



ROBOJOB
FIRST IN CNC AUTOMATION



ROBOJOB AUTOMATION

FOR  Nakamura-Tome

AUTOMATION OF TURNING LATHES

Using the Turn-Assist Series

The RoboJob Turn-Assist Series includes a wide range of standard products for the automation of the Nakamura-Tome turning lathes. These solutions differ in dimensions, capacity, workpiece diameter and robot payload. They are all very user-friendly, compact, accessible and visible.

Every automation has the most comprehensive standard functions, which are simple and fast to operate without any robot knowledge. This set-up allows you to get started right away with easy-to-use controls. Extra features and options can be integrated in both the software and the hardware.

TURN-ASSIST ESSENTIAL i

YOUR ESSENTIAL
Standard Automation

- > Small runs
- > Workpieces up to Ø 400 mm
- > Fixed table with limited stacking height
- > Robot payload: 20 kg or 35 kg
- > Integrated

TURN-ASSIST 200 i

YOUR COMPACT
Standard Automation

- > Small and medium sized runs
- > Workpieces up to Ø 200 mm
- > Powered table with more capacity
- > Robot payload: 12 kg or 20 kg
- > Integrated

TURN-ASSIST 270 i

YOUR POWERFUL
Standard Automation

- > Small and medium sized runs
- > Workpieces up to Ø 270 mm
- > Powered table with more capacity
- > Robot payload: 20 kg or 35 kg
- > Integrated



TURN-ASSIST ESSENTIAL i

> YOUR **ESSENTIAL** STANDARD AUTOMATION

> FOR **SMALL RUNS**

Using this basic model of the Turn-Assist Series, you can set to work immediately. This easy-to-use automation has been specifically developed for the loading and unloading of small runs and/or small workpieces. You have an adjustable table that may be configured very quickly for different workpiece dimensions using the patented positioning principle. The workpieces may also be positioned by means of freely definable grid plates, for example for special workpiece shapes.

As a result of our user-friendly interface you can automate your small runs in just a few minutes: the intuitive, graphic software guides you step by step when setting up your assignment.



TA E i

- > Automation on one fixed frame
- > Easily moveable

- 01 3 coloured signal tower
- 02 Integrated safety wall
- 03 Configurable feed and removal
- 04 Built-in robot controller
- 05 Fixed chassis & anchoring points
- 06 Laser scanner
- 07 Clamping force control for grippers
- 08 Industrial robot
- 09 Double gripper for gripping raw and finished pieces
- 10 Control panel

TURN-ASSIST 200 i

> YOUR **COMPACT** STANDARD AUTOMATION

> FOR **SMALL** AND **MEDIUM** SIZED RUNS

With the Turn-Assist 200, RoboJob offers you the most compact automation on the market. This model has been specifically developed for the loading and unloading of small and medium sized batches, for workpieces up to Ø200 mm.

This model has 2 servo-controlled stacking plates that allow you to stack a considerable amount of rough and finished components.



TA 200 i > Automation on one fixed frame
> Easily moveable

- | | |
|-------------------------------------|--|
| 01 3 coloured signal tower | 07 Clamping force control for grippers |
| 02 Integrated safety wall | 08 Industrial robot |
| 03 Powered feed and removal | 09 Double gripper for gripping raw and finished pieces |
| 04 Built-in robot controller | 10 Control panel |
| 05 Fixed chassis & anchoring points | |
| 06 Laser scanner | |

TURN-ASSIST 270 i

- > YOUR **POWERFUL** STANDARD AUTOMATION
- > FOR **SMALL AND MEDIUM** SIZED RUNS

If you want more: Then you can best choose the Turn-Assist 270, our most powerful model in the Turn-Assist Series. This standard automation unit is equipped with powered feed and removal.

Since the Turn-Assist 270 is even larger than the Turn-Assist 200, you can get even more out of it. This not only applies to the number of workpieces, but also to the size of your workpieces. You can automate workpieces up to a diameter of 270 mm on this model.



