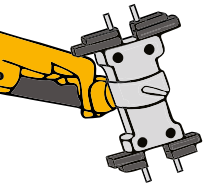


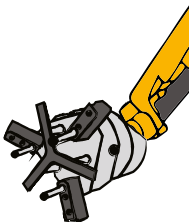
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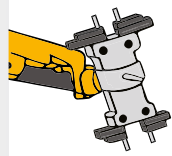


## HALTER LoadAssistant®

For loading batches from 10 to 1,000 workpieces







THE HALTER LOADASSISTANT IS SIMPLE, FULLY CONFIGURED, READY FOR YOUR USE AND IT CAN BE CONNECTED TO ANY NEW OR EXISTING CNC MACHINE.



METALWORKING COMPANIES INVESTING IN THE HALTER LOADASSISTANT IMMEDIATELY SEE AN INCREASE IN THEIR PROFIT MARGINS AND IN THE FLEXIBILITY OF THEIR PRODUCTION, EVEN WHEN PRODUCING SMALL AND MEDIUM BATCH SIZES.



"Profitability of the Okuma Multus B400W is almost doubled."  
Marc Meijer | BMI Thegon

## Immediately increase profits with the **right** automation!

The market for you, as a business in the metalworking industry, has changed significantly in recent years. Your customers have become more demanding than ever before. They expect you to supply at competitive prices, but they also demand smaller batch sizes and shorter delivery times. At the same time you have to deal with rising labor costs and a lack of CNC operators. You need these operators for skilled labor, not simple repetitive jobs.

The only way to resolve these challenges is to choose the right automation. For small to large batch sizes this should be an automation system that is fast to set up and easy to integrate into existing processes.

### Easy loading system with short set-up times

The HALTER LoadAssistant has been developed based on HALTER CNC Automation's many years of experience in the metalworking industry and in production automation.

It is a smart and sophisticated system and it does exactly what it is designed to do: load your CNC machine with small and medium batches. The system is very fast to set up and you don't need any knowledge about robots to operate it.

Would you like to immediately increase your profits like many other companies have already done? Do you want to invest in a system that provides years of trouble-free loading of your CNC machines, even with smaller batch sizes? Then choose the HALTER LoadAssistant and get in touch with us today!

Call: 800-314-8261 or email to: [info@haltercnc.com](mailto:info@haltercnc.com)







THE HALTER LOADASSISTANT WAS DEVELOPED IN COOPERATION WITH THE FASTEMS GROUP. FASTEMS IS THE WORLD LEADER IN THE FIELD OF MANUFACTURING AUTOMATION. IT HAS INSTALLED MORE THAN 1,500 FMS SYSTEMS (FLEXIBLE MANUFACTURING SYSTEMS) AND HAS IMPLEMENTED MORE THAN 350 PORTALS AND 1,600 ROBOTIC SYSTEMS WORLDWIDE.



HALTER LOADASSISTANT IS PRODUCED IN ISSUM, GERMANY.



"After all the alternatives had been carefully studied, the choice was made for the HALTER LoadAssistant."  
Rolf Würstlin | ASS Maschinenbau

## About us

HALTER CNC Automation has developed the HALTER LoadAssistant based on over 25 years of experience in the metalworking industry. No one understands the issues metalworking companies are struggling with better than we do. Customers expect shorter delivery times, margins are under pressure, and there is a growing shortage of skilled operators. Moreover, the expensive CNC machines have an insufficient number of spindle hours.

The mission of HALTER CNC Automation is to help metalworking companies become immediately more profitable, even in the production of batches from 10 to 1000 workpieces, by supplying accessible automatic-loading systems.

We are continuously working on the development, production, distribution and service of our products. We do this with a team of specialists and in cooperation with highly qualified suppliers and distributors. This allows our customers to rely on our high-tech, robust and reliable automation.

