



SECKLER
... and it works!

SECKLER – your inspiration in automation.
The SECKLER AG Company profile.

Complex functions require simple solutions. From SECKLER.

SECKLER is worldwide the best qualified address when it comes to particularly consultation-intensive and complex challenges.

„We also venture settings of tasks which the most companies in our industry decline. Exactly these duties get us in the mood and motivate us to top performances. Nothing is too difficult for us. We love to make the impossible possible – to do research, until a solution is found“, according to the statement of the CEO Jacques Hess.

A big strength of the SECKLER AG lies in the project management. The flat hierarchy in the company results in short and direct decision-making paths – with only one competent contact for all matter. By the very much structured and self-controlled work with regular project team meetings as well as strict appointment and process controls, the SECKLER AG is valid to the most reliable suppliers of the automation industry.

Automotive/Transportation



Hydraulic/Pneumatic



Medical devices



Consumer goods



Watch/Jewellery



- + **Automation, even in dirty and wet environments**
- + **Wide range of parts – from grams to kilograms**
- + **The same key account team accompanies the project throughout the planning phase**
- + **Loyal to its customers and handling with technological knowledge**
- + **High level of customer confidence built on neutrality, competence, precision, dependability and delivery reliability**
- + **Local representative in the most important markets**
- + **Stable company with many years of tradition**

SECKLER machines are a major asset when it comes to designing and developing specific applications in the following sectors:

- + Automotive/Transportation
- + Hydraulic/Pneumatic
- + Medical devices
- + Consumer goods
- + Watch/Jewellery

SECKLER is a global, Swiss-based manufacturer of individually designed automation systems in the field of handling technology. Our main activity is the development and manufacture of fully-automated machines to mass-produce high-precision components, especially in dirty and wet environments.

The nearly 50 years old company history demonstrates our long experience and broad expertise in special-purpose engineering. SECKLER possesses standardised, patented and also highly unique system solutions. Our modular machines are designed to be very flexible, and their long lifetime, low service costs and re-usability are particularly impressive.



**More than a promise.
Competence and expertise. From SECKLER.**



4 **SECKLER – Your expert and premium partner in production automation for ...**

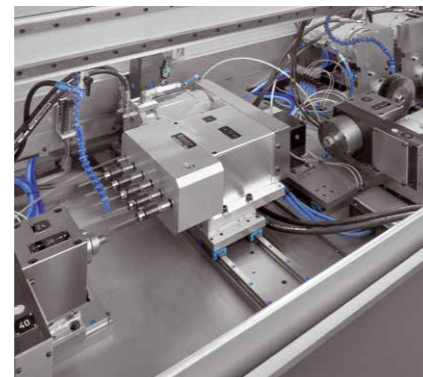
Automation technology

Loading and unloading machine tools, pallet conveyors and a range of gripper systems.



Special-purpose machines

Automatic deburrers, labelling machines, inspection and sorting machines, etc.



System solutions

Interlinking of processing machines and complex stand-alone machines with modules for measuring, deburring and cleaning.



Planning functions

Situation analysis, feasibility studies, component designs that are suitable for automation, designing optimised systems.



- + Tailored, customer-oriented solutions
- + High productivity, operating 24 hours a day, 7 days a week
- + 100% monitoring, reliability, quality
- + Optimised build times
- + Highly economical systems – rapid ROI
- + High availability of systems
- + Fast, consistent part exchange times
- + CE marked and ISO 9001 certified

Higher quality with lower cost

The purpose of an investment is to improve productivity. SECKLER can help you reduce costs per item even further, while improving the quality of the components.

Optimised build times

You can use the SECKLER *modulo* system to realise many projects more quickly. Build times can be significantly reduced with well-planned logistics and production processes.

Optimum quality assurance in component production

Despite their high productivity, SECKLER machines produce continuously high-quality components. And the quality is obvious – with fewer rejects and fully automatic measuring systems that reveal the finest detail with micro precision.

