



**HALTER**  
CNC AUTOMATION

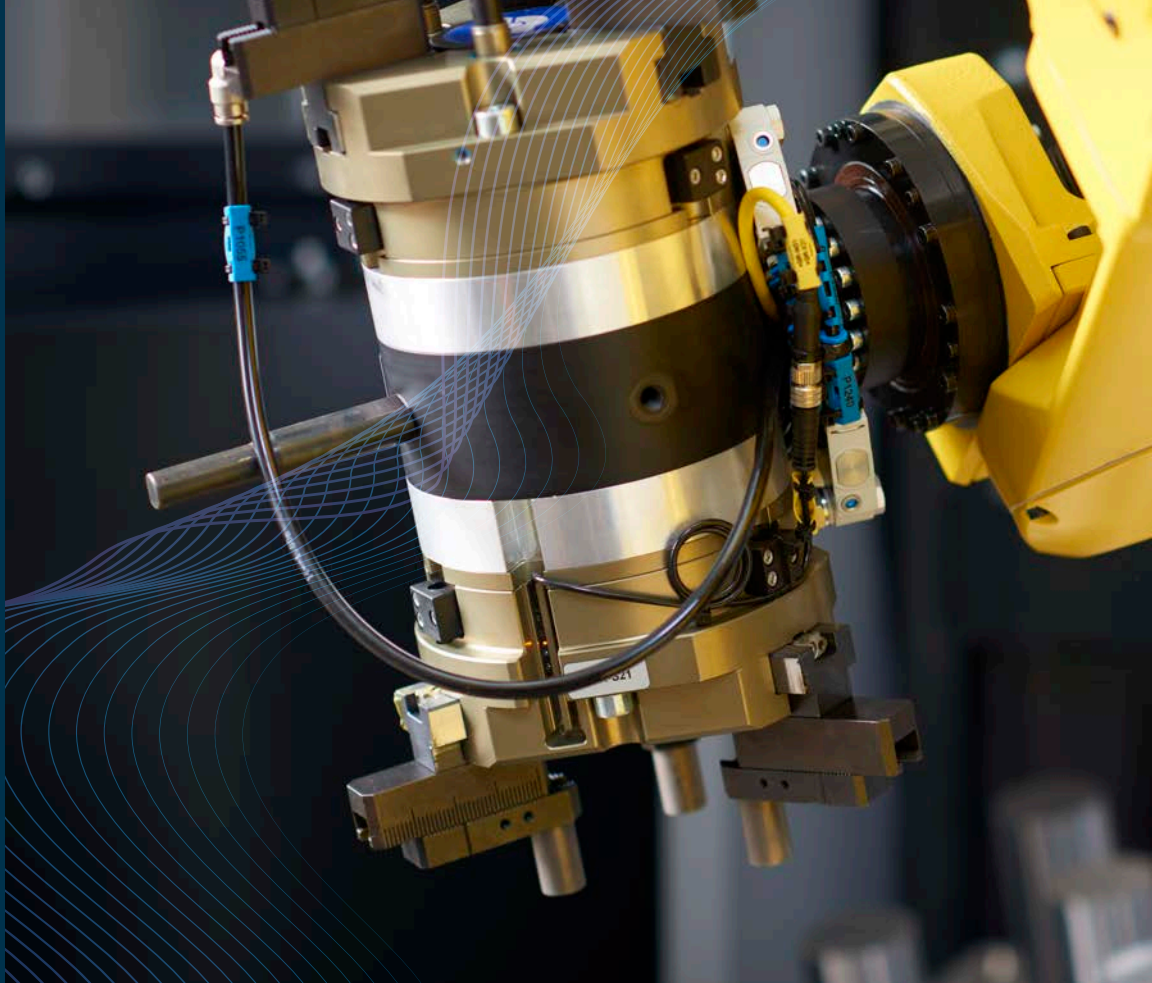
**Committed  
to performance.  
Dedicated to  
deliver.**





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

HALTER LoadAssistant





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## IMMEDIATELY INCREASE PROFITS WITH A HALTER LOADASSISTANT

The market conditions for your company in the machining sector have changed considerably in recent years. Your customers have become much more demanding. 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. You can overcome these challenges by choosing the right HALTER automation solution. We offer a wide range of HALTER LoadAssistants which substantially increase the production capability of your CNC machine. 95% of our customers achieve ROI in less than 18 months.

For small and medium-sized batches you need a system with short set-up times and fast integration processes. HALTER CNC Automation has developed the HALTER LoadAssistants for this, based on its many years of experience in the machining industry and production automation. The all-in-one Universal (for turning and milling), the TurnStacker and the MillStacker. Compact, Premium and Big. Available with a 12 kg, 20 kg, 35 kg or 70 kg robot arm.