## Your key benefits

1 HALTER LoadAssistant increases your production output, machine efficiency and profits:

- ✓ The additional machining hours at a lower cost immediately result in higher production output and higher profitability.
- ✓ One operator can operate more than one machine at the same time, improving the utilization rate of your machine shop.
- ✓ Automation lowers labor costs, as the average labor costs are 5 to 8 times higher than the average depreciation cost per hour of the robot.

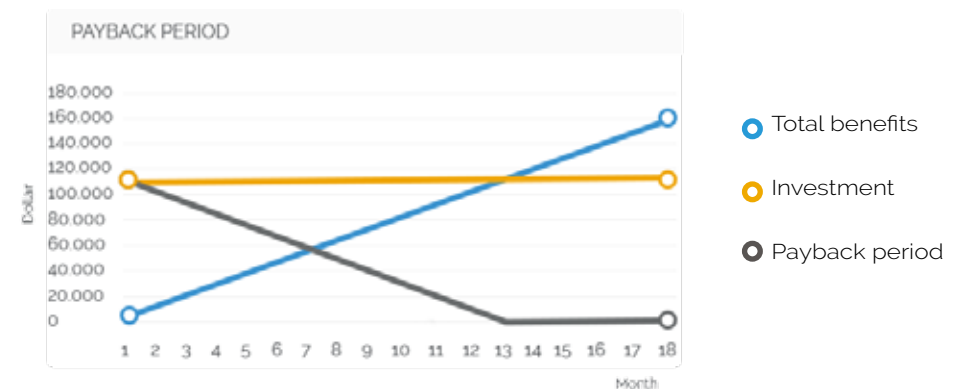


2 Your qualified operators are better utilized

Operators are qualified to set up and program CNC machines. Most of the time, however, they are engaged in tedious and repetitive work. The HALTER LoadAssistant takes over this work, allowing your qualified operators to focus on work preparation, testing, configuring other machines, and creating CNC programs. The content of their job therefore becomes more appealing and the operators become more efficient.

3 You do not need robot specialists

The HALTER LoadAssistant can easily be set up and operated by any employee. No robotics training is required thanks to the HALTER SmartControl combined with the well-thought-out loading solution.



4 It increases flexibility as it can be used with several of your CNC machines

The HALTER LoadAssistant can easily be moved with a pallet truck and connected to other CNC machine in your shop. By investing in one loading robot you can automate several machines, allowing you to respond to the demand of your customers in a more flexible way. You can use the HALTER Universal with a lathe as well as with a milling machine.

# THE EASY WAY TO AUTOMATE YOUR CNC MACHINE

1

## HALTER SmartControl



- No robotics experience required
- Set-up ready in 12 steps
- Very flexible: add additional cycles yourself
- Change-over takes less than 5 minutes

2

## Rotating loading system



### UNIVERSAL:

- Universal, pre-programmed grid plates
- For lathes and/or milling machines up to 9.055"
- Grid-plates are adjustable in height for workpieces up to 9.843"
- New batches can be set up while the robot arm is working



### S-180:

- Stacking stations for milling workpieces up to 7.087"
- High capacity on a small surface area (for shorter workpieces)
- Workpiece turn-around station for two-sided machining



### S-230:

- Stacking stations for turning workpieces up to 9.055"
- High capacity with a small surface area (for shorter workpieces)
- Workpiece turn-around station for two-sided machining

3

## Easy to move and switch to another CNC machine



- Movable with a pallet truck
- Positioning facilitated by the self-centering anchors
- Automatic identification of the CNC machine

4

## Accessible and safe



- CNC machine remains accessible by the operator at all times, no fences necessary
- Equipped with floor scanner to slow down and stop the robot arm
- Does not compromise the safety of your operator

5

## Fanuc 6-axis robot arm



- Maximum load capacity of robot arm: 10 kg (22lbs), 20 kg (44lbs) or 35 kg (77lbs)
- Suitable for industrial environments
- Stable, accurate and sustainable

6

## Optimal gripper system



- Universal 2 or 3-finger grippers
- Quickly adjustable grippers
- Built-in safety sensors for open/close control
- Airflow system that cleans off the vice or chuck



7

## Setting up a new batch while the robot continues to operate



- Thanks to the rotating loading system, a new batch can be filled from the backside while the production process is running.

