

# TURN-ASSIST SERIES

GET MORE OUT OF YOUR TURNING LATHE

# **TURN-ASSIST SERIES**

#### **Extending the standard in CNC automation**

For more than 10 years now we have been working on perfecting and further expanding our Turn-Assist Series. In 2010, the Turn-Assist 250 became our very first product and it immediately turned out to be a hit. Over the years, the Turn-Assist Essential and the Turn-Assist 180 have been added, plus we have added new functionalities, modular extensions and also a new control system. In this way, the Turn-Assist has become **the most widespread system in the whole of Europe.** With more than 500 installations on the counter, we can also bank on a customer satisfaction of more than 90%.

The time has now come to take the next step. With our renewed product range, we're making the distinction between 'integrated' and 'separated' automations. With the 'integrated' models we build the entire automation on to one fixed frame. This offers the advantage that you can easily remove this automation system for maintenance work on your CNC machine. Furthermore you can also easily move this automation system from one CNC machine to another.

In the 'separated' models all key elements are constructed separately from each other: the feed and removal, the robot with the robot support, the operating console and various possible safety systems. This way, these elements may be **physically separated from each other.** This enables you to automate large machining centres, without your automation blocking access to your machine's tool magazine.

This brochure will guide you through our **renewed Turn-Assist range**. You will see that you have a wide range of standard products, standard options and modular extensions. These building blocks allow you to **build your customized automation**. Your commercial contact points will be happy to assist you in your search for the right solution for your needs and assignments.

Choose RoboJob. You'll find that you've found a partner who not only knows the machining industry in all its facets, but also thinks with you. Together, we make your business more profitable, we increase your flexibility and we improve your employees' job satisfaction.

Want to know more about the Turn-Assist Series? Contact us:

866-952-9020 and then press 1 info@robojob-usa.com

RoboJob-USA.com

#### VID-83 Machine Shop Options



VID-66 Deloitte Study: Struggling to Meet Existing Demand

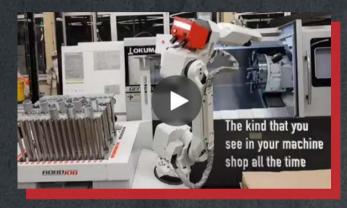


VID-82 American Reshoring Update August2022



#### **VIDEO LINKS**

VID-64 Robot Economic Myths



VID-58 Robots Do More Than Tend Your CNC Machine



VID-69 Twilight Manufacturing



# **AUTOMATION OF TURNING LATHES**

#### **Using the Turn-Assist Series**

Our Turn-Assist Series offers you a wide range of three standard products for the automation of your lathe. These three solutions differ in dimensions, capacity and workpiece diameter.

They are all very user-friendly, compact, accessible and visible: thus our Turn-Assist Series are the most compact and user-friendly loading solutions on the market.

You also have the most comprehensive standard functions, so that you can get started right away with our easy-to-use controls and significantly increase your Output, Efficiency and Flexibility.

# TURN-ASSIST ESSENTIAL

YOUR ESSENTIAL Standard Automation

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





### **TURN-ASSIST ESSENTIAL**

#### > 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.

With the Turn-Assist Essential you can choose from **different models**:

	ESSENTIAL	INTEGRATED	SEPARATED
PAYLOAD	20 kg payload	•	•
	35 kg payload	•	•
	Higher payload		•

Page 19 gives you an overview of all Options and Modular extensions, with which you can further personalize your Turn-Assist.

### **INTEGRATED**

- > 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 Industrial robot
- 07 Clamping force control for grippers
- 08 Control panel \*
- 09 Laser scanner \*



This set-up is a standard set-up without Pallet-Load or Pallet-Unload. Installations with Pallet-Load and / or Pallet-Unload are protected with a cage or light screen.

### **SEPARATED**

Key elements are physically separated from each other

- 01 Safety wall
- 02 Configurable feed and receipt
- 03 Electrical installation
- 04 Industrial robot
- 05 Clamping force control for grippers
- 06 Robot support
- 07 Control panel
- 08 Light screen



## **TURN-ASSIST 200**

- 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.

With the Turn-Assist 200 you can choose from different models:

	200	INTEGRATED	SEPARATED
PAYLOAD	12 kg payload	•	•
	20 kg payload	•	•
	35 kg payload		•

Page 19 gives you an overview of all Options and Modular extensions, with which you can further personalize your Turn-Assist.

### **INTEGRATED**

- > 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 Industrial robot
- 07 Clamping force control for grippers
- 08 Control panel \*
- 09 Laser scanner \*



This set-up is a standard set-up without Pallet-Load or Pallet-Unload. Installations with Pallet-Load and / or Pallet-Unload are protected with a cage or light screen.