Efficiency of the systems

SECKLER machines are reliable and easy to operate. A single person is able to control a number of machines at a time. Unmanned shifts are a further possibility. This increases the machines running time thus speeding up the return on your investment. Saving you money.

Developing and manufacturing:

- + Standard handling cells
- + Integrated handling installations
- + Cells for match grinding and match honing
- + Product or machine related installations
- + Interlinked machines
- + Palletising systems
- + Special-purpose machines
- + Automatic deburring machines
- + Inspecting and sorting machines
- + Labelling machines
- + Integration of SCARA and articulated-arm robots

Over more than four decades, SECKLER has had a shaping influence on modern automation. Continuous innovation and the resulting experience are evidence of the high level of expertise at SECKLER. There are good reasons why renowned manufacturers are increasingly turning to solutions from SECKLER.

So far, more than 2000 SECKLER installations have been delivered thus demonstrating the company's advanced competence.

All SECKLER solutions are produced in accordance with the ISO 9001 standard and covered by the latest CE quality and safety guidelines.



**Your special case is a normal case for us.
Solutions that connect. From SECKLER.**



**Our reputation precedes us.
Stability and presence. From SECKLER.**

SECKLER is connecting customers and development

The pace of change gets faster and faster, especially in special-purpose engineering. SECKLER's response has been to establish its own development department. The result is that complex systems can now be put into operation more efficiently and more quickly.

The sales department is in daily contact with its customers throughout the world. This closeness to our customers is the main driving force behind new developments. That is why SECKLER's development department has been fully integrated within the technology department. This means there is no delay in developing new systems or optimising existing systems in terms of cost, installation and quality.

SECKLER is connecting production machines

SECKLER combines production processes with standardised loading and unloading solutions, allowing for uninterrupted production 24 hours a day, seven days a week. Measuring applications are integrated with the online system, helping to guarantee seamless production from start to finish.

To improve value creation, additional processes can be incorporated within our automation solutions. Examples include auto assembly, mounting, testing, palletising, washing, etc. This means SECKLER can offer fully integrated solutions with improved productivity and optimum manufacturing quality.

Additional operations

Blowing, Washing, Cleaning, Assembling, Mounting, Measuring (pre-, post-process), Orienting, Aligning, Turning, Deburring, Labelling, Database connections, Statistical process control, Logistics



Machine tool

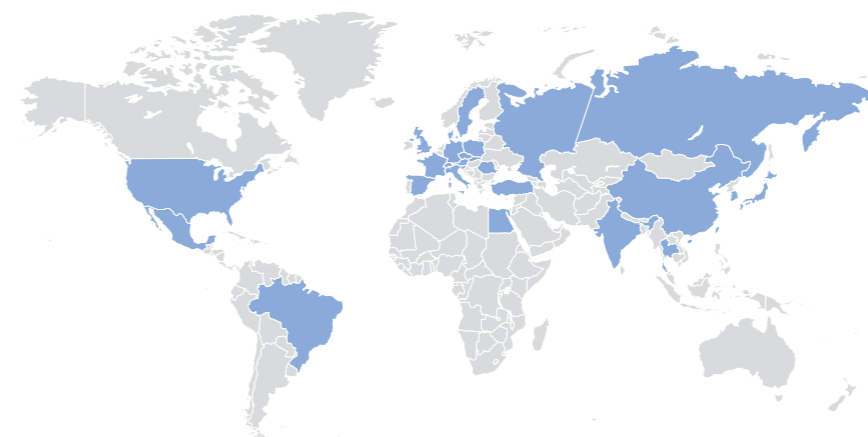
Grinding, Honing, Turning, Milling, Hobbing, Stamping, etc.

The aim of SECKLER is to concentrate upon the core business, the achievement of systems in the production automation, handling technology and in the customised mechanical engineering. SECKLER wants to create an ideal sphere which promotes and supports successful relations with the employees and the customers. SECKLER wants to gain a healthy profitability to promote new developments as well as to guarantee a steady advancement of the SECKLER AG.