8

## High-quality industrial components and reliable technology



- Rigid construction
- Only A-class industrial components
- Standard and complete plug-and-play system



Watch our videos to see how it works at [www.haltercncautomation.com](http://www.haltercncautomation.com)



### COMPACT ALL-IN-ONE DESIGN

- ✓ NO ADDITIONAL COMPONENTS, FENCES OR CABLES NECESSARY
- ✓ ROTATING SYSTEM ALLOWS FILLING FROM THE BACKSIDE
- ✓ MINIMAL USAGE OF FLOOR SPACE, INCLUDING THE SAFETY ZONE







### Intuitive, graphics-based programming in 12 steps



The HALTER SmartControl features intuitive software, so the operator does not need any knowledge of robot programming. All positions and all possible variables have been pre-programmed into the HALTER LoadAssistant by means of a grid plate (for the Universal) or a stacking system (for the S-180 and S-230). This means that the operator only needs to enter the workpiece data (e.g., the diameter and height) and the robotic arm will know, based on this data, the exact position of the workpiece. The data of the CNC machine (such as the vice or chuck) are set so that the HALTER LoadAssistant can immediately start the automatic loading of the machine. Thanks to the HALTER SmartControl, the changeover times are minimized and the HALTER LoadAssistant can even be used for smaller batches.

### Standard loading cycles that can be flexibly extended with additional functions



The HALTER LoadAssistant works with multiple standard loading cycles, which can be selected with one click. Thus you do not need to program anything because the robot arm upon installation is taught exactly where the vise or chuck is. For example, there are standard cycles for the loading and unloading of CNC machines with one spindle, two spindles, a multitasking lathe center or for the unloading of a sub-spindle in combination with a bar feeder.

In addition, you also have the option to extend any standard cycle with additional functionalities. For example, the workpieces can be placed on a measuring station, engraving machine, production line or pallet. Therefore you retain the advantage of short changeover times through the use of standard cycles, but you also have optimal flexibility when it comes to adding extra features.

## HALTER SmartControl



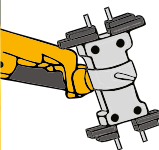
- ✓ Intuitive and graphical programming in 12 steps
- ✓ Rotating panel with 15" touch screen
- ✓ Choice between inside and outside gripping
- ✓ Gripping with or without pressure star
- ✓ Possibility to work with spindle orientation
- ✓ Eccentric loading and unloading
- ✓ Adding of free programmable cycles
- ✓ Standard cycles can be extended with extra functionalities
- ✓ Adjustable distance of the airflow system
- ✓ Software analysis for machine utilization
- ✓ Automatic program storage
- ✓ Input can be entered in inches or mm
- ✓ Automatic back-up of robot programs or manual back up to USB
- ✓ Robot arm can be parked with the Park Position button
- ✓ Free choice of pre-installed language
- ✓ Can be connected to up to 4 machines



The HALTER SmartControl is equipped with software that precisely informs you about the productivity of the HALTER LoadAssistant and thus of course your CNC machine. This will provide you with handy analysis of your actual machine utilization.

The HALTER LoadAssistant is easy to move with a pallet truck. Thanks to the self-centering anchors, the HALTER LoadAssistant always stays at a fixed reference position. You can use one system for multiple machines (up to 4). The robot-machine interface only needs to be established once and then the HALTER SmartControl retains all relevant machine data and can be started immediately. Based on the experience of our customers, the total time required to move the HALTER LoadAssistant and begin production with another CNC machine is less than 30 minutes.