TA 270 i

- > Automation on one fixed frame
- > Easily moveable

- 01 3 coloured signal tower
- 02 Integrated safety wall
- 03 Powered feed and removal
- 04 Built-in robot controller
- 05 Fixed chassis & anchoring points
- 06 Laser scanner
- 07 Clamping force control for grippers
- 08 Industrial robot
- 09 Double gripper for gripping raw and finished pieces
- 10 Control panel

WHY OFFER A ROBOJOB AUTOMATION?

With the RoboJob automation, we can offer you the most user-friendly and most reliable system on the market. Each of our products meets the highest requirements so that you can increase your Efficiency, Output and Flexibility.

We will explain the 4 most important benefits to you:

>  **FLEXIBLE**

>  **SIMPLE AND SMART**

>  **CAPACITY**

>  **EXTREMELY COMPACT**

FLEXIBLE

- > 1 automation for a wide variety of workpieces
- > Configurable table
- > No inlays needed, although possible
- > Patented stacking principle
- > Easy to use gripper concept
- > Integrated airflow
- > Workpiece detection
- > Easily moveable



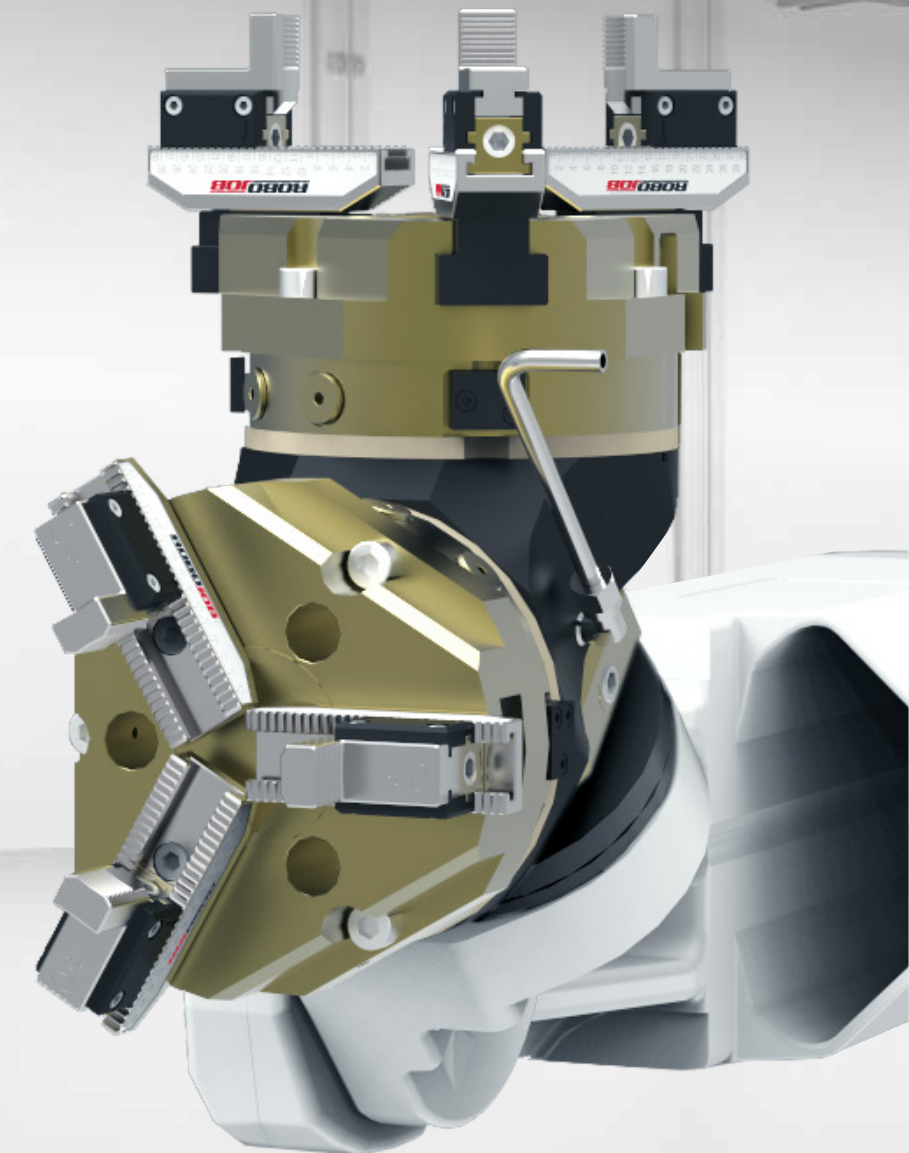
Three-point gripper
2HD Fix 90° JGZ80



Three-point gripper
2HD Fix 90° JGZ125



Two-point gripper
for axes

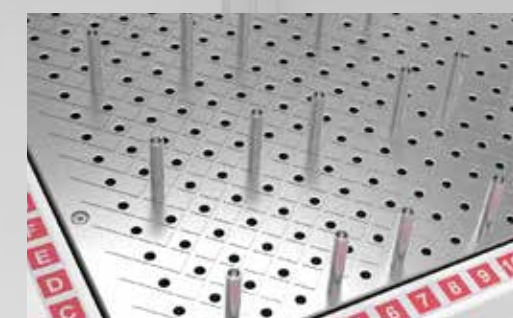
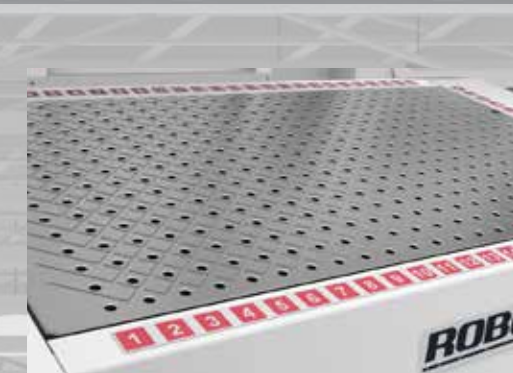
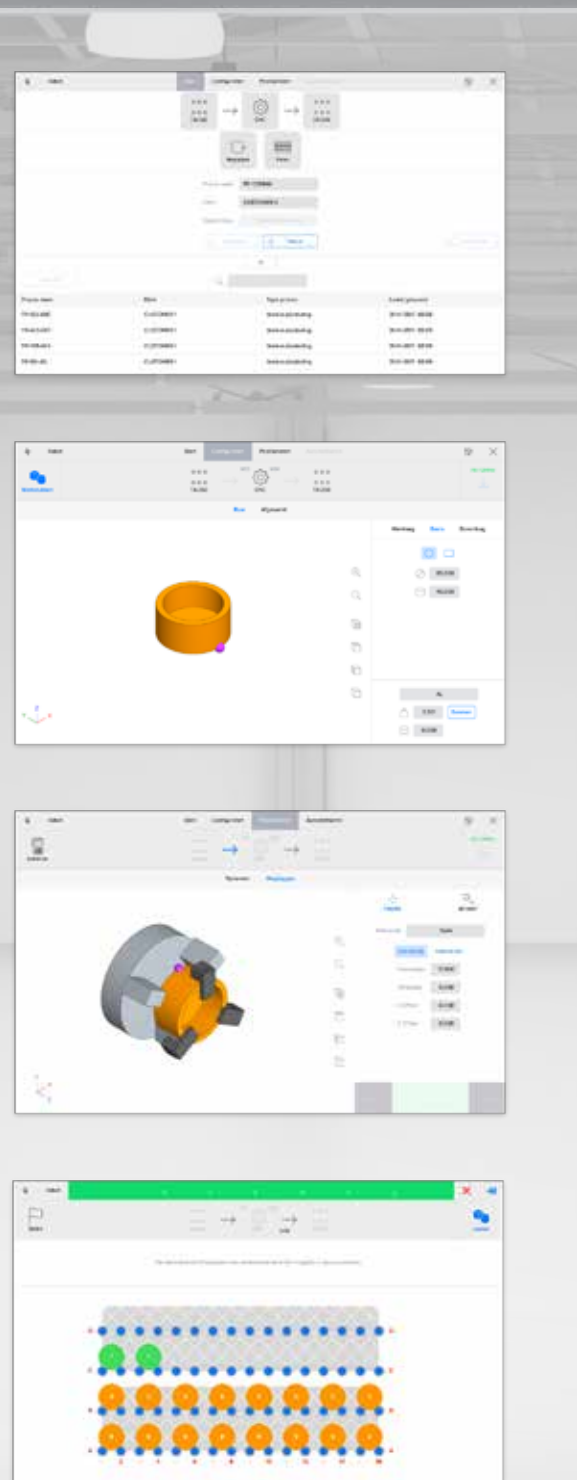