The name SECKLER represents for decades the highest quality and precision in the special mechanical engineering. Creative approaches also on complicated tasks have produced innovative machine concepts over and over again. The management of SECKLER is calibrated on consolidation. With their 30 employees they have achieved the optimum size, to be able to react flexible to the most different market situations and customer wishes.

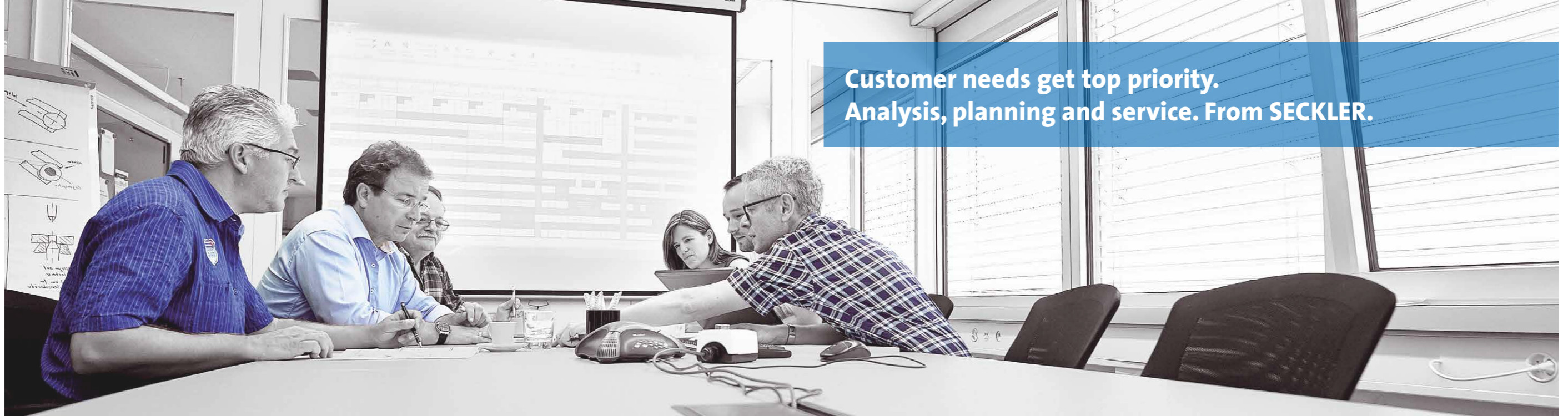
Historical milestones

- 1975** Founded by Robert Seckler
- 1983** First major order for the automated production of fuel injection needles
- 2002** Launch of the modular handling cell SECKLER *modulo 300*
- 2005** Development of SECKLER *modulo 500* and SECKLER *debur*
- 2007** Development of new robot cell SECKLER *robomation*
- 2009** MBO is taking over ixmation SECKLER systems. Rebranding in SECKLER AG
- 2011** Introduction of ViFlow for our ISO processes
- 2013** Development of the painting robot cell SECKLER *paintero*
- 2015** Development of the automatic sandblasting machine SECKLER *sandero*
- 2017** Development SECKLER *mesuro*
- 2018** Launch of the construction kit SECKLER *variation*
- 2021** Development of the through feeding system SECKLER *sandero*



More than 2000 SECKLER systems in operation worldwide

**Customer needs get top priority.
Analysis, planning and service. From SECKLER.**



Focusing on customer benefit is the overriding corporate philosophy at SECKLER, and we make sure we put this into practice.

The result is: High-quality tailored solutions, with service support that covers every need. So even in sales

and service, SECKLER provides top-quality service for the benefit of all of our many customers.

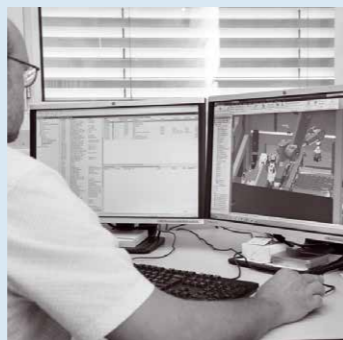
Consulting

The starting point for any project is the customer's engineering idea. An efficient, parallel development process is set up with the early involvement of a SECKLER project manager, who is integrated within the customer's team. This makes for an easy exchange of information and expertise, with processes running as smoothly as possible. This comprehensive consulting optimises costs and project management.