## Why choose the HALTER LoadAssistant®

- ✓ HALTER SmartControl – no robotics experience required
- ✓ Minimal set-up times, therefore also very suitable for small batch sizes
- ✓ Robot can continue operating while setting up a new workpiece
- ✓ Design based on 25 years of experience in the metalworking industry and production automation
- ✓ Minimal usage of floor space, including safety zone
- ✓ One HALTER LoadAssistant for several CNC machines
- ✓ Your CNC machine remains fully accessible
- ✓ Compact all-in-one design; no additional components, fences or cables necessary
- ✓ Provides your operators with the highest level of safety
- ✓ Best possible service by certified technicians

## Important services for our customers

- ✓ Short delivery time from the production facility in Germany
- ✓ Turnkey delivery, set-up and training
- ✓ Top service by HALTER-certified technicians
- ✓ Favorable financing conditions thanks to the short payback period



"HALTER'S MORE THAN 25 YEARS OF EXPERIENCE AND OUR CLOSE RELATIONSHIP WITH THE CNC END-USER MARKET HAS INSPIRED US TO PROVE THAT AUTOMATION ALWAYS PAYS!"



"My operators can work with the Halter; no robot knowledge is required at all."

Randy Decker | Decker Precision Machining







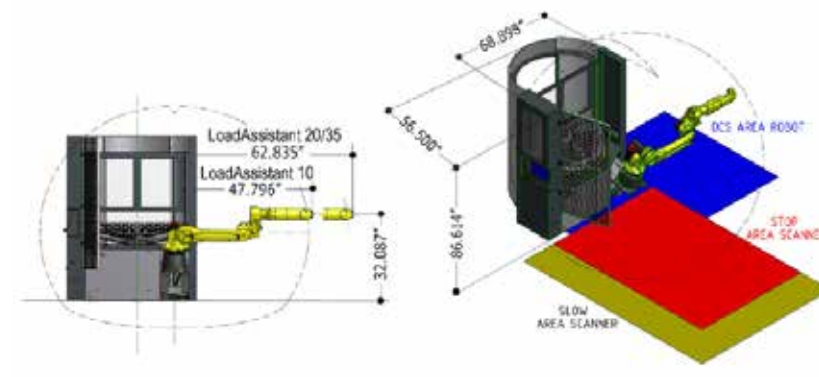
# Installation and instruction

The HALTER LoadAssistant is delivered turnkey. It is important to know that your CNC machine does not necessarily need to be equipped with a so-called 'robot interface' from your machine supplier. Our certified technicians make the connection between your CNC machine and the HALTER LoadAssistant through a PLC. Thanks to the standardized HALTER interface protocol, our installation can result in significant cost savings for you.

Your CNC machine needs to be equipped with an automatic door opener to be able to work with the HALTER LoadAssistant. In case your CNC machine doesn't have a door opener, we can build it in for you.

The operator training session takes place immediately after the installation. Our technicians ensure that after the training, your operator is able to work independently with the HALTER LoadAssistant.

Safety zone, robot arm reach and dimensions



## References

The HALTER LoadAssistant can be connected to any new or existing CNC machine. On our website you will find short videos showing recent installations.

With the HALTER, the machines of the following brands already operate more efficiently:

Akira Seiki, Bridgeport Hardinge, DMG Mori, Doosan, Eumach, Haas, Hermle, Hurco, HwaCheon, Kitamura, MAS, Mazak, Mikron, Mori Seiki, Nakamura, Okuma, Quaser, Takisawa, Victor and others.

## How it works

How exactly does the HALTER LoadAssistant work? Please visit our website for a short video explanation.



## Service

The international network of certified service partners of HALTER CNC Automation guarantees high-quality service for each system supplied. Through training and annual certification of our service partners, we keep our service level high, enabling you to operate a reliable system for many years.






IT IS IMPORTANT TO KNOW THAT YOUR CNC MACHINE DOES NOT NECESSARILY NEED TO BE EQUIPPED WITH A SO-CALLED 'ROBOT INTERFACE' FROM YOUR MACHINE SUPPLIER. OUR CERTIFIED TECHNICIANS MAKE THE CONNECTION BETWEEN YOUR CNC MACHINE AND THE HALTER LOADASSISTANT THROUGH THE STANDARDIZED HALTER INTERFACE PROTOCOL.