### **SEPARATED**

Key elements are physically separated from each other

- 01 Safety wall
- 02 Powered feed and removal
- 03 Electrical installation
- 04 Industrial robot
- 05 Clamping force control for grippers
- 06 Robot support
- 07 Control panel
- 08 Light screen



## **TURN-ASSIST 270**

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

If you want more: Then you can best choose for 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.

With the Turn-Assist 270 you can choose from **different models**:

	270	INTEGRATED	SEPARATED
AD	20 kg payload	•	•
VLO/	35 kg payload	•	•
PA	Higher payload		•

Page 19 gives you an overview of all Options and Modular extensions, with which you can further personalize your Turn-Assist.

### **INTEGRATED**

- > 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 Industrial robot
- 07 Clamping force control for grippers
- 08 Control panel \*
- 09 Laser scanner \*



This set-up is a standard set-up without Pallet-Load or Pallet-Unload. Installations with Pallet-Load and / or Pallet-Unload are protected with a cage or light screen.

### **SEPARATED**

Key elements are physically separated from each other

- 01 Safety wall
- 02 Powered feed and removal
- 03 Electrical installation
- 04 Industrial robot
- 05 Clamping force control for grippers
- 06 Robot support
- 07 Control panel
- 08 Light screen

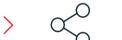


# WHY CHOOSE A TURN-ASSIST?

When you choose a Turn-Assist, you choose the most user-friendly and most reliable system on the market. Each of our Turn-Assist products meets the highest requirements so that you can increase your Efficiency, Output and Flexibility.

With a Turn-Assist you make the work more pleasant on the work floor, you get more spindle hours from your machine and you have an extremely flexible solution with a wide applicability in weight and type of workpieces.

We will explain the 4 most important benefits to you:



**FLEXIBLE** 



**SIMPLE AND SMART** 





**CAPACITY** 





**EXTREMELY COMPACT** 





# 

- > Unique gripper concept
- > Various gripper types
- > Integrated airblow
- > Workpiece detection



Three-point gripper 2HD Fix 90° JGZ80



Three-point gripper 2HD Fix 90° JGZ125



parallel gripper

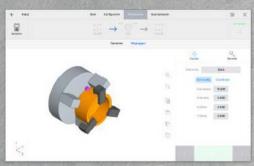




- > Intuitive graphic control
- Fastest set-up and change-over times
- > Touch screen







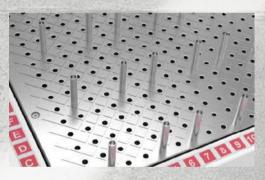






- Highest capacity on the smallest surface
- No grid plates needed, although possible
- > Stacking of workpieces





