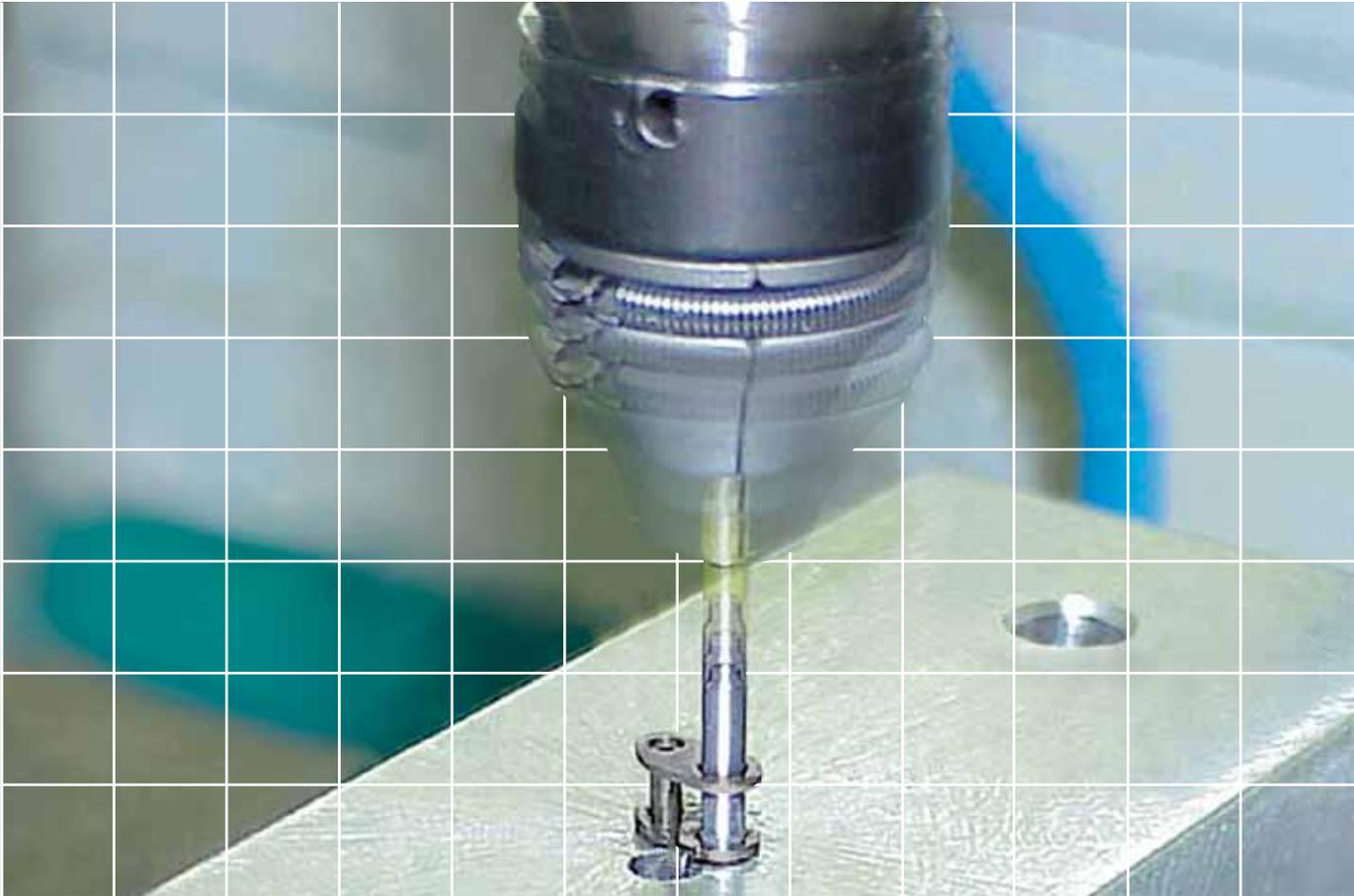




Technology that connects



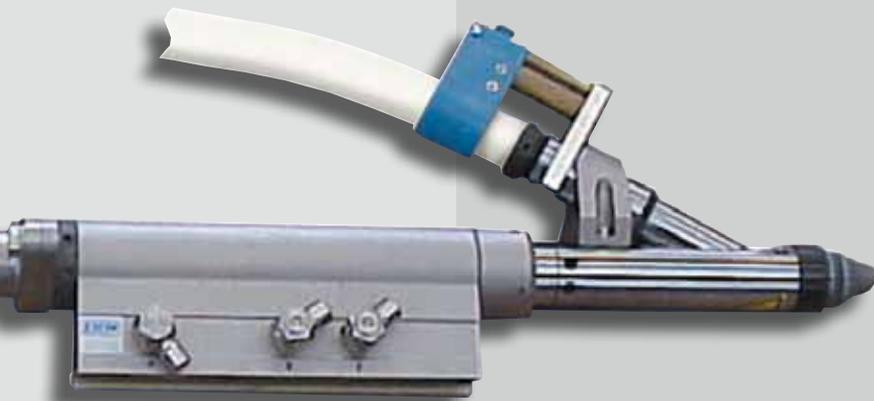
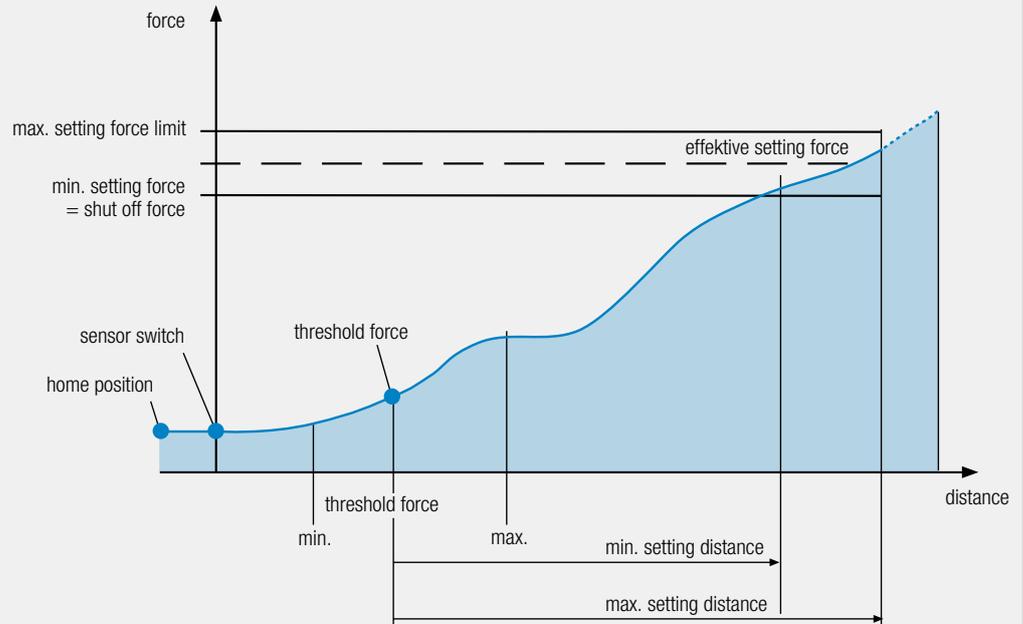
Inserting Technology PEB

with automatic feed

Inserting Units

Good connections
right from the start

Series assembly with automatic feeding of the connection elements: WEBER inserting units with force and distance monitoring and control

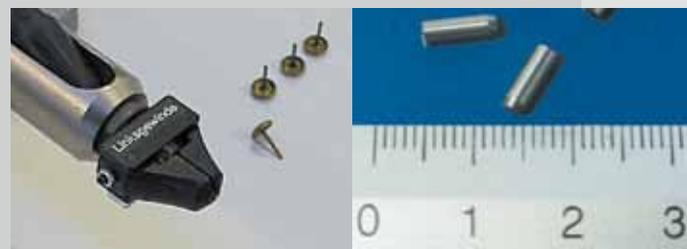


A suitable WEBER inserting unit for every application

The common feature of all WEBER inserting units is the swivelling-arm inserting set. This WEBER principle allows constant, precise guiding of the connection element to be processed, from the feed unit to the nose piece. To achieve short cycle times, the feeding of the connection element is carried out during the insertion process.