OUR HELPDESK IS ACCESSIBLE TO ALL USERS OF THE HALTER LOADASSISTANT.



## Capacity

HALTER LOADASSISTANT UNIVERSAL 10 / 20 / 35		CAPACITY
	Workpiece diameter (min-max)	.394" - 9.055"
	Minimum workpiece (L x W)	.394" x .394"
	Maximum workpiece (L x W)	9.055" x 9.055"
	Maximum height of workpiece	9.843"
	Maximum load capacity robot arm	22 lbs / 44 lbs / 77 lbs
	Maximum total weight on rotating table	551 lbs / 1653 lbs
	Max. number of workpieces for grid plate 10-35 mm	176
	Max. number of workpieces for grid plate 23-55 mm	136
	Max. number of workpieces for grid plate 23-85 mm	68
	Max. number of workpieces for grid plate 23-115 mm	40
	Max. number of workpieces for grid plate 23-135 mm	24
	Max. number of workpieces for grid plate 23-155 mm	18
	Max. number of workpieces for grid plate 23-230 mm	6

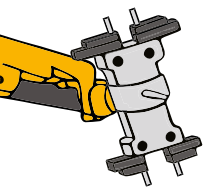
HALTER LOADASSISTANT S-180 20 / 35		CAPACITY
	Minimum workpiece (L x W)	1.575" x 1.575"
	Maximum workpiece (L x W)	7.087" x 7.087"
	Maximum height of workpiece	6.889"
	Maximum load capacity robot arm	44 lbs / 77 lbs
	Maximum total weight on rotating table	2755 lbs
	Maximum stacking height	13.779"
	Number of stacking stations (1 empty)	12
	Maximum weight per station	253 lbs
	Max. number of workpieces at workpiece height of 0.394"	385
	Max. number of workpieces at workpiece height of 0.984"	154
	Max. number of workpieces at workpiece height of 1.969"	77
	Max. number of workpieces at workpiece height of 3.149"	44
	Max. number of workpieces at workpiece height of 4.527"	33
	Max. number of workpieces at workpiece height of 6.889"	22

HALTER LOADASSISTANT S-230 20 / 35		CAPACITY
	Workpiece diameter (min-max)	1.692" - 9.055"
	Maximum height of workpiece	6.889"
	Maximum load capacity of robot arm	44 lbs / 77 lbs
	Maximum total weight on rotating table	2755 lbs
	Maximum stacking height	13.779"
	Number of stacking stations (1 empty)	12
	Maximum weight per station	253 lbs
	Max. number of workpieces at workpiece height of 0.394"	385
	Max. number of workpieces at workpiece height of 0.984"	154
	Max. number of workpieces at workpiece height of 1.969"	77
	Max. number of workpieces at workpiece height of 3.149"	44
	Max. number of workpieces at workpiece height of 4.527"	33
	Max. number of workpieces at workpiece height of 6.889"	22

