

### SECKLER

### Always a burr less – SECKLER *deburo*.

Deburring system for parts in all shapes and sizes.

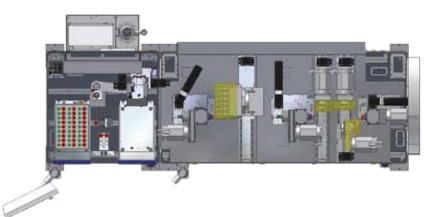
# Linear or rotary – deburring in all positions with SECKLER *deburo*.

Deburring remains an issue in all mechanical processes even today, despite the use of the best machining technology. Machining burrs occur as a result of operations such as milling, turning, grinding, honing, etc. However, today's pressure on costs and the rising quality requirements mean that process-reliable, fully automated solutions are now indispensable.

SECKLER has been making deburring technology for 25 years, using wire brushes or nylon impregnated brushes with abrasive grit. SECKLER *deburo* automatic brush deburrers are individually tailored solutions guaranteeing optimum workflow in manufacturing processes. SECKLER *deburo* deburrers are in use throughout the world on every continent, in companies of all sizes. SECKLER has a comprehensive range, including compact stand alone solutions, advanced special models with complex control technology for industrial mass production, and brush modules that are integrated with our handling systems.

Our range meets customer requirements from sharp edged burr-free to an edge roundness of 0.15 mm. SECKLER *deburo* deburrers have been specially developed for surface working in linear and rotary indexing processes. The systems can be upgraded with options such as automatic part feed, robot handling, a turning unit for working both sides of a part, and integrated item cleaning and drying. These options allow the systems to operate unattended and fully automatically. The systems can be fully integrated with new or existing production lines at any time.

The linear arrangement of a deburring system is suitable for complete processing with multiple chuckings. Portal robots are used to transport parts from station to station. The machine shown here is used to deburr fuel injection parts for diesel engines.

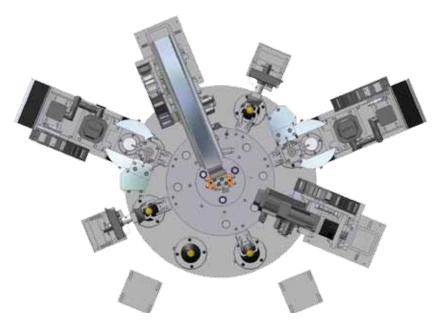






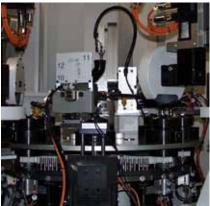


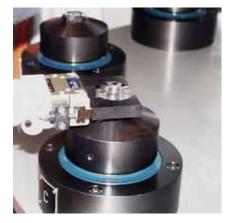
- + High productivity, operating 24 hours a day, 7 days a week...
- + Guaranteed repetition with identical processing quality and uniform surface quality
- + Workplace humanisation, by automating harmful processes (metal powders) and reducing the risk of injury from burrs
- + High availability of systems
- + Tailored, customer-oriented solutions
- + Highly economical systems rapid ROI
- + Technological details handled in the strictest confidence
- + CE marked and ISO 9001 certified



The rotary indexing bench is ideal for deburring mass-produced parts like sintered products or precision stampings. The rotary indexing brush deburrer shown here was designed and built to deburr pump gears. Both faces and the outside diameter are deburred.







## Fast and reliable – modular solutions.

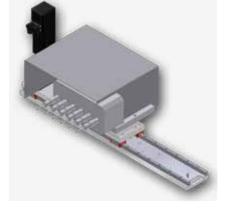
After many years' experience building brush deburrers, SECKLER has developed an efficient system to meet any challenge. The result is a tried-and-tested modular system that can carry out a vast range of deburring tasks. With SECKLER, "modular" your system will be delivered more quickly!

#### Multiple-spindle brush head

The inner brushes for deburring small bore holes have a short service life. A multiple-spindle brush head is a good way of avoiding the need to replace the brush after every x parts. This approach allows the machine to continue working x times longer (depending on the number of brushes) until the next brush change.