Engineering

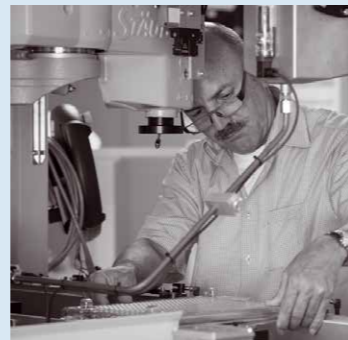
The engineers in our mechanical and electronic engineering departments give concrete form to the project team's ideas using 3D CAD systems. Location analyses and feasibility studies are carried out, and components are designed so they are suitable for automation. This results in considerable savings and individually tailored, cost-effective solutions.



System construction

The standardised modular design elements mean they can be assembled to form a system quickly and individually.

The software development department creates the digital user interface, and can, on request, incorporate the customer's data or describe interfaces with other systems.



Commissioning

To help with commissioning, customers are provided with comprehensive documentation specific to their particular system in the main languages of English, German, French or Italian. The documentation includes CAD design drawings, lists of components and spare parts, CE-compliant instructions, maintenance plans and suggested replacement parts to be kept in stock.



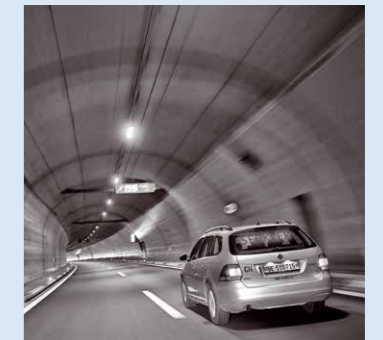
Training

SECKLER's job does not end when the system is put into operation. Whenever a system is handed over, the customer's personnel receive intensive and thorough training for smooth operation and technical maintenance. Mechanical, electrical and software training is provided to allow customers to diagnose problems quickly themselves.



After-Sales Service

The show must go on. That is why SECKLER Customer Service uses expert service engineers to ensure that all the systems we supply are always fit for use. If a fault arises, support can also be provided via remote diagnostics, often avoiding the need for an engineer to attend. SECKLER also offers service agreements for preventive maintenance, retrofitting and modernisation.



Especially flexible.
With SECKLER *robomation*. From SECKLER.

Extremely variable.
With SECKLER *variation*. From SECKLER.

- + Fast availability and short delivery
- + Compact, space-saving design
- + Proven SECKLER technology combined with market leading robots



Sizes

- + *robomation 100*
- + *robomation 200*
- + *robomation 500*

SECKLER *robomation* is the flexible standard robot cell which will increase your productivity in manufacturing. The SECKLER *robomation* is available in three versions and three sizes.

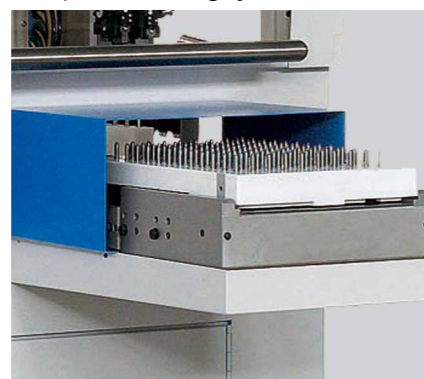
Versions

- + **F** equipped with a fixed robot ceiling or foot mounted for loading/unloading of your machine through a keyhole.
- + **LM** equipped with a gantry mounted robot for direct loading/unloading of your machine.
- + **FLM** equipped with a fixed robot ceiling or foot mounted with keyhole handover to a gantry for loading/unloading of your machine.

All cells are available with different types of pallet feeding systems.



Pallet drawer



Pallet conveyor



Pallet stacking box

SECKLER *variation* is a standard handling cell for the automatic supply and out-flow of the workpieces. The basic frame can be extended for additional modules (for example post-process station). Various feeding and gripper systems are available for an individual expansion.