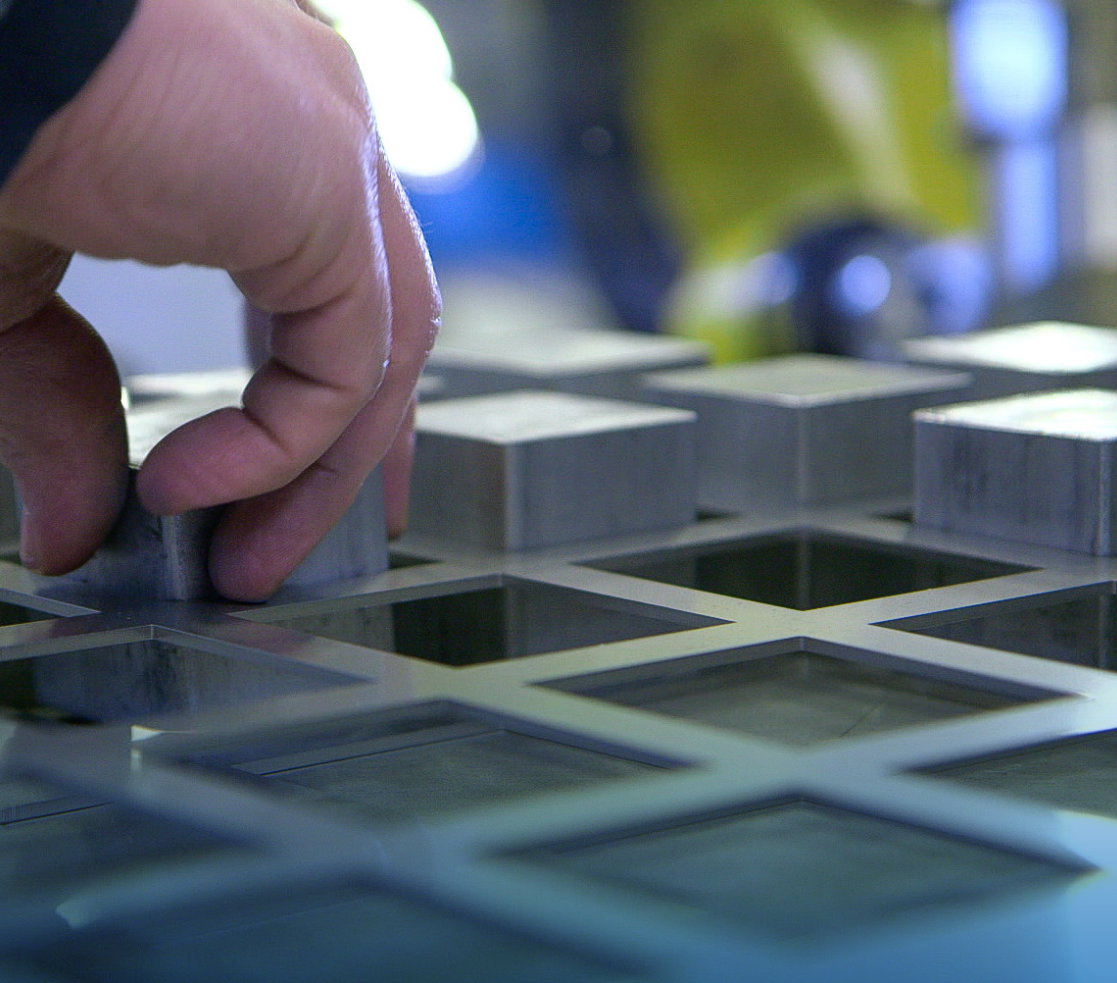
It is a smart and well-thought-out system and it does exactly what it is designed to do: load your CNC machine with small and medium-sized batches. The system is very fast to set up and you don't need any knowledge about robots to operate it.

Would you like to immediately increase your profits as many other companies have already done in more than 25 countries worldwide? Do you want to invest in a system that will provide 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!

## EASY-TO-USE LOADING SYSTEM WITH SHORT SET-UP TIMES

Call: 800-314-8261 or send an e-mail to:  
[info@haltercncrobotics.com](mailto:info@haltercncrobotics.com)





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.

A man with a beard and blue eyes, wearing a dark blue shirt, is looking up at a large yellow industrial robot arm. The robot arm is positioned above him, and its mechanical components are visible. The background is a dark, industrial setting with some blue lighting. The text "HALTER CNC AUTOMATION" is overlaid in large white letters, with a small orange horizontal line above the word "HALTER".

# HALTER CNC AUTOMATION

HALTER LoadAssistant

The HALTER LoadAssistant has been developed based on HALTER CNC Automation's more than 25 years of experience in the CNC machining world.

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.



- FOR EVERY BRAND OF CNC MACHINE
- ALSO FOR YOUR EXISTING CNC-MACHINE
- HIGH FLEXIBILITY IN WORKPIECE VARIATION
- WELL-THOUGHT-OUT CAPACITY SOLUTIONS
- SET-UP IN 5 MINUTES
- NO EXPERIENCE WITH ROBOTICS IS REQUIRED
- COMPLETE PLUG-AND-PLAY SOLUTIONS
- EASILY MOVED FROM ONE CNC MACHINE TO ANOTHER
- DELIVERY WITH 12, 20, 35 OR 70 KG ROBOT

# HALTER LOADASSISTANT

HALTER LoadAssistant

## COMPACT 12

- ✓ Smallest footprint
- ✓ Easily moved from one CNC machine to another
- ✓ Set up in less than 5 minutes
- ✓ Preparing new batch while robot is running



### UNIVERSAL COMPACT 12 TURNING/MILLING

### TURNSTACKER COMPACT 12 TURNING

### MILLSTACKER COMPACT 12 MILLING

Pay load	12 kg	12 kg	12 kg
Max. workpiece size	diameter 5.314"	diameter 6.299"	5.905" x 5.905"
Max. workpiece length	5.905"	6.889"	6.889"
Optional workpiece length (long shafts)	9.843"	-	-



## PREMIUM 20/35

- ✓ Most versatile system in the market
- ✓ Easily moved from one CNC machine to another
- ✓ Set up in less than 5 minutes
- ✓ Preparing new batch while robot is running



## BIG 35/70

- ✓ High capacity for workpieces with large dimensions
- ✓ For loading heavy workpieces
- ✓ Set up in less than 5 minutes
- ✓ Preparing new batch while robot is running



### UNIVERSAL PREMIUM 20/35 TURNING/MILLING

Pay load	20 kg - 35 kg	20 kg - 35 kg	20 kg - 35 kg
Max. workpiece size	diameter 10.629"	diameter 9.055"	7.086" x 7.086"/ 3.149"x11.811"
Max. workpiece length	9.843"	9.843"	13.779"
Optional workpiece length (long shafts)	17.716"	-	-

### TURNSTACKER PREMIUM 20/35 TURNING

### MILLSTACKER PREMIUM 20/35 MILLING

### UNIVERSAL BIG 20/35 TURNING/MILLING

Pay load	35 kg - 70 kg	35 kg - 70 kg	35 kg - 70 kg
Max. workpiece size	diameter 11.811"	diameter 11.811"	9.843" x 9.843"/ 2.540" x 15.748"
Max. workpiece length	11.811"	5.715"	5.715"
Optional workpiece length (long shafts)	31.5"	-	-

### TURNSTACKER BIG 20/35 TURNING

### MILLSTACKER BIG 20/35 MILLING

# THE EASY WAY TO AUTOMATE YOUR CNC MACHINE

Worldwide, in more than 25 countries, hundreds of HALTER LoadAssistants have already been delivered and are being used by fully satisfied customers. Thanks to the proven, high-quality technology and the support from our consultants, the production process is further automated and optimized. In 95% of the cases our customers achieve a return of investment of less than 18 months.



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





## 1. HALTER SmartControl

- No robotics experience required
- Set-up ready in 12 steps
- Very flexible: easy to add new functionalities
- Set-up takes less than 5 minutes

## 2. Rotating loading system

### UNIVERSAL:

- For lathes and/or milling machines
- Grid-plates are adjustable in height for workpieces
- New batches can be set up while the robot arm is working

### MILLSTACKER:

- Stacking stations for milling workpieces
- High capacity on a small surface, for lower workpieces
- Workpiece turnaround station for two-sided machining

### TURNSTACKER:

- Stacking stations for turning workpieces
- High capacity on a small surface, for lower 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 to the operator at all times, no fencing required
- 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: 12 kg, 20 kg, 35 kg or 70 kg
- 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
- Airblow system to clean 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



"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!"

