WEBER
Technik pur

AUTOMATION.
Assembly systems

WEBER GMBH

...so that technology works.

Automation of
Production and system lines

Automation engineering solutions made by WEBER:

Our portfolio ranges from the simple expansion of existing systems up to customised special machines, complex assembly systems and completely newly developed machines and systems.

Throughout all project phases, our engineers are at your side with their many years of experience. Whether planning, project planning or design, whether drawing up circuit diagrams, system control or robot programming and, of course, also during mechanical and electrical assembly and commissioning.

Our services at a glance

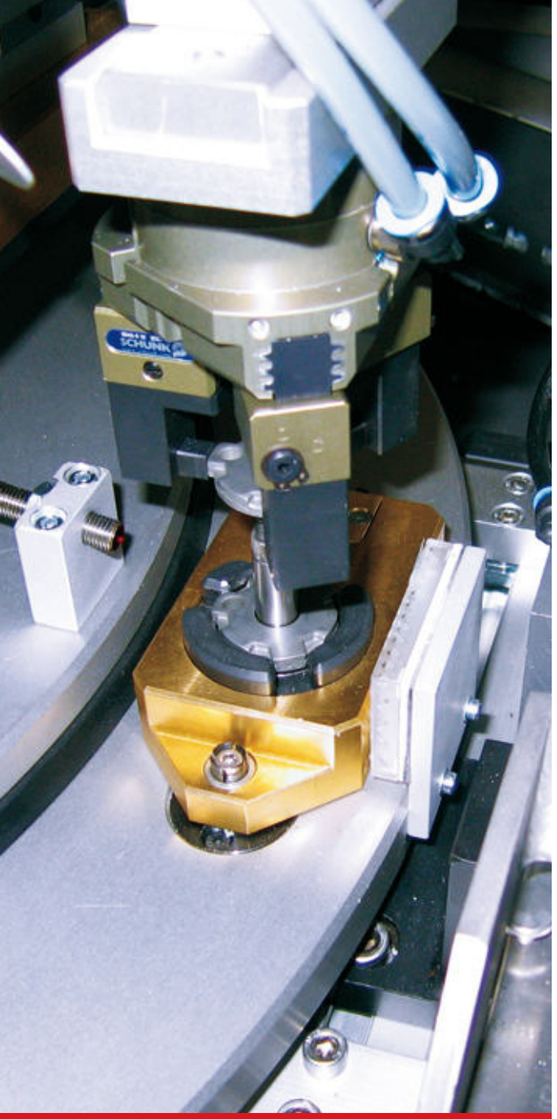
- Assembly systems & test rigs
- Robotics
- Sensor technology
- Equipment and devices
- Database management
- Documentation
  - drawings
  - Parts lists
  - Spare and wear parts lists
  - Risk assessment and CE
  - Machine capability study (MFU)
  - FMEA
  - Operating instructions
  - Wiring and hydraulic diagrams
  - E-Plan Creation
  - System programming
- Commissioning & start-up support
- Maintenance, installation and service

Assembly systems

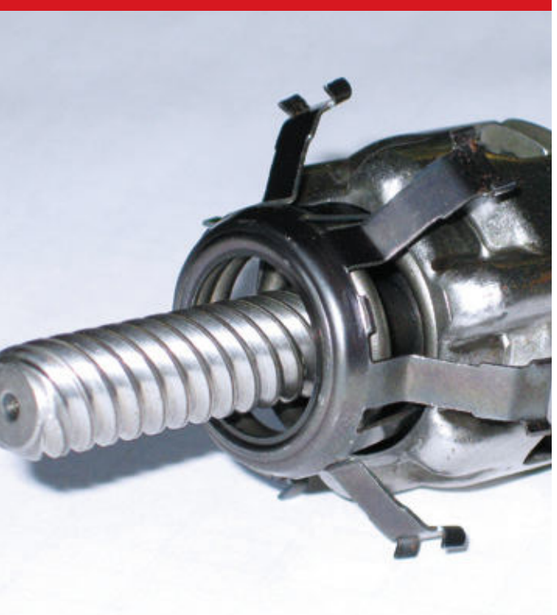
We upgrade your plant, create special solutions according to your individual requirements or develop completely new machines and plants.

Our services at a glance

- Planning and project management
- Design and detailing with all common CAD systems
- Pneumatic and hydraulic circuit diagram generation
- FMEA and hazard analysis
- Electrical planning
- System control (hard or soft PLC with Siemens or Beckhoff)
- Robot programming
- Mechanical & electrical installation and commissioning
- Documentation



From assembly to packaging.