The illustration shows a typical, controlled insertion process:

- The spindle advances from home position at high speed.
- As soon as the initiator has been passed, the speed of advance decreases and distance monitoring begins.
- The connection element is inserted, until the shut-off depth is reached, the insertion force being monitored. Alternatively, insertion can be continued up to a certain cut-off force, with the insertion depth being monitored.
- The spindle then retracts to home position.



A separate solution for every task

From hand-held insertion tool to fully automatic inserting spindle

Insertion is a much-used process in series assembly. In many cases, quality certification of the correct assembly of the parts must be provided. This is particularly true of high-quality parts whose failure could cause major damage. Insertion can be carried out manually or at a station. Automatic feeding is standard for WEBER inserting units.



Hand-held insertion tool HPP

Pneumatic insertion for low insertion forces (manual force)

The hand-held insertion tool is used to press the connection element slowly into its hole without screwing.

Hand-held insertion tool HSS

Pneumatic insertion for low insertion forces up to approx. 300 N

The hand-held insertion tool HSS is used to press the connection elements into a hole or onto a component by means of an impulse. Slight pressure on the HSS is all that is needed to trigger the insertion process.

Stationary insertion spindle PEB

Pneumatic insertion for forces up to approx. 800 N

The ECO is a simple, stationary machine in slide form. It is an economical alternative to the top-end insertion spindles for simple insertion tasks. Quality assessment of the insertion process is possible via depth monitoring. Head stroke and insertion stroke modules can be moved independently.

Stationary insertion spindle PEB

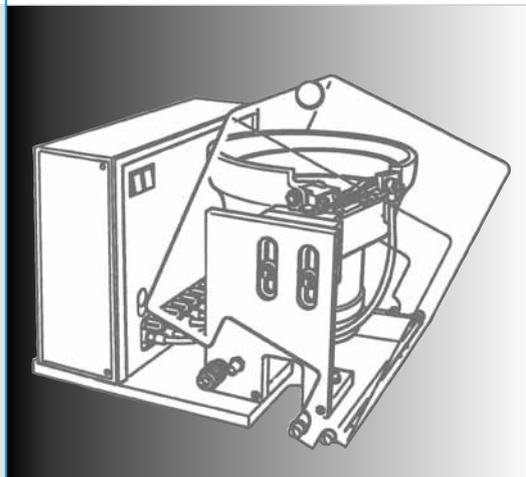
Pneumatic insertion

The spindle series PEB can be used for all simple insertion tasks.

The advance force is generated pneumatically. The spindle can be used both in individual stations and in complete assembly systems. Different sizes are available for different applications. These are chosen to suit the size of the connection element and the necessary insertion forces. Quality assessment of the insertion process is possible via depth monitoring.

Modular Structure

for all models



Feed

All WEBER insertion units can be fitted with automatic feeders. This shortens the cycle time. The parts to be inserted do not have to be pre-inserted. They can be fed and inserted in the same station. The connection elements are fed to the insertion unit quickly and reliably by means of the vibrating spiral conveyor, the exit track, the escape mechanism and a flexible, profiled feed tube.

The geometry of the fed parts is accommodated by using different components.