- + Feeding and provision of any parts
- + Various feeding and gripper systems
- + Convenient operator guidance



Additional modules

- + SPC and NOK rejection
- + Blowing, sucking
- + Washing, cleaning
- + Assembling, mounting
- + Measuring (pre- or post-process)
- + Orienting, aligning
- + Flip over
- + Deburring
- + Labelling
- + etc.

Available part feeding systems

- + Chain conveyor
- + Pallet conveyor with or without stacking system
- + Bulk material supply via vibrating bowl feeder
- + Chute
- + Rotary indexing table

Available gripper systems

- + V-gripper
- + H-gripper
- + Swivel arm loader



Adjustable feed cycle chain



Pick-up on indexing table



Telescopic gantry with H-gripper

Systematic solutions with intelligence.
With SECKLER *modulo* 300 and 500. From SECKLER.

In a class of its own.
With SECKLER *sortero*. From SECKLER.

- + Compact, space-saving design
- + Constantly upgradeable, easily modified, always reusable
- + Modular system to shorten build times
- + Fast, consistent part exchange times

The SECKLER *modulo* handling cell offers individual and fully automated unload/load solutions for your machine tool.

The SECKLER *modulo* guarantees fast cycle times; even under extreme conditions. The cell has a compact space-saving design, can be retrofitted very easily as it is designed with future modifications in mind, and is expandable at any time.

The SECKLER *modulo* handling system is designed for demanding applications in production machines, and is the result of experience and contact with customers.

One of the great strengths of SECKLER *modulo* is the sophisticated modular concept, offering a range of tried-and-tested compatible modules. The modules can be used to create reliable systems ready for all kinds of production jobs in a very short time.



SECKLER *modulo* is available in two size versions. SECKLER *modulo* 300 has been developed for handling items weighing up to approx. 1 kg. The SECKLER *modulo* 500 is suitable for handling items up to 5 kg.



Combination drawer for rejects/SPC



Reading the data matrix code



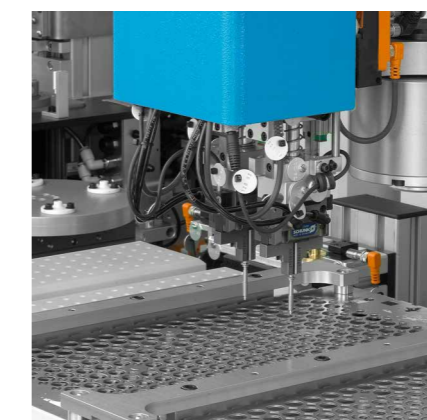
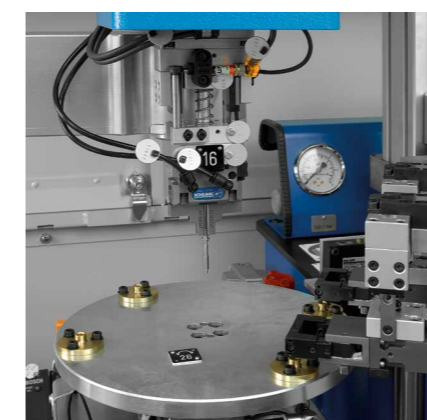
Measuring station

Essentially, automatic classification machines are required to sort items precisely according to defined features or dimensions, for example color, shape, size, hardness, weight or surface quality.

- + Exact sorting to micro precision
- + 100% inspection and reliability – parts cannot be mixed up
- + Fast retooling for similar parts

The SECKLER *sortero* is an intelligent, high-precision automatic classification machine that

gives you the freedom to specify the number of classes, the class width and the manufacturer of the measuring instruments. A wide range of measuring systems is available. Probes are used to take mechanical measurements. In the case of contactless measurements, optical or pneumatic scanning processes are used.