HALTER LoadAssistant

# COMPACT ALL-IN-ONE SYSTEM

- No additional components, fences or cables necessary
- Workpieces are filled at the back, thanks to the rotating loading system
- Minimal usage of floor space, including safety zone

The HALTER Premium and Compact are 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 connect one system to multiple CNC machines. 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.



# HALTER SMARTCONTROL

HALTER LoadAssistant

## 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 MillStacker and TurnStacker). This means that the operator only needs to enter the workpiece data (e.g., the diameter and

height) and the robot arm will know, based on this data, the exact position of the workpiece.

The data of the CNC machine (such as the vise or chuck) are set so that the HALTER LoadAssistant can immediately start the automatic loading of the machine. Thanks to the HALTER SmartControl, the set-up times are minimized and the HALTER LoadAssistant can even be used for smaller batches.



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 RELEVANT AND USEFUL ANALYSIS OF YOUR ACTUAL MACHINE UTILIZATION.

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## 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, conveyor belt or pallet. Therefore you retain the advantage of short set-up times through the use of standard cycles, but you also have optimal flexibility when it comes to adding extra functionalities.



### HALTER SmartControl standard functionalities:

- Positioning workpiece in machine vise with soft push function
- Workpiece turnaround function for two-sided machining
- Workpiece regripping for accurate positioning
- Unload-only function in combination with bar feeder
- Inside and outside gripping
- Workpiece loading in chuck with or without pressure star
- Adjusting airflow distance
- Working with spindle orientation of the CNC machine
- Eccentric loading and unloading
- Robot park positioning button

### HALTER SmartControl enables the following optional functionalities:

- Unloading workpiece on pallet
- Unloading workpiece on external fixed position, e.g. conveyor belt
- Unloading of residual material
- Collecting a workpiece from a revolver tool
- Cleaning of workpiece outside the CNC machine
- Positioning workpiece on measuring station
- Removal of rejected workpieces
- Workpiece side-gripping
- Workpiece orientation in chuck of the CNC machine
- Customer-specific functionalities



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

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# 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 does need to be equipped with an automatic door opener to be able to work

with the HALTER LoadAssistant. If it does not have this, we will install a servo-controlled automatic door opener, which you can also safely use when you are not using the robot and want to operate your CNC machine manually.

The operator training session takes place immediately after the installation. Our technicians ensure that after the training, your operator is able to work with the HALTER LoadAssistant completely independently. Our consultants will continue to provide you with advice also after the installation in order to get the optimum return from your HALTER.



## SERVICE

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

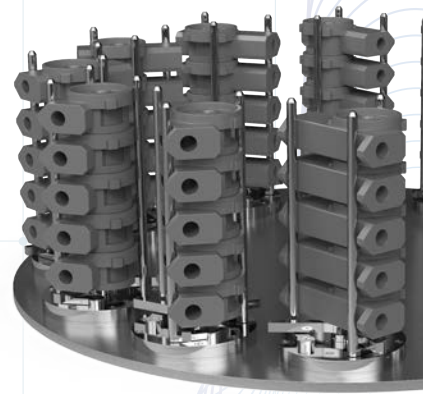
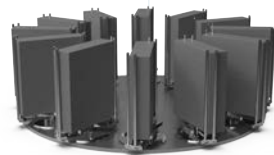
- Short delivery time from the production facility in Germany
- Turnkey delivery, set-up and training
- Top service by HALTER-certified technicians
- Application engineering and consultancy



# WORKPIECE-SPECIFIC SOLUTIONS

Halter's application engineering team can design grid plates and special gripper fingers for your specific workpieces.

For example, if you want to automate castings or other workpieces which need special handling. All these custom solutions can be implemented in the user-friendly HALTER SmartControl. The flexibility of the solutions that we offer ensures that you can automate even greater variation of workpieces.



# UNIVERSAL COMPACT 12



HALTER LoadAssistant

## System

Rigid industrial construction	✓
Rotating loading table	✓
Full enclosure and protection	✓
Movable	by pallet truck
Placed on 3-point self-centering anchors	✓
Fanuc 6-axis robot arm	26.45 lbs
Drip tray for leaking coolant	✓
Workpiece side-gripping station	Option
Workpiece turnaround station for two-sided machining	Option
Status light	Option
Standard robot-machine interface for every CNC machine	✓

## HALTER SmartControl

Intuitive and graphical programming in 12 steps	✓
Touch screen	15 inch
Free choice of pre-installed language	✓
Input can be entered in inches or mm	✓
Software analysis for machine utilization	✓
Automatic program storage	✓
Max. number of CNC machines to connect with	4

## HALTER SmartControl standard functionalities

Positioning workpiece in machine vise with soft push function	✓
Workpiece turn-around function for two-sided machining	✓
Workpiece regripping for accurate positioning	✓
Unload-only function in combination with bar feeder	✓
Inside and outside gripping	✓
Workpiece loading in chuck with or without pressure star	✓
Adjusting airblow distance	✓
Working with spindle orientation of the CNC machine	✓
Eccentric loading and unloading	✓
Robot park positioning button	✓

## HALTER SmartControl enables the following optional functionalities

Unloading workpiece on pallet	Option
Unloading workpiece on external fixed position, e.g. conveyor belt	Option
Unloading of residual material	Option
Collecting a workpiece from a revolver tool	Option
Cleaning of workpiece outside the CNC-machine	Option
Positioning workpiece on measuring station	Option
Removal of rejected workpieces	Option
Workpiece side-gripping	Option
Radial positioning of the workpiece in the chuck	Option
Customer-specific functionalities	On request



### Grippers

2-finger gripper for rectangular workpieces	Option
3-finger gripper for round workpieces	Option
2-finger gripper for long shafts	Option
Separate grippers for raw and machined workpieces	✓
Airblow system	✓
Workpiece detection system by open/close message	✓
Quick change system for exchanging grippers	Option
Quickly adjustable gripper fingers	✓
Workpiece-specific gripper fingers	Option
Pressure sensor on the robot arm monitors air pressure	✓

### Safety

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	✓
Autom. servo-driven door opener with integrated safety mechanism	Option
Closed safety circuit	✓