SIMPLE AND SMART

- > Intuitive graphic control
- > No robot knowledge needed
- > 3D visualisations in software
- > 5 minutes' set-up time for new workpieces
- > Batch cycle time management
- > Integrated measure controls
- > Custom specific options easy to integrate

CAPACITY

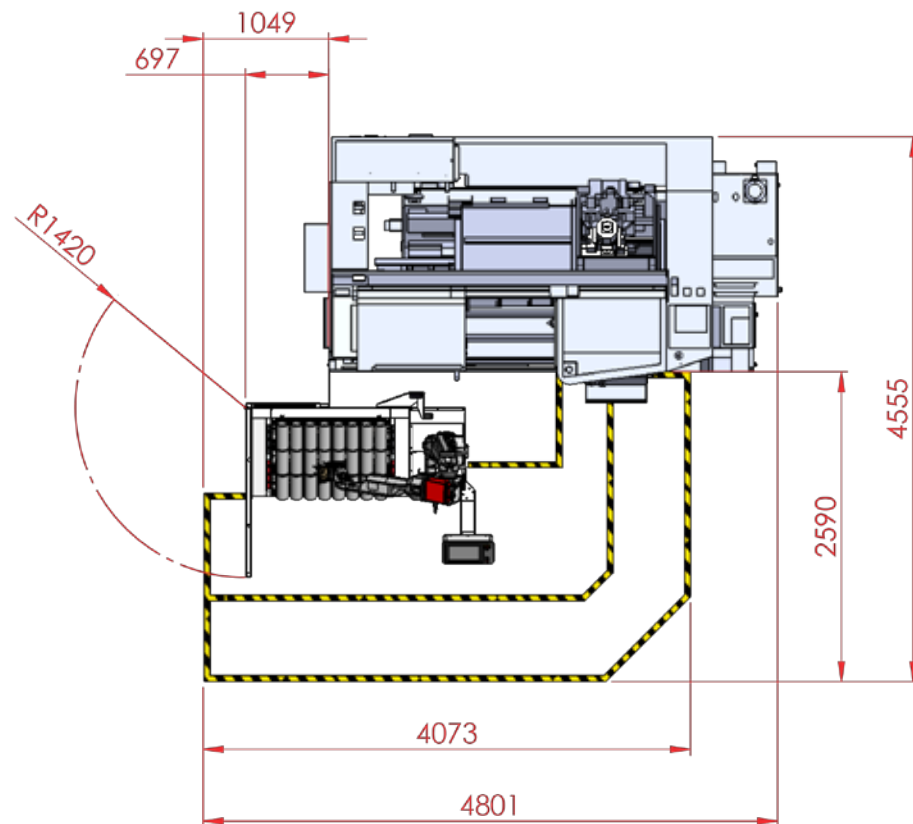
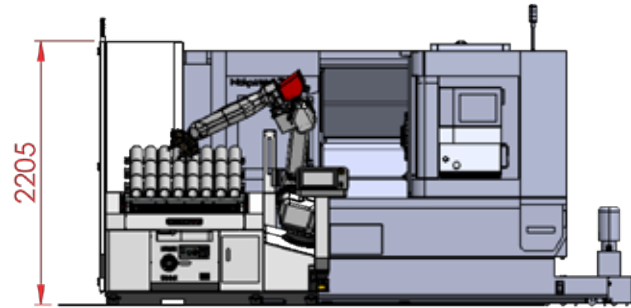
- > Highest capacity on the smallest surface
- > No grid plates needed, although possible
- > Patented stacking principle
- > Stacking height up to 350 mm
- > Optimized capacity for all different workpiece diameters, based on patented principle





EXTREMELY COMPACT

- > Easily moveable from one machine to another
- > Open protection based on newest technology
- > Safety compliant