The pictures show an automatic classification machine for selecting on the basis of an outer diameter. A twin measuring stand is used to cut the cycle time in half by allowing two parts to be measured simultaneously in a single step. The measuring technology is based on the scanning principle, whereby a pneumatic ring gauge passes over the cylindrical part of the item and measures around 200 points.

**Always perfect surfaces.
With SECKLER *sandero*. From SECKLER.**

**Always a burr less.
With SECKLER *debu*. From SECKLER.**

The SECKLER *sandero* is designed to accommodate parts up to a maximum diameter of 80 mm and a maximum length of 150 mm.

It is comprised of a stand-alone blasting system with rotary table and eight workpiece stations. It is possible to have a maximum of four individually programmable blasting nozzles at each table position. After the blasting process, the workpieces are carefully blown off so that they can be removed dust-free from the parts fixture.

Basic configuration

- + Rotary indexing table with 8 satellites
- + 4 blasting gun units
- + Blasting pre-acceleration of blasting media
- + Selective fine grain separation unit
- + Surface micro filter

Options

- + Vertical linear unit for blasting nozzles with a stroke of 150 mm
- + Automated blasting shot injection
- + Suction with dust container
- + Noise protection cell for suction and injection

- + **High flexibility**
- + **Better process controlling**
- + **High and repetitive quality**



For the SECKLER *sandero* we have developed a new clamping system with rubber protection.

Robot above pallet consists of:

- + Double gripper head
- + Pallet stacking box
- + Flip-over station



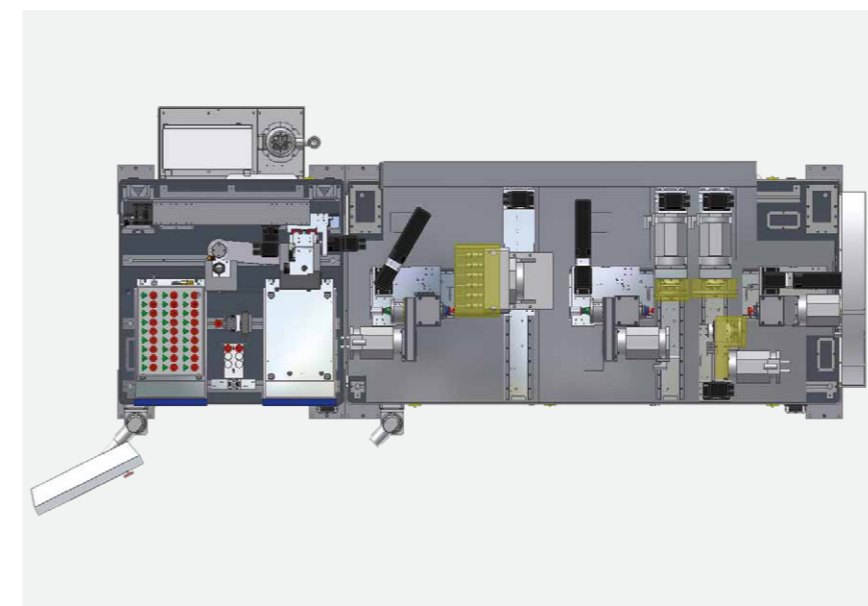
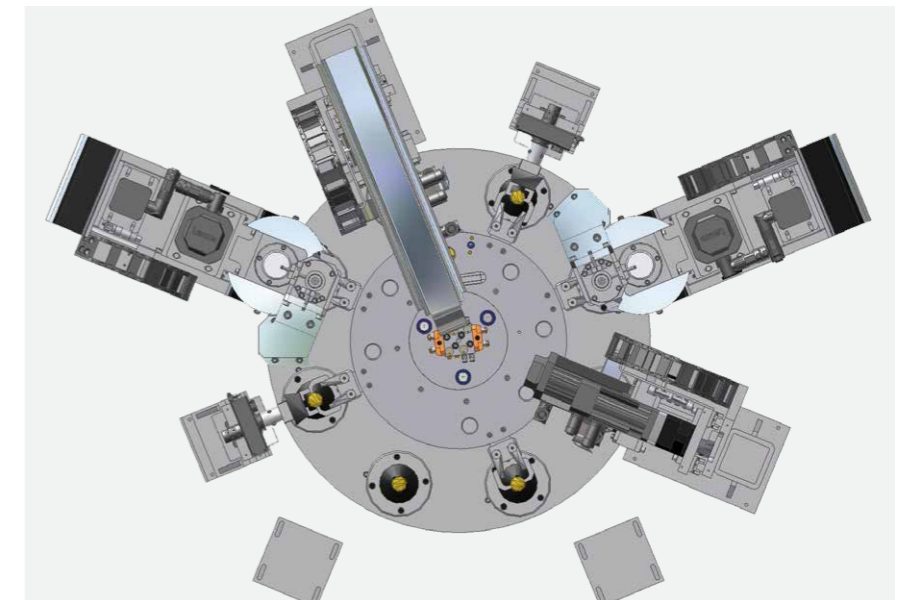
Deburring remains an issue in all mechanical processes such as milling, turning, grinding, honing, etc.