### Input

Voltage	208 V
Peak consumption	30 A
Compressed air pressure	87.2 psi

### Dimensions

Length	53.15"
Width	49.2"
Height	79.92"
Total weight	2094 lbs

### Capacity

Workpiece diameter (min-max)	.39" - 5.314"
Minimum workpiece (L x W)	.39" - .39"
Maximum workpiece (L x W)	5.314" - 5.314"
Maximum height of workpiece	5.90"
Maximum load capacity robot arm	26.45 lbs
Maximum total weight on rotating table	1102.31 lbs
Max. number of workpieces for grid plate 10-35 mm	166
Max. number of workpieces for grid plate 23-55 mm	92
Max. number of workpieces for grid plate 23-85 mm	44
Max. number of workpieces for grid plate 23-115 mm	32
Max. number of workpieces for grid plate 23-135 mm	18
Workpiece-specific grid plates	Option

### Capacity for long shafts

Workpiece diameter (min-max)	.39" - 1.57"
Minimum workpiece (L x W)	.39" - .39"
Maximum workpiece (L x W)	1.57" - 1.57"
Maximum height of workpiece	9.84"
Maximum weight of workpiece (turning)	11.02 lbs
Maximum weight of workpiece (milling)	11.02 lbs
Maximum load capacity robot arm	26.4 lbs
Maximum total weight on rotating table	1102.31 lbs
Max. number of workpieces for grid plate 10-35 mm	166
Max. number of workpieces for grid plate 23-55 mm	92

# UNIVERSAL PREMIUM 20/35



HALTER LoadAssistant

## System

Rigid industrial construction	✓
Rotating loading table	✓
Full enclosure and protection	✓
Movable	by pallet truck
Placed on 3-point self-centering anchors	✓
Fanuc 6-axis robot arm	44 lbs / 77 lbs
Drip tray for leaking coolant	✓
Workpiece side-gripping station	Option
Workpiece turnaround station for two-sided machining	Option
Status light	Option
Standard robot-machine interface for every CNC machine	✓

## HALTER SmartControl

Intuitive and graphical programming in 12 steps	✓
Touch screen	15 inch
Free choice of pre-installed language	✓
Input can be entered in inches or mm	✓
Software analysis for machine utilization	✓
Automatic program storage	✓
Max. number of CNC machines to connect with	4

## HALTER SmartControl standard functionalities

Positioning workpiece in machine vice with soft push function	✓
Workpiece turnaround function for two-sided machining	✓
Workpiece regripping for accurate positioning	✓
Unload-only function in combination with bar feeder	✓
Inside and outside gripping	✓
Workpiece loading in chuck with or without pressure star	✓
Adjusting airblow distance	✓
Working with spindle orientation of the CNC machine	✓
Eccentric loading and unloading	✓
Robot park positioning button	✓

## HALTER SmartControl enables the following optional functionalities

Unloading workpiece on pallet	Option
Unloading workpiece on external fixed position, e.g. conveyor belt	Option
Unloading of residual material	Option
Collecting a workpiece from a revolver tool	Option
Cleaning of workpiece outside the CNC machine	Option
Positioning workpiece on measuring station	Option
Removal of rejected workpieces	Option
Workpiece side-gripping	Option
Radial positioning of the workpiece in the chuck	Option
Customer-specific functionalities	On request

## Grippers

2-finger gripper for rectangular workpieces	Option
3-finger gripper for round workpieces	Option
2-finger gripper for long shafts	Option
Separate grippers for raw and machined workpieces	✓
Airblow system	✓
Workpiece detection system by open/close message	✓
Quick change system for exchanging grippers	Option
Quickly adjustable gripper fingers	✓
Workpiece-specific gripper fingers	Option
Pressure sensor on the robot arm monitors air pressure	✓

## Safety

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	✓
Autom. servo-driven door opener with integrated safety mechanism	Option
Closed safety circuit	✓

## Input

Voltage	208 V
Peak consumption	30 A
Compressed air pressure	87.2 psi

## Dimensions

Length	68.89"
Width	56.45"
Height	87.4"
Total weight	2447 lbs / 2469 lbs

## Capacity

Workpiece diameter (min-max)	.39" - 10.63"
Minimum workpiece (L x W)	.39" - .39"
Maximum workpiece (L x W)	10.63" - 10.63"
Maximum height of workpiece	9.84"
Maximum load capacity robot arm	44 lbs / 77 lbs
Maximum total weight on rotating table	1102 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 23-175 mm	18
Max. number of workpieces for grid plate 23-195 mm	14
Max. number of workpieces for grid plate 23-230 mm	10
Max. number of workpieces for grid plate 23-270 mm	6
Workpiece-specific grid plates	Option

## Capacity for long shafts

Workpiece diameter (min-max)	- / .39" - 1.57"
Minimum workpiece (L x W)	- / .39"-.39"
Maximum workpiece (L x W)	- / 1.57"-1.57"
Maximum height of workpiece	- / 17.71"
Maximum weight of workpiece (turning)	- / 17.63 lbs
Maximum weight of workpiece (milling)	- / 17.63 lbs
Maximum load capacity robot arm	- / 77.16 lbs
Maximum total weight on rotating table	- / 1653 lbs
Max. number of workpieces for grid plate 10-35 mm	- / 160
Max. number of workpieces for grid plate 23-55 mm	- / 130
Max. number of workpieces for grid plate 23-85 mm	- / 64

# UNIVERSAL BIG 35/70



## System

Rigid industrial construction	✓
Rotating loading table	✓
Full enclosure and protection	✓
Movable	by 5 t forklift truck, crane
Placed on 3-point self-centering anchors	✓
Fanuc 6-axis robot arm	77 lbs / 154 lbs
Drip tray for leaking coolant	✓
Workpiece side-gripping station	Option
Workpiece turnaround station for two-sided machining	Option
Status light	Option
Standard robot-machine interface for every CNC machine	✓

## HALTER SmartControl

Intuitive and graphical programming in 12 steps	✓
Touch screen	21 inch
Free choice of pre-installed language	✓
Input can be entered in inches or mm	✓
Software analysis for machine utilization	✓
Automatic program storage	✓
Max. number of CNC machines to connect with	4

## HALTER SmartControl standard functionalities

Positioning workpiece in machine vise with soft push function	✓
Workpiece turn-around function for two-sided machining	✓
Workpiece regripping for accurate positioning	✓
Unload-only function in combination with bar feeder	✓
Inside and outside gripping	✓
Workpiece loading in chuck with or without pressure star	✓
Adjusting airblow distance	✓
Working with spindle orientation of the CNC machine	✓
Eccentric loading and unloading	✓
Robot park positioning button	✓