#### Multiple brush carriage

Modules are available to allow multiple processes to be performed on parts in a single step, including a range of multiple brush carriages. The example shown here is a brush unit for simultaneous face and outside diameter deburring.



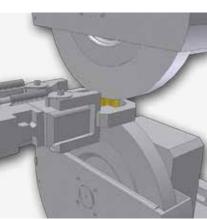


#### Control

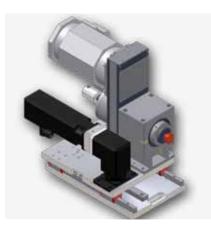
- + Siemens PC627 with graphical user interface
- + Siemens AC servo drives
- + Mobile handbox

#### Twin-sided brush unit

A twin-sided brush unit can also be used to deburr both faces of an item in a single step.



Customer-specific solutions are created from tried-and-tested components using OD brushes, face brushes, internal brushes and slot/ groove brushes. An automatic brush wear compensation system can be integrated as an option, using current consumption to indicate the degree of wear of each brush in its current state.



#### Headstock

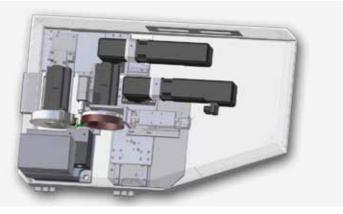
The headstock is used to retain and rotate items. The following chuck systems are available:

- + Three-jaw chuck
- +Collet chuck
- + Between turning centers with a driver and supported by the tailstock



#### Tailstock

The tailstock is used to support long items. It is also used if the item has to be supported between turning centers to facilitate brush access.



#### **Complete brush station**

Modules are not just single components, but complete brush stations that can be integrated quickly and easily with the automation cell in your production line. SECKLER can provide references from various sectors, especially large suppliers to the automobile industry. Machines and systems that have been successfully developed include the following:

Centerless deburring for rotor shafts and ABS pistons

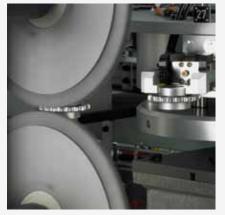




Simultaneous face and outside diameter brush deburring

Integrating modular deburring units in handling cells





Twin-sided brush units to deburr both faces of a sintered item in a single step

The demands relating to cost-effective deburring and surface working are becoming increasingly exacting. Workflows need to be improved and operating costs need to be lowered. SECKLER is aware of these challenges and has the right expertise to deliver optimum solutions in terms of technology as well as economy.

As it strives for innovative solutions, SECKLER is able to meet individual customer wishes in a targeted way. Every deburring task calls for an individual solution, so our Center of Competence verifies feasibility before every offer is sent out. We can find the best, most economical solution thanks to the winning combination of years of production experience and extensive testing.

# Pressing all the right buttons – customer know-how.

	Spindelstock Station 1			Bürste Station 1		-	
	U/min	Drehrichtung	U/min	Drehrichtung	Burstzeit		
1. Zyklus	0	©	O	G	0,0		
2 Zyklus	0	Q	0	9	0,0		1 -
Zustellung Bi Zustellung ni Korrektur Bü	ach n-Teile	Eingabe	0 stk.		Optionen Automatische Zustellung Bürste gewechselt Bürststation angewählt		
WS seit Bürs	tenwechsel	Statistik	stk.				
Max. Telle pr Bürstenabnü	ro Bürste	10	stk.	100			Zurück



#### Simply press a button...

...to show all relevant machine data in the display of your SECKLER system.

At SECKLER, we do more than just deliver the technology. You are given a clear controlling tool for your system. It is easy to handle and based on the familiar Windows user interface. A user-friendly touch screen makes operating the machine control a pleasant and straightforward experience. Database connections are also possible.

#### Testing times

You are welcome to have your items tested on a test system at the SECK-LER Center of Competence.

Test machines are ready and waiting to solve your specific deburring problem. You have full access to the expertise of SECKLER – not for standard machines but for customerspecific complex systems.



#### Intelligent support

Service engineers or consultants are standing by, and can be with you on site within 24 hours.

SECKLER pays more than lip service to customer support. SECKLER is your speedy and reliable trusted partner, whether you need support developing your solution or an engineer able to fix a technical problem.

### SECKLER

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