## Technical specifications

SYSTEM	UNIVERSAL 10 / 20 / 35	S-180 20 / 35	S-230 20 / 35
Rigid industrial construction	✓	✓	✓
Rotating loading table	✓	✓	✓
Full enclosure and protection	✓	✓	✓
Simple to move with pallet truck	✓	✓	✓
Can be placed on 3-point self-centering anchors	✓	✓	✓
Fanuc 6-axis robot arm	10 / 20 / 35 kg	20 / 35 kg	20 / 35 kg
Drip tray for leaking coolant	✓	✓	✓
Workpiece turn-around station for two-sided machining	✓	✓	✓
Standard robot-machine interface for every CNC machine	✓	✓	✓
HALTER SMARTCONTROL	UNIVERSAL 10 / 20 / 35	S-180 20 / 35	S-230 20 / 35
Intuitive and graphical programming in 12 steps	✓	✓	✓
Rotating panel with 15" touch screen	✓	✓	✓
Choice between inside and outside gripping	✓	✓	✓
Gripping with or without pressure star	✓	✓	✓
Possibility to work with spindle orientation	✓	✓	✓
Eccentric loading and unloading	✓	✓	✓
Adding of free programmable cycles	✓	✓	✓
Standard cycles can be extended with extra functionalities	✓	✓	✓
Adjustable distance of the airflow system	✓	✓	✓
Software analysis for machine utilization	✓	✓	✓
Automatic program storage	✓	✓	✓
Input can be entered in inches or mm	✓	✓	✓
Robot arm can be parked with the Park Position button	✓	✓	✓
Free choice of pre-installed language	✓	✓	✓
Max. number of CNC machines to connect with	4	4	4
GRIPPERS	UNIVERSAL 10 / 20 / 35	S-180 20 / 35	S-230 20 / 35
2-finger gripper for rectangular workpieces	Optional	✓	-
3-finger gripper for round workpieces	Optional	-	✓
Separate grippers for raw and machined workpieces	✓	✓	✓
Standard airflow system on all grippers	✓	✓	✓
Workpiece detection system by open/close message	✓	✓	✓
Quick change system for exchanging grippers	✓	✓	✓
Quickly adjustable gripper fingers	✓	✓	✓
Pressure sensor on the robot arm monitors air pressure	✓	✓	✓
SAFETY	UNIVERSAL 10 / 20 / 35	S-180 20 / 35	S-230 20 / 35
In-machine-space function	✓	✓	✓
Fanuc DCS area in combination with the Sick floor scanner	✓	✓	✓
Sliding door provided with safety sensors	✓	✓	✓
Standard safety fence between CNC machine and the Halter	✓	✓	✓
Closed safety circuit	✓	✓	✓
Automatic servo-driven door opener with integrated safety	✓	✓	✓
DIMENSIONS AND INPUT	UNIVERSAL 10 / 20 / 35	S-180 20 / 35	S-230 20 / 35
Length x Width	68.898" x 56.457"	68.898" x 56.457"	68.898" x 56.457"
Height	87.402"	87.402"	87.402"
Total weight	2182 / 2447 / 2469 lbs	2667 / 2689 lbs	2667 / 2689 lbs
Voltage	208 3 Phase	208 3 Phase	208 3 Phase
Peak consumption	30 A	30 A	30 A
Compressed air pressure	87 PSI	87 PSI	87 PSI