## HALTER SmartControl enables the following optional functionalities

Unloading workpiece on pallet	Option
Unloading workpiece on external fixed position, e.g. conveyor belt	Option
Unloading of residual material	Option
Collecting a workpiece from a revolver tool	Option
Cleaning of workpiece outside the CNC machine	Option
Positioning workpiece on measuring station	Option
Removal of rejected workpieces	Option
Workpiece side-gripping	Option
Radial positioning of the workpiece in the chuck	Option
Customer-specific functionalities	On request

### Grippers

2-finger gripper for rectangular workpieces	Option
3-finger gripper for round workpieces	Option
2-finger gripper for long shafts	Option
Separate grippers for raw and machined workpieces	✓
Airblow system	✓
Workpiece detection system by open/close message	✓
Quick change system for exchanging grippers	Option
Quickly adjustable gripper fingers	✓
Workpiece-specific gripper fingers	Option
Pressure sensor on the robot arm monitors air pressure	✓

### Safety

In-machine-space function	✓
Fanuc DCS area in combination with the Sick floor scanner	✓
Sliding door provided with safety sensors	✓
Autom. servo-driven door opener with integrated safety mechanism	Option
Closed safety circuit	✓

### Input

Voltage	208 V
Peak consumption	30 A / 60 A
Compressed air pressure	87.2 psi

### Dimensions

Length	110.23"
Width	88.58"
Height	87.4"
Total weight	5489 lbs / 6172 lbs

### Capacity

Workpiece diameter (min-max)	.39" - 11.81"
Minimum workpiece (L x W)	.39" - .39"
Maximum workpiece (L x W)	11.81" - 11.81"
Maximum height of workpiece	11.81"
Maximum load capacity robot arm	77.61 lbs / 154 lbs
Maximum total weight on rotating table	6613 lbs
Max. number of workpieces for grid plate 10-35 mm	320
Max. number of workpieces for grid plate 23-55 mm	220
Max. number of workpieces for grid plate 23-85 mm	120
Max. number of workpieces for grid plate 23-115 mm	82
Max. number of workpieces for grid plate 23-135 mm	44
Max. number of workpieces for grid plate 23-175 mm	28
Max. number of workpieces for grid plate 23-195 mm	24
Max. number of workpieces for grid plate 23-230 mm	18
Max. number of workpieces for grid plate 23-300 mm	10
Workpiece-specific grid plates	Option

### Capacity for long shafts

Workpiece diameter (min-max)	.39" - 1.57" / .39" - 3.14"
Minimum workpiece (L x W)	.39" - .39"
Maximum workpiece (L x W)	.39" - .39" / 3.14" - 3.14"
Maximum height of workpiece	17.71" / 31.5"
Maximum weight of workpiece (turning)	17.64 lbs / 66.14 lbs
Maximum weight of workpiece (milling)	17.64 lbs / 50.70 lbs
Maximum load capacity robot arm	77.16 lbs / 154 lbs
Maximum total weight on rotating table	6613 lbs
Max. number of workpieces for grid plate 10-35 mm	320
Max. number of workpieces for grid plate 23-55 mm	220
Max. number of workpieces for grid plate 23-85 mm	120

# TURNSTACKER COMPACT 12



HALTER LoadAssistant

## System

Rigid industrial construction	✓
Rotating loading table	✓
Full enclosure and protection	✓
Movable	by pallet truck
Placed on 3-point self-centering anchors	✓
Fanuc 6-axis robot arm	26.45 lbs
Drip tray for leaking coolant	✓
Workpiece turnaround station for two-sided machining	Option
Status light	Option
Standard robot-machine interface for every CNC machine	✓

## HALTER SmartControl

Intuitive and graphical programming in 12 steps	✓
Touch screen	15 inch
Free choice of pre-installed language	✓
Input can be entered in inches or mm	✓
Software analysis for machine utilization	✓
Automatic program storage	✓
Max. number of CNC machines to connect with	4

## HALTER SmartControl standard functionalities

Workpiece turnaround function for two-sided machining	✓
Unload-only function in combination with bar feeder	✓
Inside and outside gripping	✓
Workpiece loading in chuck with or without pressure star	✓
Adjusting airflow distance	✓
Working with spindle orientation of the CNC machine	✓
Eccentric loading and unloading	✓
Robot park positioning button	✓

## HALTER SmartControl enables the following optional functionalities

Unloading workpiece on pallet	Option
Unloading workpiece on external fixed position, e.g. conveyor belt	Option
Unloading of residual material	Option
Collecting a workpiece from a revolver tool	Option
Cleaning of workpiece outside the CNC machine	Option
Positioning workpiece on measuring station	Option
Removal of rejected workpieces	Option
Workpiece side-gripping	Option
Radial positioning of the workpiece in the chuck	Option
Customer-specific functionalities	On request

### Grippers

3-finger gripper for round workpieces	✓
Separate grippers for raw and machined workpieces	✓
Airblow system	✓
Workpiece detection system by open/close message	✓
Quickly adjustable gripper fingers	✓
Workpiece-specific gripper fingers	Option
Pressure sensor on the robot arm monitors air pressure	✓

### Safety

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	✓
Autom. servo-driven door opener with integrated safety mechanism	Option
Closed safety circuit	✓

### Input

Voltage	208 V
Peak consumption	30 A
Compressed air pressure	87.2 psi

### Dimensions

Length	53.15"
Width	49.21"
Height	79.92"
Total weight	2204 lbs

### Capacity

Workpiece diameter (min-max)	1.38" - 6.30"
Maximum height of workpiece	6.88"
Maximum load capacity robot arm	26.45 lbs
Maximum total weight on rotating table	1708 lbs
Maximum stacking height	13.77"
Number of stacking stations (1 empty)	12
Maximum weight per station	154 lbs
Max. number of workpieces at workpiece height of 10 mm	385
Max. number of workpieces at workpiece height of 20 mm	187
Max. number of workpieces at workpiece height of 50 mm	77
Max. number of workpieces at workpiece height of 70 mm	55
Max. number of workpieces at workpiece height of 85 mm	44
Max. number of workpieces at workpiece height of 110 mm	33
Max. number of workpieces at workpiece height of 150 mm	22



# TURNSTACKER PREMIUM 20/35



HALTER LoadAssistant

## System

Rigid industrial construction	✓
Rotating loading table	✓
Full enclosure and protection	✓
Movable	by pallet truck
Placed on 3-point self-centering anchors	✓
Fanuc 6-axis robot arm	44.09 lbs / 77.16 lbs
Drip tray for leaking coolant	✓
Workpiece turnaround station for two-sided machining	
Status light	Option
Standard robot-machine interface for every CNC machine	Option