Turn-Assist 200 i with a 20kg robot on a Nakamura SC 300-II



REVOLVING UNIT

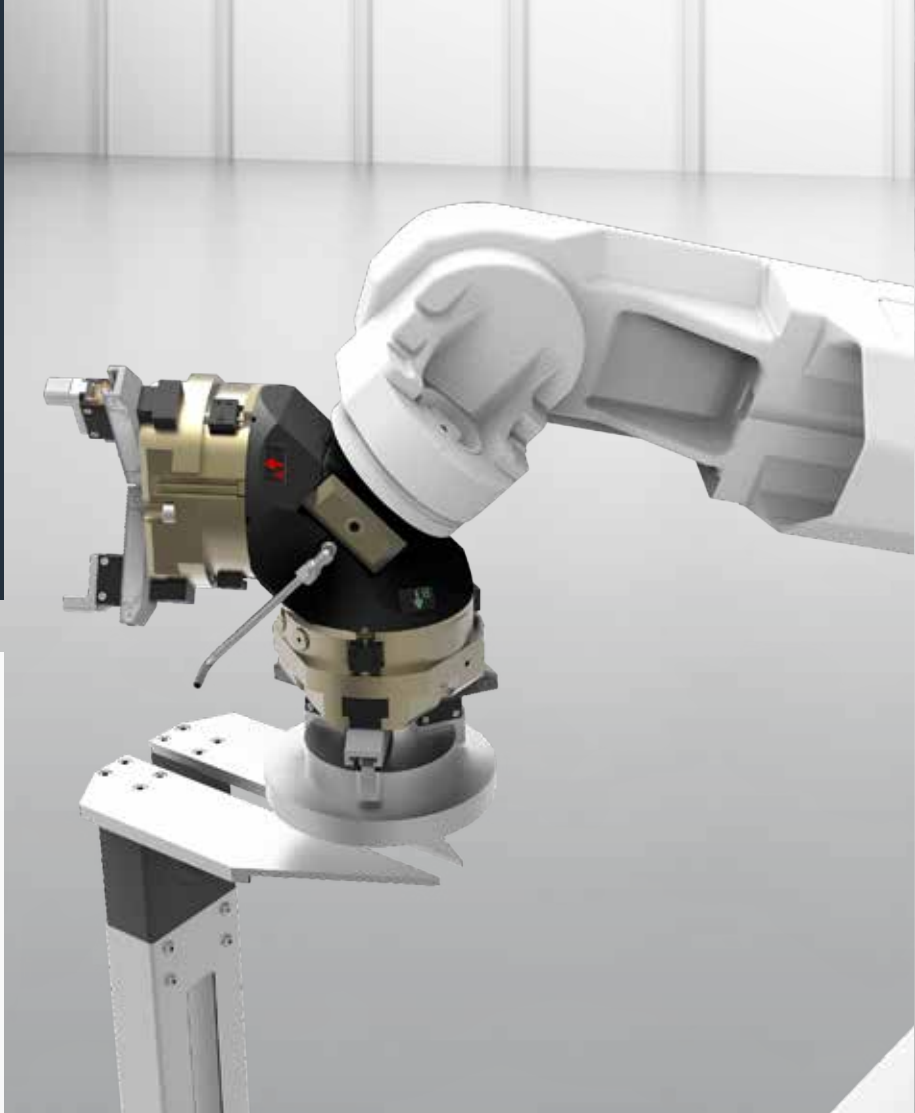
For a complete finish of your workpieces, along all sides

- > Finished part in 1 single set-up command
- > Possible for almost all workpieces
- > Compact design, no extra space needed

The revolving unit allows you to process all sides of the workpiece in one single set-up command.

The components immediately come finished from the machine, processed on all sides. The output of the CNC machine is thus further increased and the work-in-progress is reduced.

You can use the revolving unit for workpieces of 25 mm to 200 mm long, and with a diameter between 25 mm and 200 mm.