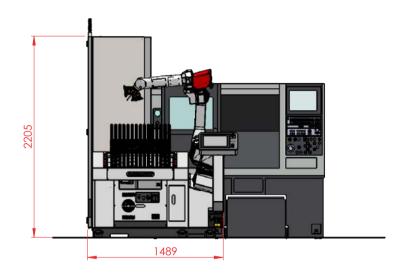


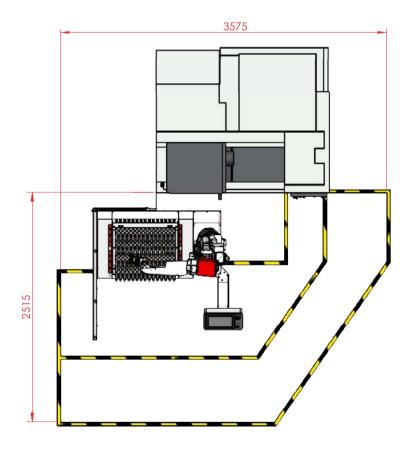


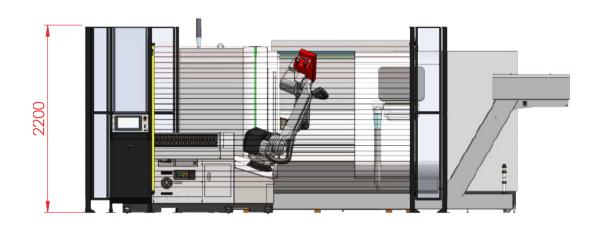


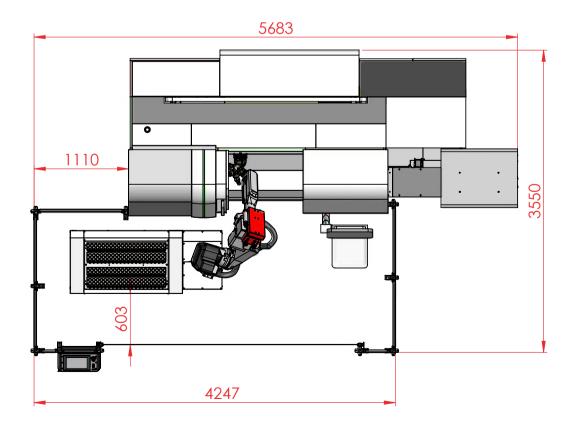


- The most compact automation on the market
- > Visible and open configuration











## **OPTIONS AND MODULAR EXTENSIONS**

#### For your Turn-Assist

With our **Modular extensions** you have various options for adding extra functionality to your automation. Each time according to your own needs and the assignments you want to process automatically. The following pages give you an overview of all modular extensions.

Furthermore, at RoboJob we are continuously working on new possibilities! This is why you should also keep a close eye on our website **www.robojob.eu**, since you will always find an up-to-date overview of our latest novelties and innovations.

With all new extensions we of course strive to be able to apply these to existing RoboJob systems.

#### **Options**

Laying aside in a box on the feed and receipt

Laying aside on a slide

Automatic messenger service

Automatic shutdown of the automation and the CNC machine

Unloading of multiple disc components from one rough component

Pull & Break feature

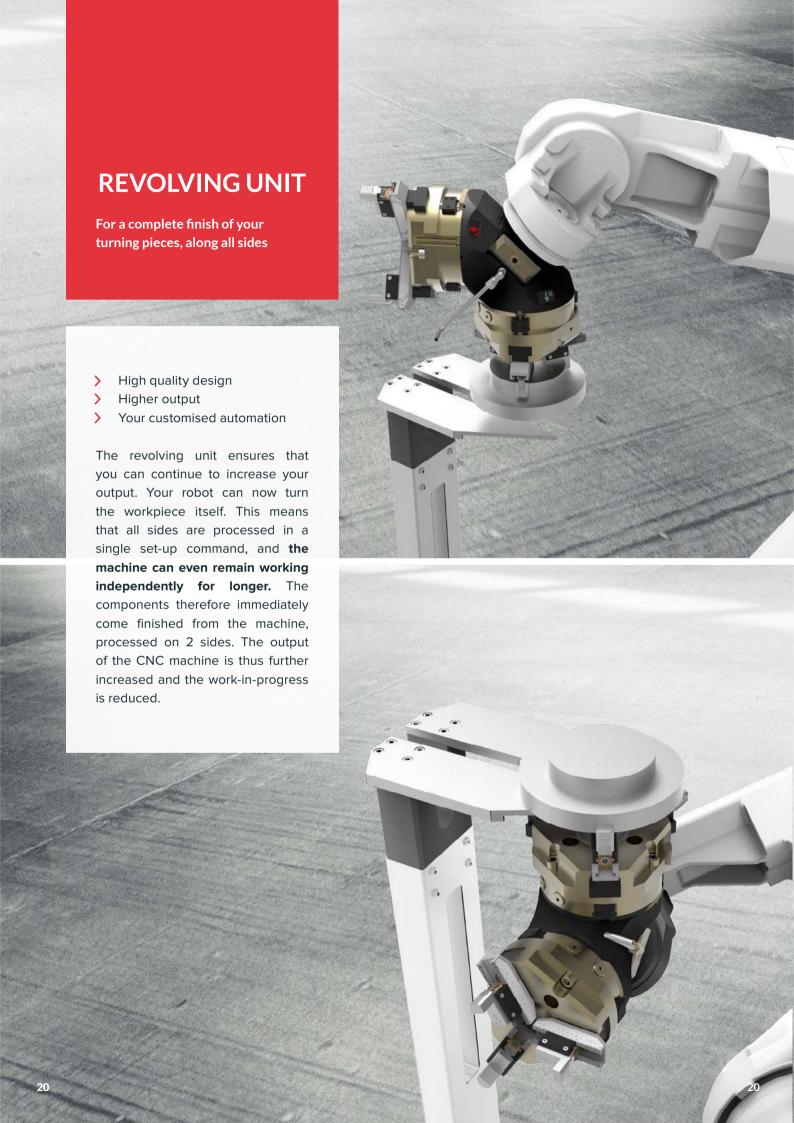
Collaboration with bar feeder

Software for pre- and post-processing

Portability to another lathe

Portability to a milling machine

In order that you can actually build your customized automation, we provide you with a wide range of extras: these Options require additional software and/or hardware. Your commercial point of contact will explain these further to you.