## HALTER SmartControl

Intuitive and graphical programming in 12 steps	✓
Touch screen	15 inch
Free choice of pre-installed language	✓
Input can be entered in inches or mm	✓
Software analysis for machine utilization	✓
Automatic program storage	✓
Max. number of CNC machines to connect with	4

## HALTER SmartControl standard functionalities

Workpiece turnaround function for two-sided machining	✓
Unload-only function in combination with bar feeder	✓
Inside and outside gripping	✓
Workpiece loading in chuck with or without pressure star	✓
Adjusting airflow distance	✓
Working with spindle orientation of the CNC machine	✓
Eccentric loading and unloading	✓
Robot park positioning button	✓

## HALTER SmartControl enables the following optional functionalities

Unloading workpiece on pallet	Option
Unloading workpiece on external fixed position, e.g. conveyor belt	Option
Unloading of residual material	Option
Collecting a workpiece from a revolver tool	Option
Cleaning of workpiece outside the CNC machine	Option
Positioning workpiece on measuring station	Option
Removal of rejected workpieces	Option
Workpiece side-gripping	Option
Radial positioning of the workpiece in the chuck	Option
Customer-specific functionalities	On request



### Grippers

3-finger gripper for round workpieces	✓
Separate grippers for raw and machined workpieces	✓
Airblow system	✓
Workpiece detection system by open/close message	✓
Quickly adjustable gripper fingers	✓
Workpiece-specific gripper fingers	Option
Pressure sensor on the robot arm monitors air pressure	✓

### Safety

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	✓
Autom. servo-driven door opener with integrated safety mechanism	Option
Closed safety circuit	✓

### Input

Voltage	208 V
Peak consumption	30 A
Compressed air pressure	87.2 psi

### Dimensions

Length	68.89"
Width	56.49"
Height	87.40"
Total weight	2667 lbs / 2689 lbs

### Capacity

Workpiece diameter (min-max)	1.69" - 9.055"
Maximum height of workpiece	6.89"
Maximum load capacity robot arm	44.09 lbs / 77.16 lbs
Maximum total weight on rotating table	2755 lbs
Maximum stacking height	13.77"
Number of stacking stations (1 empty)	12
Maximum weight per station	253.53 lbs
Max. number of workpieces at workpiece height of 10 mm	385
Max. number of workpieces at workpiece height of 20 mm	187
Max. number of workpieces at workpiece height of 50 mm	77
Max. number of workpieces at workpiece height of 70 mm	55
Max. number of workpieces at workpiece height of 85 mm	44
Max. number of workpieces at workpiece height of 110 mm	33
Max. number of workpieces at workpiece height of 150 mm	22



# TURNSTACKER BIG 35/70



HALTER LoadAssistant

## System

Rigid industrial construction

Rotating loading table

Full enclosure and protection

Movable

Placed on 3-point self-centering anchors

Fanuc 6-axis robot arm

Drip tray for leaking coolant

Workpiece turnaround station for two-sided machining

Status light

Standard robot-machine interface for every CNC machine

## HALTER SmartControl

Intuitive and graphical programming in 12 steps

Touch screen

Free choice of pre-installed language

Input can be entered in inches or mm

Software analysis for machine utilization

Automatic program storage

Max. number of CNC machines to connect with



by 5 t forklift truck,  
crane



77.16 lbs / 154.32 lbs



Option

Option



21 inch



4

## HALTER SmartControl standard functionalities

Workpiece turnaround function for two-sided machining

Unload-only function in combination with bar feeder

Inside and outside gripping

Workpiece loading in chuck with or without pressure star

Adjusting airflow distance

Working with spindle orientation of the CNC machine

Eccentric loading and unloading

Robot park positioning button



## HALTER SmartControl enables the following optional functionalities

Unloading workpiece on pallet

Unloading workpiece on external fixed position,  
e.g. conveyor belt

Unloading of residual material

Collecting a workpiece from a revolver tool

Cleaning of workpiece outside the CNC machine

Positioning workpiece on measuring station

Removal of rejected workpieces

Workpiece side-gripping

Radial positioning of the workpiece in the chuck

Customer-specific functionalities

Option

Option

Option

Option

Option

Option

Option

Option

On request

### Grippers

3-finger gripper for round workpieces	✓
Separate grippers for raw and machined workpieces	✓
Airblow system	✓
Workpiece detection system by open/close message	✓
Quickly adjustable gripper fingers	✓
Workpiece-specific gripper fingers	Option
Pressure sensor on the robot arm monitors air pressure	✓

### Safety

In-machine-space function	✓
Fanuc DCS area in combination with the Sick floor scanner	✓
Sliding door provided with safety sensors	✓
Autom. servo-driven door opener with integrated safety mechanism	Option
Closed safety circuit	✓

### Input

Voltage	208 V
Peak consumption	30 A / 60 A
Compressed air pressure	87.2 psi

### Dimensions

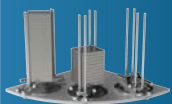
Length	110.23"
Width	88.58"
Height	87.40"
Total weight	5789 lbs / 6472 lbs

### Capacity

Workpiece diameter (min-max)	1.69" - 11.81"
Maximum height of workpiece	8.85"
Maximum load capacity robot arm	77.16 lbs / 154.32 lbs
Maximum total weight on rotating table	6613 lbs
Maximum stacking height	17.71"
Number of stacking stations (1 empty)	12
Maximum weight per station	551 lbs
Max. number of workpieces at workpiece height of 10 mm	495
Max. number of workpieces at workpiece height of 20 mm	242
Max. number of workpieces at workpiece height of 50 mm	99
Max. number of workpieces at workpiece height of 70 mm	66
Max. number of workpieces at workpiece height of 85 mm	55
Max. number of workpieces at workpiece height of 110 mm	44
Max. number of workpieces at workpiece height of 150 mm	33
Max. number of workpieces at workpiece height of 225 mm	22



# MILLSTACKER COMPACT 12



HALTER LoadAssistant

## System

Rigid industrial construction	✓
Rotating loading table	✓
Full enclosure and protection	✓
Movable	by pallet truck
Placed on 3-point self-centering anchors	✓
Fanuc 6-axis robot arm	26.45 lbs
Drip tray for leaking coolant	✓
Workpiece side-gripping station	Option
Workpiece turnaround station for two-sided machining	Option
Status light	Option
Standard robot-machine interface for every CNC machine	✓