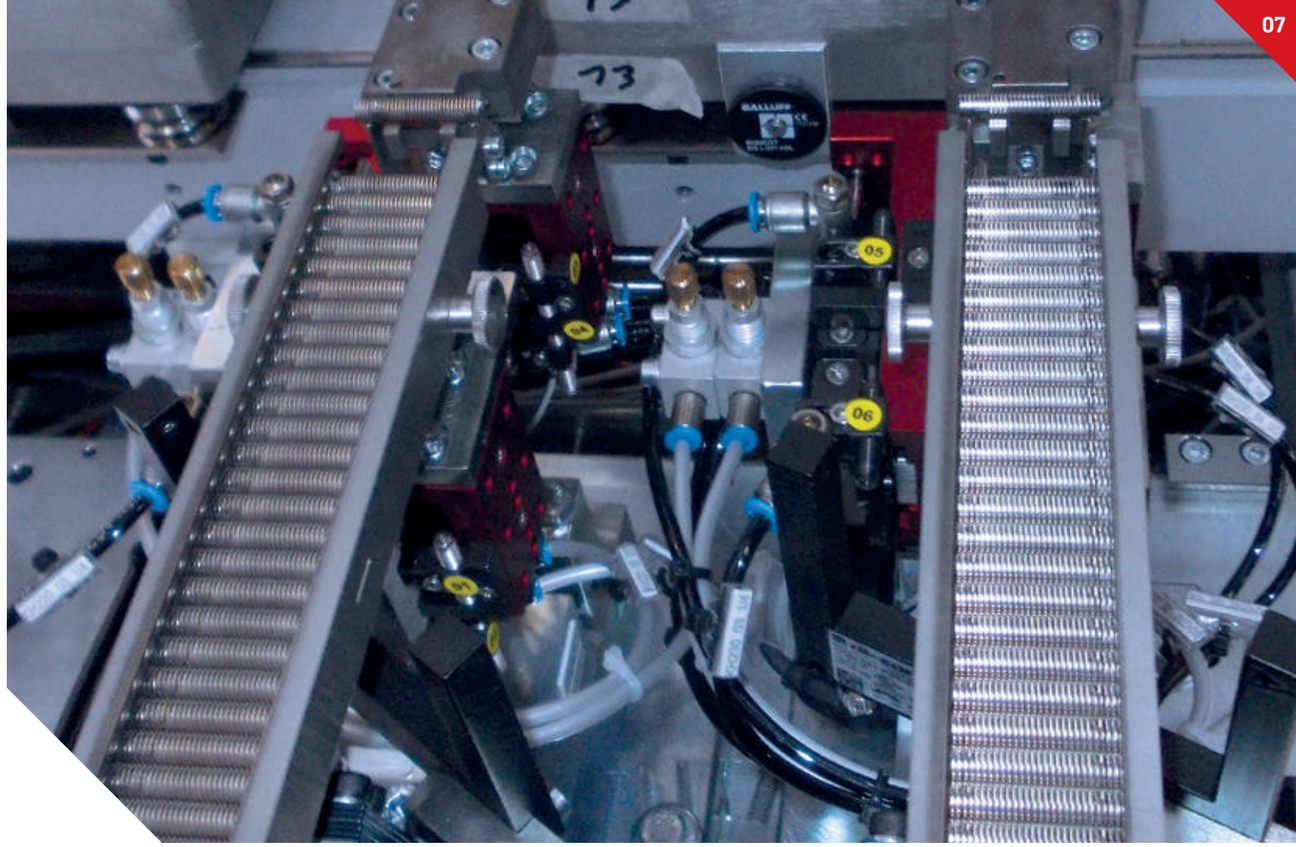
Assembly system „Ball and Ramp“

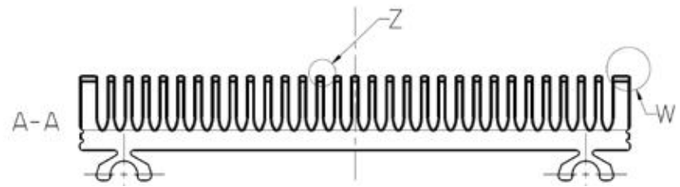
Fully automatic assembly line for cartridge assembly

The assembly plant works according to the „ball and ramp“ principle and enables fast, smooth production processes.

Technical description

- Cycle time: 7 seconds
- Automatic feeding of components via conveyor pots and palletiser
- Assembly of intermediate assemblies on workpiece carriers
- Fast transfer system with a changeover time of 0.5 seconds
- Product marking by Trumpf marking laser
- Screw the ramp package electrically via spindle
- Forming ramp packs with hydraulic punch
- Palletise finished product in customer packaging with electrical handling system





Assembly system „Sharp lower blade“

The assembly line for the „sharp lower blade“ assembly is fully automatic.

The production line developed by us enables the assembly of components with four different types of blades in less than one minute cycle time..

Technical description

- For 4 different product types
- Cycle time: 1 second
- Workpiece carrier changing time of 0.5 seconds
- Automatic feeding of the individual parts via vibratory conveyors
- Camera inspection Punching condition
- Automatic pen assembly and control
- Deburring station
- Automatic palletiser for feeding the knives by robot on a turntable
- Punching of the knives and preparation for knife assembly
- Welding of the knives with Trumpf Laser
- Camera inspection of the welding spots and the position of the knife in relation to the swinging body
- Laser marking of product parts
- Removal of the products via handling system with selection of the error code
- Robot gripping of the products in customer trays
- Cleaning the workpiece carriers on the conveyor system

Automatic assembly and testing line for cardan shafts

Fully automatic assembly & testing line

The system enables the customer to rationalise production while achieving extremely high precision.

Technical desription

- Cycle time: 15 seconds
- Displacement force measurement for verifying tolerances of bearing fits
- Optical measurement of ball diameter using laser sensors
- Optical inspection for the presence of necessary components
- Dosing of different types and quantities of lubricants, with quantity control in grams
- Automatic feeding of components via storage tables and step conveyors
- Crimping of sheet metal caps on the cardan shaft with force-displacement monitoring of crimping process
- Application of a surface protection
- Product inspection and damage detection via camera system
- Automatic removal by robot and placement into customer packaging

WEBER
Technik pur

WEBER GmbH
Wailandtstraße 6
63741 Aschaffenburg
Phone + 49 60 21 35 88-0
Mobile
Mail service@webergmbh.de

www.webergmbh.de

Jörg FAY
Business Unit Manager
Automation & Test Rigs
+ 49 60 21 35 88-135
+ 49 171 707 81 50
j.fay@webergmbh.de