	TURN-ASSIST	Εi	Es	200 i	200 s	270 i	270 s
GENERAL DATA	Version	Integrated	Separated	Integrated	Separated	Integrated	Separated
	Minimum Ø of the workpieces	25 mm	25 mm	25 mm	25 mm	25 mm	25 mm
	Maximum Ø of the workpieces	400 mm	400 mm	200 mm	200 mm	270 mm	270 mm
	Minimum width of the side of hexagonal workpieces	25 mm	25 mm	25 mm	25 mm	25 mm	25 mm
	Maximum width of the side of hexagonal workpieces	170 mm	170 mm	170 mm	170 mm	200 mm	200 mm
	Maximum stacking height	80 - 100 mm	80 - 100 mm	2 x 350 mm	2 x 350 mm	2 x 350 mm	2 x 350 mm
	Maximum stacking weight	600 kg	600 kg	2 x 300 kg	2 x 300 kg	2 x 450 kg	2 x 450 kg
	Maximum workpiece weight	14 / 28 kg	14 / 28 kg or more	7 / 14 kg	7 / 14 kg or more	14 / 28 kg	14 / 28 kg or more
ច	Width of the automation	1.902 mm	1.902 mm	1.475/ 1.632 mm	1.475/ 1.632 mm	1.902 mm	1.902 mm
	Depth of the automation	740 mm	740 mm	740 mm	740 mm	740 mm	740 mm
	Height of the automation	2.202 mm	2.202 mm	2.202 mm	2.202 mm	2.202 mm	2.202 mm
	Total weight of the automation	1.000 kg	1.000 kg or more	800 / 900 kg	800 / 900 kg	1.000 kg	1.000 kg or more
	Electrical power	380 VAC	380 VAC	380 VAC	380 VAC	380 VAC	380 VAC
	Pneumatic usage	< 100 L / min	< 100 L / min	< 100 L / min	< 100 L / min	< 100 L / min	< 100 L / min
	12 kg payload			•	•		
	20 kg payload	•	•	•	•	•	•
OAL	35 kg payload	•	•		•	•	•
PAYLOAD	50 kg payload		•				•
	70 kg payload		•				•
	Heavier payload		•				•
	Operator console with touch screen	•	•	•	•	•	•
	Intuitive graphic operation	•	•	•	•	•	•
	Fastest set-up and change-over times	•	•	•	•	•	•
	Open and visible configuration with free machine-opening	•	•	•	•	•	•
	Removable ***	•		•		•	
STANDARD FEATURES	Robot, feed and removal and IPC may be separated from each other		•		•		•
	Configurable feed and removal with the help of workpiece supports	•	•				
	Configurable feed and removal using posts			•	•	•	•
	Possibility to work with grid plates	•	•	•	•	•	•
	Suitable for round components	•	•	•	•	•	•
	Suitable for hexagonal components	0	0	•	•	•	•
	Stacking of workpieces (see max. stacking height)	•	•	•	•	•	•
	Powered feed and removal			•	•	•	•
	Leaked fluid collection and recovery to the machine	•	•	•	•	•	•
	Integrated air blow	•	•	•	•	•	•

	TURN-ASSIST	= i	Es	200 i	200 s	270 i	270 s
	Separate grippers for rough & finished workpieces	•	•	•	•	•	•
	External and/or internal gripping	•	•	•	•	•	•
	Clamping force control on grippers	•	•	•	•	•	•
	Adjustable gripper jaws	•	•	•	•	•	•
	Automatic automation shutdown	•	•	•	•	•	•
	3-colour signal tower	•	•	•	•	•	•
	Workpiece detection	•	•	•	•	•	•
	Protection with laser scanner	0	0	0	0	0	0
	Protection with integrated partition	0		0		0	
<u></u>	Protection with light screen	0	0	0	0	0	0
SAFETY	Protection with separate screen wall	0	0	0	0	0	0
	Protection with separate transparent wall	0	0	0	0	0	0
	Protection with sliding gates	0	0	0	0	0	0
	Laying aside in a box on the feed and removal	0	0	0	0	0	0
	Laying aside on a slide	0	0	0	0	0	0
	Automatic gripper magazine	0	0	0	0	0	0
	Automatic messenger service	0	0	0	0	0	0
	Loading of shafts	0	0	0	0	0	0
SNOILOO	Unloading of multiple disc components from 1 rough component	0	0	0	0	0	0
	Pallet-Load *	0	0	With a robot as from 20 kg	With a robot as from 20 kg	0	0
	Pallet-Unload *	0	0	With a robot as from 20 kg	With a robot as from 20 kg	0	0
	Pull & Break feature	0	0	0	0	0	0
	Cooperation with bar feeder	0	0	0	0	0	0
	Software for pre- and post-processing	0	0	0	0	0	0
	Portability to another lathe ***	0	0	0		0	
	Portability to a milling machine **	0					
	Revolving unit	0	0	0	0	0	0