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USA**

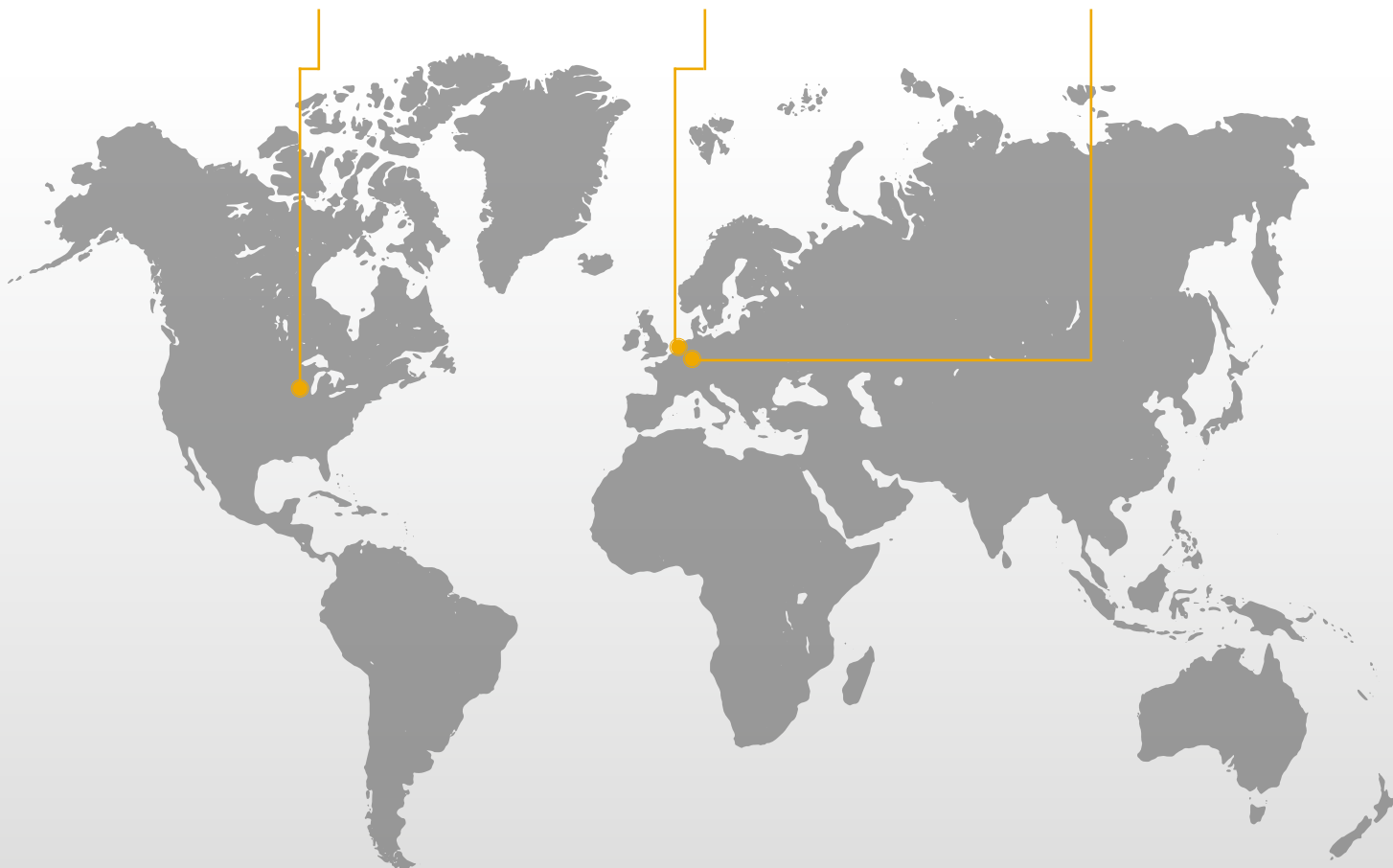
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# HALTER

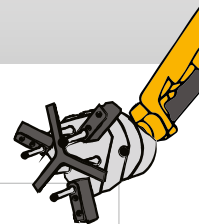
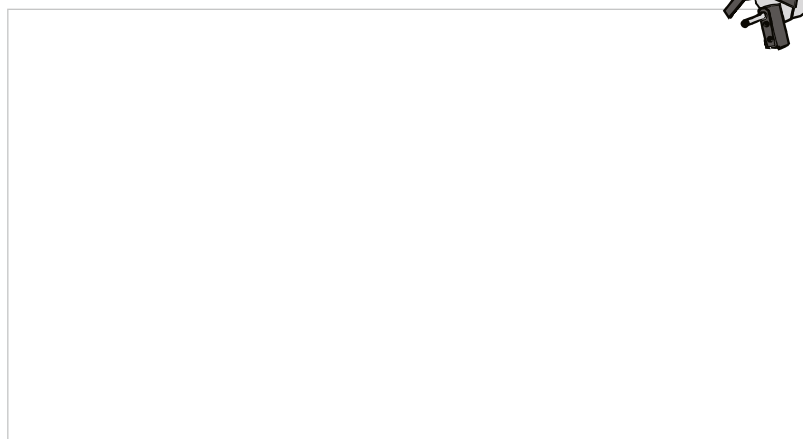
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Made in Germany

Developing partner: Fastems