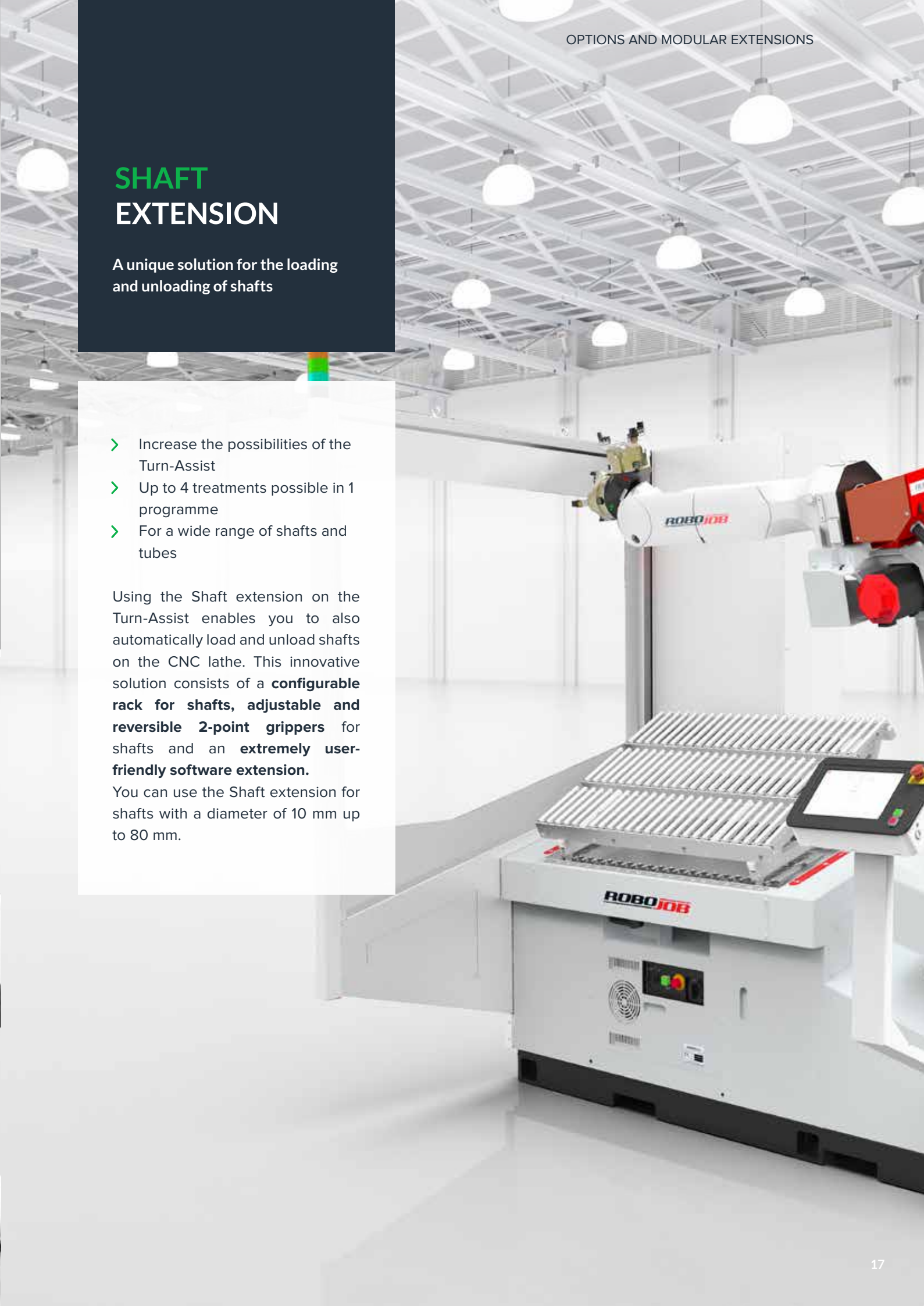


SHAFT EXTENSION

A unique solution for the loading and unloading of shafts

- > Increase the possibilities of the Turn-Assist
- > Up to 4 treatments possible in 1 programme
- > For a wide range of shafts and tubes

Using the Shaft extension on the Turn-Assist enables you to also automatically load and unload shafts on the CNC lathe. This innovative solution consists of a **configurable rack for shafts, adjustable and reversible 2-point grippers** for shafts and an **extremely user-friendly software extension**. You can use the Shaft extension for shafts with a diameter of 10 mm up to 80 mm.



