioning and simple operation also for end users.
- Increased productivity by means of just one inspection facility for alignment and quality control through synchronous operation of all three feed paths.
- Air blast ejection of defective parts into a reject bin.
- Incorrectly aligned parts are fed back to the hopper.
- Less disruption through precise inspection results and high system reliability.

### The benefits

- Reduced costs during project planning through
- Instant checking function
  - Fully functional basic device
  - Modular construction
  - Defined interfaces
- Time savings during commissioning through
- Integrated adaptive teach-in function
  - No elaborate adjustments or configurations

Flexible and reliable system operation through

- Fast retooling of the stored type
- Machine, quality and production monitoring via statistical functions
- Extremely user friendly
- Free of disruption and maintenance

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