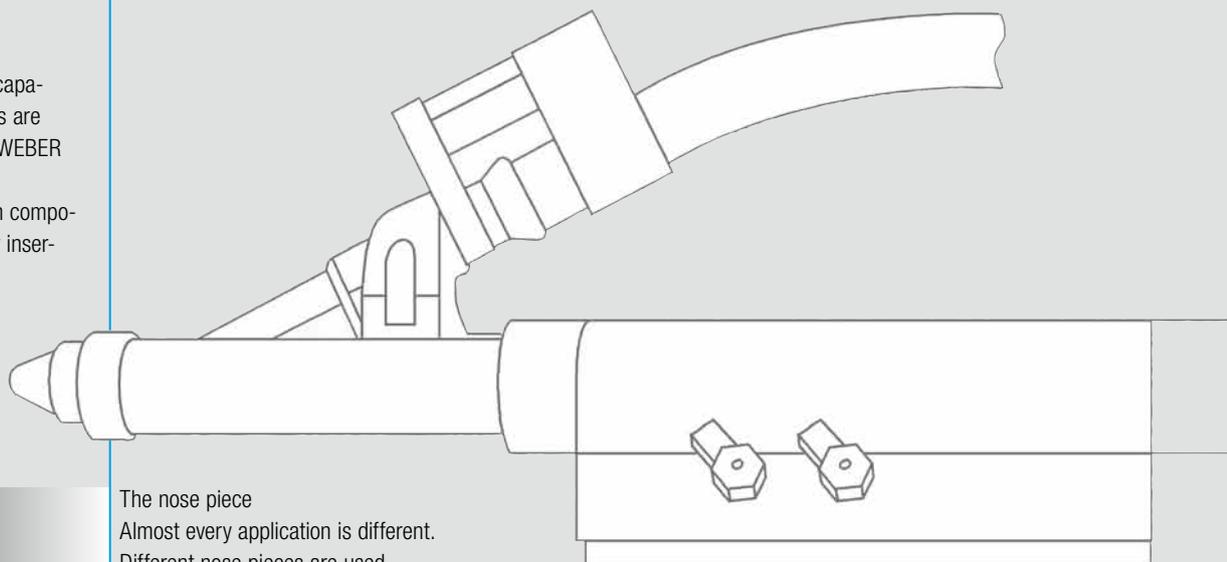
Different sizes are available for different volumes and available space as needed.



Modular structure

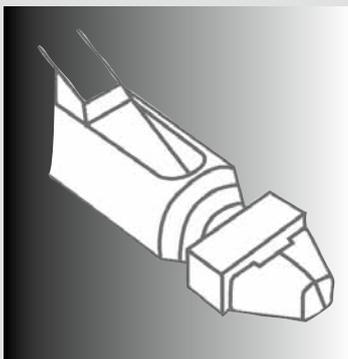
The structure and control capabilities of the insertion units are comparable to the proven WEBER screw technology modules.

All accessories and add-on components are also available for insertion.



The nose piece

Almost every application is different. Different nose pieces are used, depending on the geometry of the part and the accessibility of the insertion position. This contributes significantly to the fault-free running of the machine. Here, WEBER have the advantage of more than 45 years of experience and a multitude of existing solutions.