## HALTER SmartControl

Intuitive and graphical programming in 12 steps	✓
Touch screen	15 inch
Free choice of pre-installed language	✓
Input can be entered in inches or mm	✓
Software analysis for machine utilization	✓
Automatic program storage	✓
Max. number of CNC machines to connect with	4

## HALTER SmartControl standard functionalities

Positioning workpiece in machine vise with soft push function	✓
Workpiece turnaround function for two-sided machining	✓
Workpiece regripping for accurate positioning	✓
Inside and outside gripping	✓
Adjusting airflow distance	✓
Working with spindle orientation of the CNC machine	✓
Eccentric loading and unloading	✓
Robot park positioning button	✓

## HALTER SmartControl enables the following optional functionalities

Unloading workpiece on pallet	Option
Unloading workpiece on external fixed position, e.g. conveyor belt	Option
Unloading of residual material	Option
Cleaning of workpiece outside the CNC machine	Option
Positioning workpiece on measuring station	Option
Removal of rejected workpieces	Option
Workpiece side-gripping	Option
Customer-specific functionalities	On request

### Grippers

2-finger gripper for rectangular workpieces	✓
Separate grippers for raw and machined workpieces	✓
Airblow system	✓
Workpiece detection system by open/close message	✓
Quickly adjustable gripper fingers	✓
Workpiece-specific gripper fingers	Option
Pressure sensor on the robot arm monitors air pressure	✓

### Safety

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	✓
Autom. servo-driven door opener with integrated safety mechanism	Option
Closed safety circuit	✓

### Input

Voltage	208 V
Peak consumption	30 A
Compressed air pressure	87.2 psi

### Dimensions

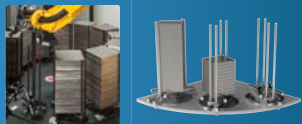
Length	53.15"
Width	49.21"
Height	79.92"
Total weight	2204 lbs

### Capacity

Minimum workpiece (L x W)	.98" X .98"
Maximum square workpiece (L x W)	4.92" X 4.92"
Maximum rectangle workpiece (L x W)	1.96" X 7.87"
Maximum height of workpiece	6.88"
Maximum load capacity robot arm	26.45 lbs
Maximum total weight on rotating table	1708 lbs
Maximum stacking height	13.77"
Number of stacking stations (1 empty)	12
Maximum weight per station	154 lbs
Max. number of workpieces at workpiece height of 10 mm	385
Max. number of workpieces at workpiece height of 20 mm	187
Max. number of workpieces at workpiece height of 50 mm	77
Max. number of workpieces at workpiece height of 70 mm	55
Max. number of workpieces at workpiece height of 85 mm	44
Max. number of workpieces at workpiece height of 110 mm	33
Max. number of workpieces at workpiece height of 150 mm	22



# MILLSTACKER PREMIUM 20/35



## System

Rigid industrial construction

Rotating loading table

Full enclosure and protection

Movable

Placed on 3-point self-centering anchors

Fanuc 6-axis robot arm

Drip tray for leaking coolant

Workpiece side-gripping station

Workpiece turnaround station for two-sided machining

Status light

Standard robot-machine interface for every CNC machine

## HALTER SmartControl

Intuitive and graphical programming in 12 steps

Touch screen

Free choice of pre-installed language

Input can be entered in inches or mm

Software analysis for machine utilization

Automatic program storage

Max. number of CNC machines to connect with



by pallet truck



44.09 lbs / 77.16 lbs



Option

Option

Option



15 inch



4

## HALTER SmartControl standard functionalities

Positioning workpiece in machine vise with soft push function

Workpiece turnaround function for two-sided machining

Workpiece regripping for accurate positioning

Inside and outside gripping

Adjusting airflow distance

Working with spindle orientation of the CNC machine

Eccentric loading and unloading

Robot park positioning button



## HALTER SmartControl enables the following optional functionalities

Unloading workpiece on pallet

Unloading workpiece on external fixed position, e.g. conveyor belt

Unloading of residual material

Cleaning of workpiece outside the CNC machine

Positioning workpiece on measuring station

Removal of rejected workpieces

Workpiece side-gripping

Customer-specific functionalities

Option

Option

Option

Option

Option

Option

Option

On request

### Grippers

2-finger gripper for rectangular workpieces	✓
Separate grippers for raw and machined workpieces	✓
Airblow system	✓
Workpiece detection system by open/close message	✓
Quickly adjustable gripper fingers	✓
Workpiece-specific gripper fingers	Option
Pressure sensor on the robot arm monitors air pressure	✓

### Safety

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	✓
Autom. servo-driven door opener with integrated safety mechanism	Option
Closed safety circuit	✓

### Input

Voltage	208 V
Peak consumption	30 A
Compressed air pressure	87.2 psi

### Dimensions

Length	68.89"
Width	56.49"
Height	87.40"
Total weight	2667 lbs / 2689 lbs

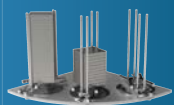
### Capacity

Minimum workpiece (L x W)	1.57" X 1.57"
Maximum square workpiece (L x W)	7.08" X 7.08"
Maximum rectangle workpiece (L x W)	3.15" X 11.81"
Maximum height of workpiece	6.88"
Maximum load capacity robot arm	44.09 lbs / 77.16 lbs
Maximum total weight on rotating table	2755 lbs
Maximum stacking height	13.77"
Number of stacking stations (1 empty)	12
Maximum weight per station	253 lbs
Max. number of workpieces at workpiece height of 10 mm	385
Max. number of workpieces at workpiece height of 20 mm	187
Max. number of workpieces at workpiece height of 50 mm	77
Max. number of workpieces at workpiece height of 70 mm	55
Max. number of workpieces at workpiece height of 85 mm	44
Max. number of workpieces at workpiece height of 110 mm	33
Max. number of workpieces at workpiece height of 150 mm	22