TECHNICAL FEATURES		TA E i	TA 200 i	TA 270 i
GENERAL DATA	Minimum Ø / length of the workpieces	25 mm	25 mm	25 mm
	Maximum Ø / length of the workpieces	400 mm	200 mm	270 mm
	Minimum width of the side of hexagonal workpieces	25 mm	25 mm	25 mm
	Maximum width of the side of hexagonal workpieces	170 mm	170 mm	200 mm
	Maximum stacking height	80 - 100 mm	2 x 350 mm	2 x 350 mm
	Maximum stacking weight	600 kg	2 x 300 kg	2 x 450 kg
	Maximum workpiece weight	14 / 28 kg	7 / 14 kg	14 / 28 kg
	Maximum width of robot gripper + robot arm	410 mm / 430 mm	330 mm / 410 mm	410 mm / 430 mm
	Minimum required clearance between robot head and machine opening/spindle	20 mm	20 mm	20 mm
	Width of the automation	1.902 mm	1.475/ 1.632 mm	1.902 mm
	Depth of the automation	740 mm	740 mm	740 mm
	Height of the automation	2.202 mm	2.202 mm	2.202 mm
	Total weight of the automation	1.000 kg	800 / 900 kg	1.000 kg
	Electrical power	380 VAC	380 VAC	380 VAC
	Pneumatic usage	< 100 L / min	< 100 L / min	< 100 L / min
	PAYLOAD	12 kg payload		•
20 kg payload		•	•	•
35 kg payload		•		•
STANDARD FEATURES	Operator console with touch screen	•	•	•
	Fastest set-up and change-over times	•	•	•
	Open and visible configuration with free machine-opening	•	•	•
	Possibility to set up in front of the machine	•	•	•
	Removable *	•	•	•
	Configurable feed and removal using posts	•	•	•
	Configurable feed and removal using workpiece supports	•		
	Possibility to work with grid plates	•	•	•
	Suitable for round components	•	•	•
	Suitable for hexagonal components		•	•
	Stacking of workpieces (see max. stacking height)	•	•	•
	Powered feed and removal		•	•
	Leaked fluid collection and recovery to the machine	•	•	•
	Integrated air blow	•	•	•
	Separate grippers for rough & finished workpieces	•	•	•
	External and/or internal gripping	•	•	•
	Clamping force control on grippers	•	•	•
	Adjustable gripper jaws	•	•	•
	3-colour signal tower	•	•	•
Workpiece detection	•	•	•	
Intuitive graphic control	•	•	•	

TECHNICAL FEATURES		TA E i	TA 200 i	TA 270 i
SAFETY	Protection with laser scanner	•	•	•
	Protection with integrated partition	•	•	•
	Protection with light screen	○	○	○
	Protection with separate screen wall	○	○	○
	Protection with separate transparent wall	○	○	○
	Protection with sliding gates	○	○	○
	OPTIONS	Laying aside in a box on the stacker	○	○
Automatic messenger service		○	○	○
Loading of shafts on a TA 200			○	
Loading of shafts on a TA 270				○
Unloading of multiple disc components from 1 rough component		○	○	○
Pull & Break feature		○	○	○
Revolving unit		○	○	○
Cycle time optimisation with Revolving unit		○	○	○
Automatic shutdown of automation and CNC machine		○	○	○

		TA E i		TA 200 i		TA 270 i	
		20 KG	35 KG	12 KG	20 KG	20 KG	35 KG
COMPATIBILITY	TURNING LATHE						
	AS200/WT100/WT150/WY150/NTJ100	⊙		•	⊙	⊙	
	WT250/WY250/SC200						
	WT300/SC300	⊙	⊙		•	⊙	⊙

- Available as standard
- ⊙ Best valid combination
- Option
- Only in combination with the laser scanner and integrated partition

FOR ADDITIONAL INFORMATION, PLEASE CONTACT METHODS MACHINE TOOLS

978-433-5388
 sales@methodsmachine.com
 methodsmachine.com



Methods Machine Tools, Inc.
sales@methodsmachine.com
877. 668. 4262

Boston • Charlotte • Chicago • Dallas
Detroit • Houston • Los Angeles • Memphis
Milwaukee • Phoenix • San Francisco