SECKLER has been making deburring technology for 25 years, using wire brushes or abrasive brushes – from sharp edged burr-free to an edge roundness of 0.15 mm.

After many years of experience, SECKLER has developed an efficient system. The result is a tried and tested modular system that can carry out a wide range of deburring tasks. With SECKLER „modular“ meaning your system will be delivered more quickly!



- + **Guaranteed repetition with identical processing quality and uniform surface quality**
- + **Workplace humanisation, by automating harmful processes (metal powders) and reducing the risk of injury from burrs**



Proved components such as OD, face, bore and slot/groove deburring units.



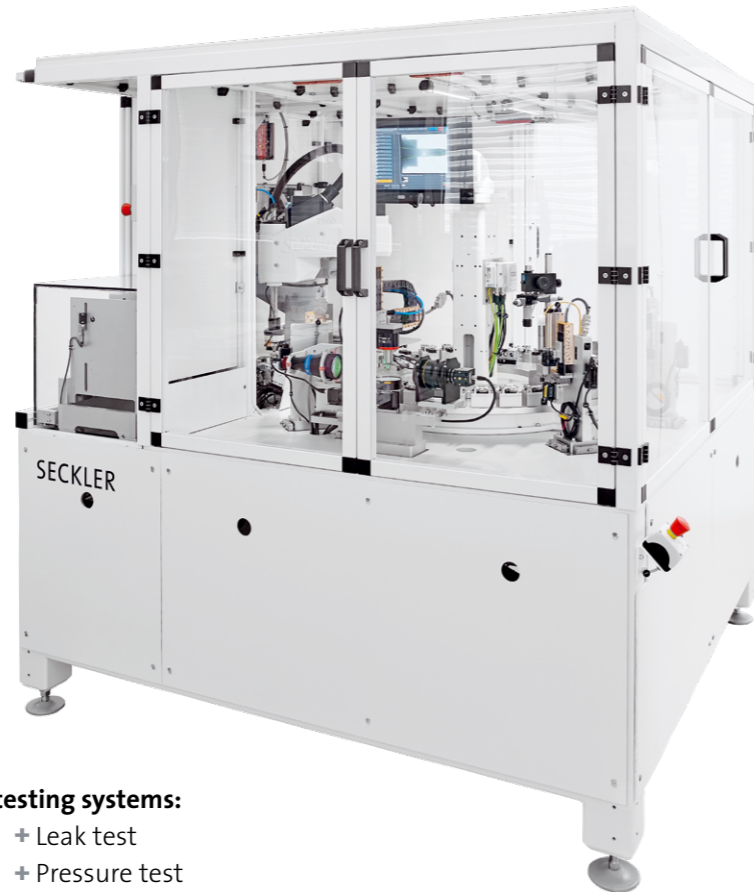
Measuring and testing. With SECKLER *mesuro*. From SECKLER.

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SECKLER *mesuro* is a highly efficient measuring and testing machine, which guarantees economical production of a wide variety of components for almost all industrial sectors with high quality requirements. The use of industrial vision systems, tactile and non-contact measuring systems play a decisive role.