Available as standard

Protection: not in combination with the laser scanner
Not to be combined with both revolving units. Addional grippers are also needed
Only in combination with the laser scanner and integrated partition

## CONTACT



#### Would you like personal advice?

Not all of your questions answered? Then we'll be happy to help you further. You'll find the contact details of our **commercial team** on our website **www.robojob-usa.com**. Here you will immediately find the **contact details** of the commercial contact point in your region.



# Visit one of our numerous trade show participations or events

We're happy to keep you posted on all **regional trade shows** and **events** where you can meet RoboJob. And of course, we'll also keep you informed about all news regarding **new developments**, **collaborations and trends** that may be important to you. In your search for more output, efficiency and flexibility, it is important to make the comparison, and to see our products live at work.

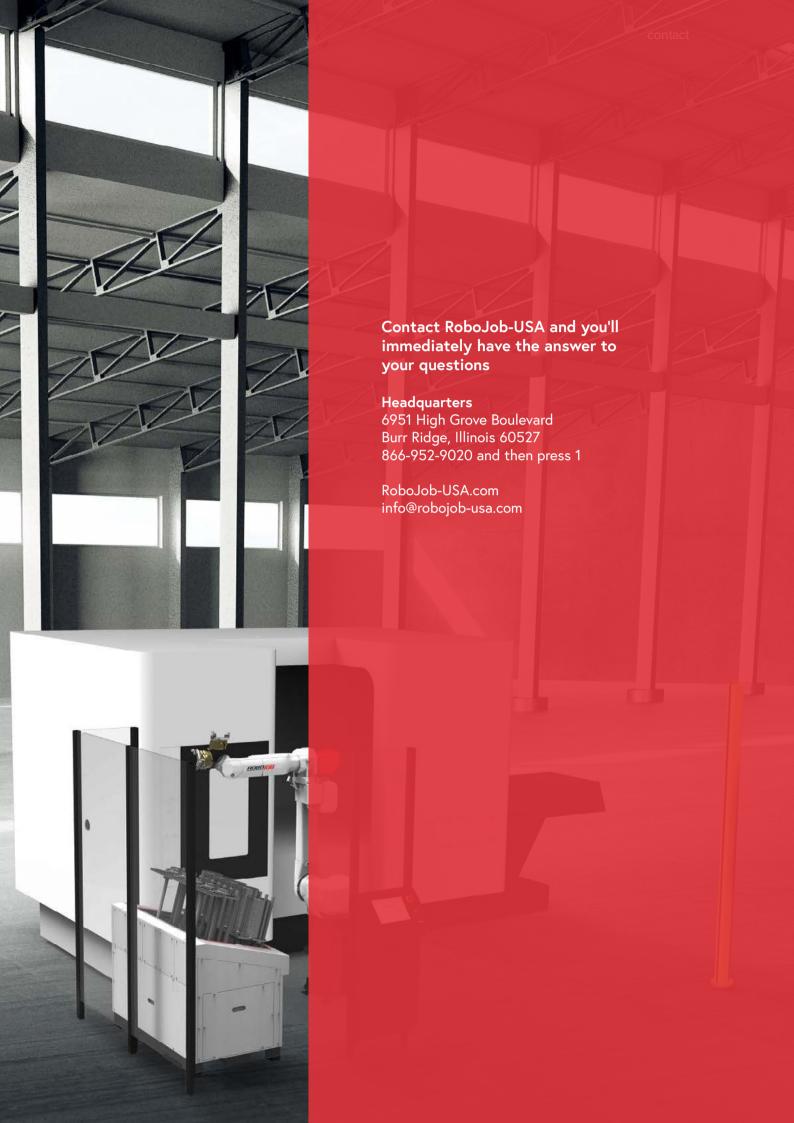
You can always find an up-to-date overview of all the **trade shows and events** in our agenda on our Website **www.robojob-usa.com.** 



#### Find a RoboJob dealer near you

RoboJob has a **comprehensive network of dealers** who can assist you in choosing the right **automation**. A complete overview of all RoboJob dealers, also in your region, can be found on our website **www.robojob-usa.com**. You'll see where and when you can visit them, and what RoboJob automation unit is set up in their showroom.







# **Headquarters**6951 High Grove Boulevard Burr Ridge, Illinois 60527 866-952-9020 and then press 1

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