Our Connections

are almost everywhere

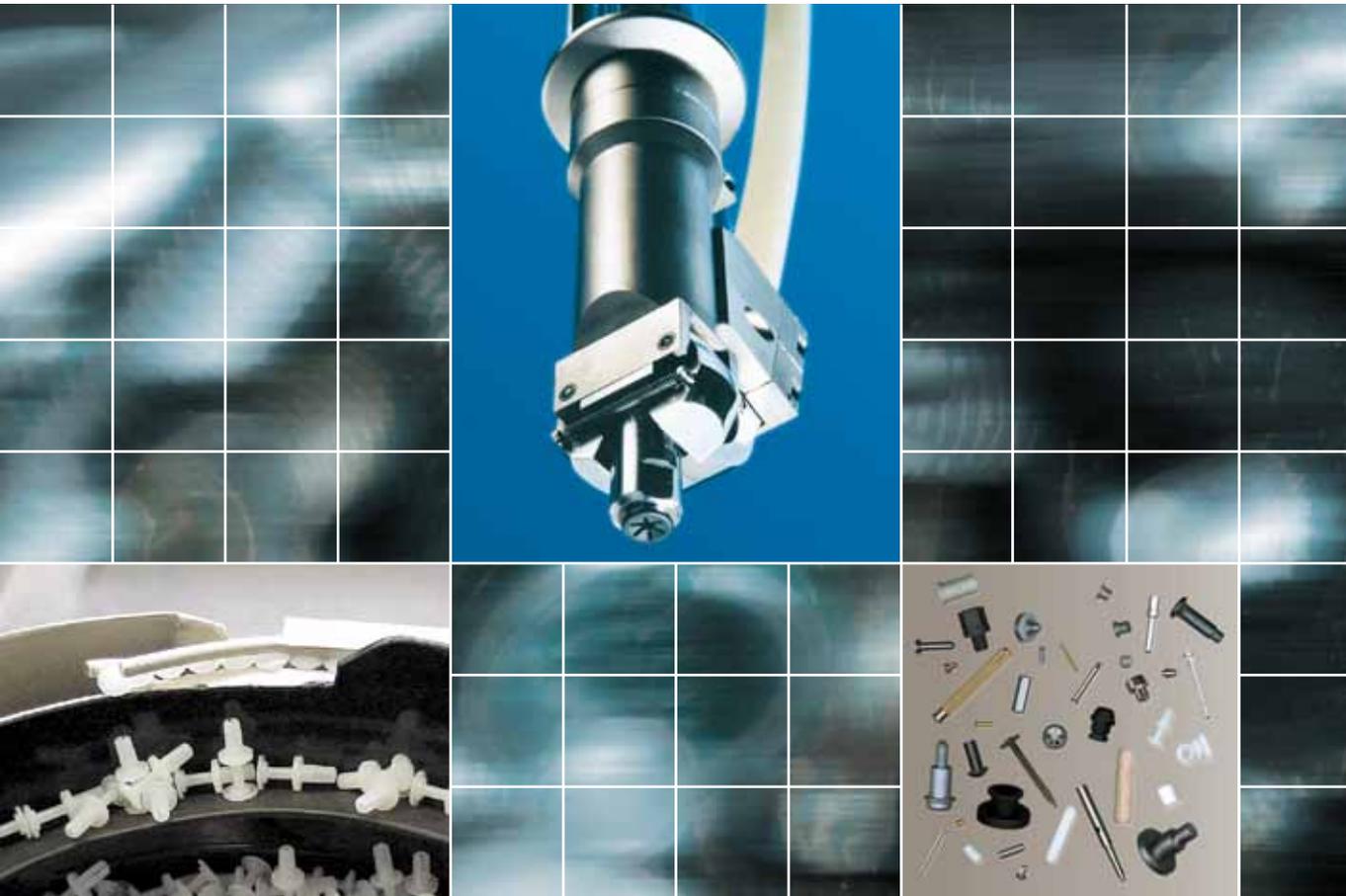
- Screw → Housing
- Washer → Dashboard
- Shelf support → Chipboard panel
- Rivet → Wooden handle
- Grooved nail → Manometer display
- Pin → Telephone
- Pin → Mirror stand
- Setscrew → Video recorder
- Plastic rivet → Cable conduit
- Rivet → Seat rail
- Filter → Valve
- Pin → High-pressure pump
- Pin → Spectacles
- Rivet bolt → Hand-brake lever
- Plastic cap → Earthing screw
- Magnet core → Coil
- Bolt → Bobby Car
- Screw → Oil drip tray
- Jet → Cylinder
- Roll pin → Cartridge
- Pin → Insulated plug
- Ball → Motor block
- Pin → Gearwheel
- Screw → Car handle
- Pin → Shock absorber
- Ventilator
- Printing plate
- Bush with fuse → Immersion heater
- Nail → Circuit board
- Terminal box
- Steel ball → Valve



...technology that connects



Technology that connects



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