Due to the very fast cycle times and extensive testing requirements, a visual inspection by humans is not 100% guaranteed. Here, only self-sufficient, high-precision components, which can be integrated seamlessly into the mechanical engineering concept, take over the work and ensure a consistent high quality.

- + Highly efficient and accurate measurement
- + Many measuring operations can be integrated
- + Integration of state-of-the-art methods and components
- + Very fast cycle times



Selection of available measuring and testing systems:

- + Optical measuring systems
- + Tactile measurement systems
- + Air gage
- + Torque measuring systems
- + Leak test
- + Pressure test
- + Eddy current test for surface defects such as cracks, pores



Rotary indexing table with several measuring and testing operation



Air gage for bores

Painting at its finest. With SECKLER *paintero*. From SECKLER.

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The proven product range SECKLER *robomation* has been extended by another application. The painting robot cell SECKLER *paintero* meets your modern quality standards and increases the efficiency of your painting processes.

Color changing

Up to five color tanks and one container of solvent are available. The color tanks are equipped with automatic stirring. A color change valve block ensures short color change times.

Spray gun in paint booth

- + Overhead laminar flow with filter
- + Underneath filter with extraction
- + Pallet fixture during painting
- + Single-head or dual-head spray guns available
- + Spray guns are based on HVLP (High Volume/Low Pressure) technology
- + Optional replaceable jets with various nozzle clearances are available



- + High flexibility
- + Better process control
- + High quality and repeatability
- + Excellent coating results



Robot

In addition to painting, the SECKLER *paintero* also does the following tasks:

- + Palletizing
- + Ionizing
- + Cleaning



Automatic tool changer

From the pallet gripper to spray gun or vice versa.



**Always at your service.
Perfect After-Sales Service. From SECKLER.**

Hotline/Remote support

Remote service means, SECKLER reaches directly to your system: Fast online expert assistance without travel time and travel costs.



Maintenance

Preventative maintenance increases the operational reliability or in other words reduces down time.



On-site support/Repair

Even against all expectations, if something does brake, it has to go fast. The competent service of SECKLER is quickly on site.



Spare part service

A high availability for spare parts is very important for many years of operating on a system. SECKLER provides what you need.



System optimization

Overhauled installations are no problem. SECKLER is happy to support you in modernization of your production processes.



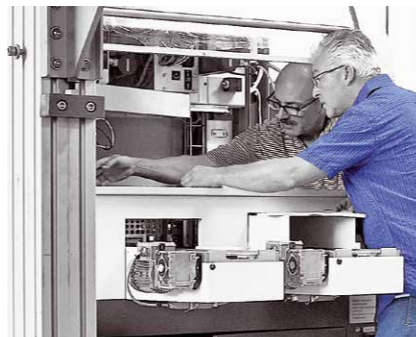
Commencement of production

You need help to start up your production? SECKLER is glad to assist with advice and support.



Training

During the technical approval, the staff of the customers get educated intensively and widely for a quick diagnose, directly onsite.



Documentation

To help with commissioning, customers are provided a comprehensive documentation specific to every single system.



- + **Competent, reliable and multilingual partners**
- + **Uncomplicated and friendly support**
- + **Fast response times and fast troubleshooting**
- + **Competent and preventive maintenance for high availability of your system**
- + **Customized maintenance contracts for reduced maintenance costs and minimized downtimes**
- + **Short downtimes**

The show must go on. That is why SECKLER After-Sales Service uses expert service engineers to ensure that all the systems we supply are always fit for use.

If a fault arises, support can also be provided via remote diagnostics; often avoiding the need for an engineer to attend. SECKLER also offers service agreements for preventive maintenance, retrofitting and modernization.

Picture credit title page: Wittenstein SE
In the brush deburring machine SECKLER *debu* as well as the
handling system SECKLER *modulo* there are operational motor-
gearbox-units TPM+ from WITTENSTEIN.

Design: www.signature.ch

SECKLER
... and it works!

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