# MILLSTACKER BIG 35/70



HALTER LoadAssistant

## System

Rigid industrial construction

Rotating loading table

Full enclosure and protection

Movable

Placed on 3-point self-centering anchors

Fanuc 6-axis robot arm

Drip tray for leaking coolant

Workpiece side-gripping station

Workpiece turnaround station for two-sided machining

Status light

Standard robot-machine interface for every CNC machine

## HALTER SmartControl

Intuitive and graphical programming in 12 steps

Touch screen

Free choice of pre-installed language

Input can be entered in inches or mm

Software analysis for machine utilization

Automatic program storage

Max. number of CNC machines to connect with



by 5 t forklift truck,  
crane



77.16 lbs / 154.32 lbs



Option

Option

Option



21 inch



4

## HALTER SmartControl standard functionalities

Positioning workpiece in machine vise with  
soft push function



Workpiece turnaround function for two-sided  
machining



Workpiece regripping for accurate positioning



Inside and outside gripping



Adjusting airflow distance



Working with spindle orientation of the CNC-machine



Eccentric loading and unloading



Robot park positioning button



## HALTER SmartControl enables the following optional functionalities

Unloading workpiece on pallet

Option

Unloading workpiece on external fixed position,  
e.g. conveyor belt

Option

Unloading of residual material

Option

Cleaning of workpiece outside the CNC machine

Option

Positioning workpiece on measuring station

Option

Removal of rejected workpieces

Option

Workpiece side-gripping

Option

Customer-specific functionalities

On request

### Grippers

2-finger gripper for rectangular workpieces	✓
Separate grippers for raw and machined workpieces	✓
Airblow system	✓
Workpiece detection system by open/close message	✓
Quickly adjustable gripper fingers	✓
Workpiece-specific gripper fingers	Option
Pressure sensor on the robot arm monitors air pressure	✓

### Safety

In-machine-space function	✓
Fanuc DCS area in combination with the Sick floor scanner	✓
Sliding door provided with safety sensors	✓
Autom. servo-driven door opener with integrated safety mechanism	Option
Closed safety circuit	✓

### Input

Voltage	208 V
Peak consumption	30 A / 60 A
Compressed air pressure	87.2 psi

### Dimensions

Length	110.23"
Width	88.58"
Height	87.40"
Total weight	5789 lbs / 6472 lbs

### Capacity

Minimum workpiece (L x W)	1.54" X 1.57"
Maximum square workpiece (L x W)	9.84" X 9.84"
Maximum rectangle workpiece (L x W)	3.93" X 15.74"
Maximum height of workpiece	8.85"
Maximum load capacity robot arm	77.16 lbs / 154.32 lbs
Maximum total weight on rotating table	6613 lbs
Maximum stacking height	17.71"
Number of stacking stations (1 empty)	12
Maximum weight per station	551 lbs
Max. number of workpieces at workpiece height of 10 mm	495
Max. number of workpieces at workpiece height of 20 mm	242
Max. number of workpieces at workpiece height of 50 mm	99
Max. number of workpieces at workpiece height of 70 mm	66
Max. number of workpieces at workpiece height of 85 mm	55
Max. number of workpieces at workpiece height of 110 mm	44
Max. number of workpieces at workpiece height of 150 mm	33
Max. number of workpieces at workpiece height of 225 mm	22



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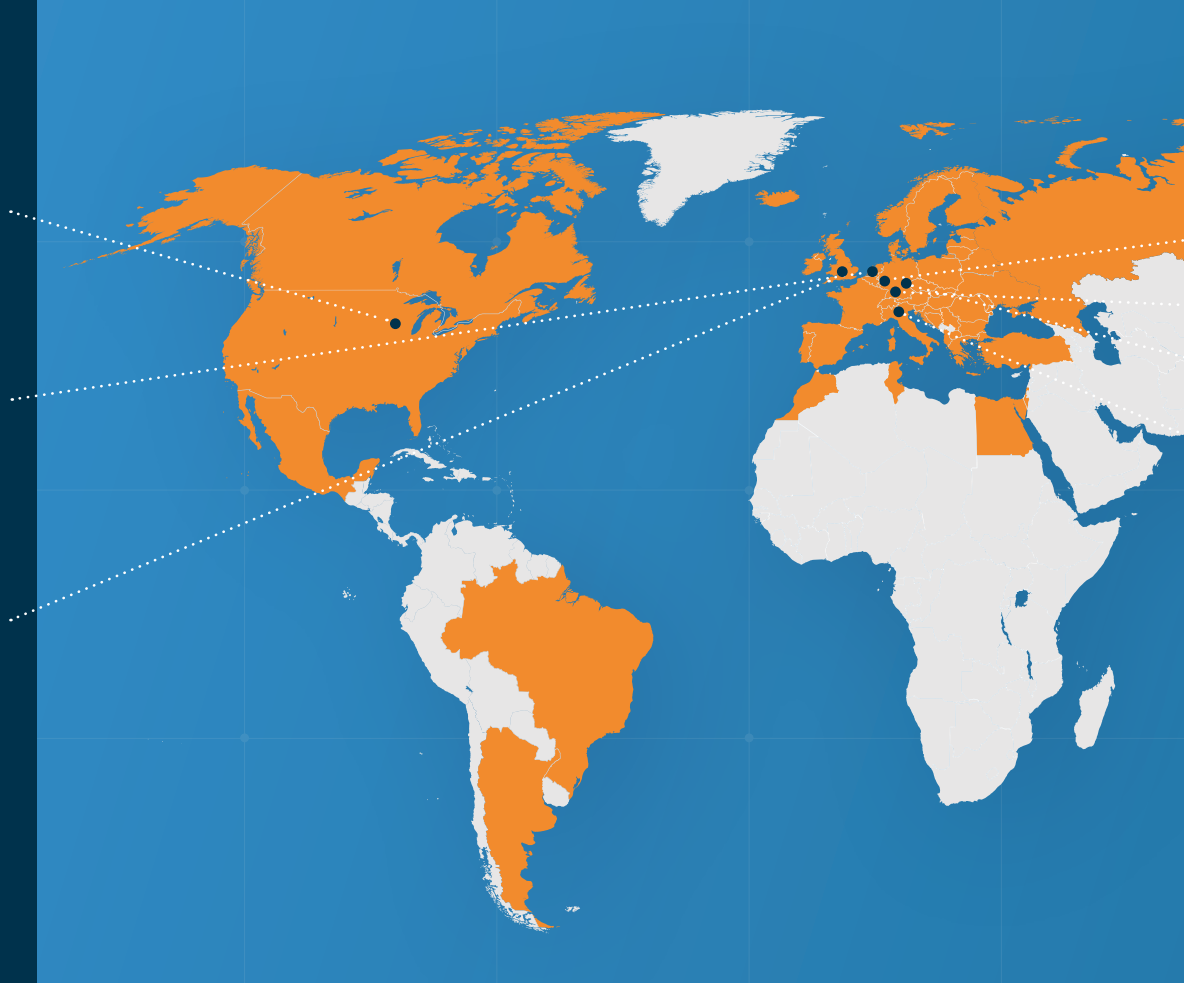
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HALTER LoadAssistant

# NOTES



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