



Automation Systems



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Unlock the power of efficiency with CubeBOX TM

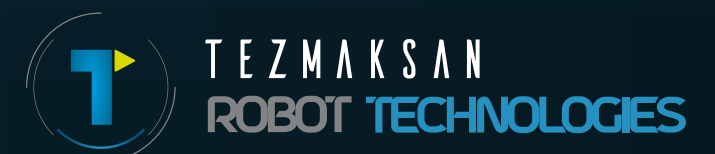
Streamline your workflow and maximize productivity with Tezmaksan Robot Technologies' cutting-edge CNC automation solution. Ready for the future? Contact Tezmaksan today.

Your productivity redefined and revolutionized

The **CubeBOX TM** system from Tezmaksan Robot Technologies offers seamless integration and maximum flexibility.

Compatible with all CNC machines, its cost-effectiveness, quick commissioning, and easy part exchange allows you to enjoy advanced automation without hefty investments. Automation is for everyone. Take your CNC automation to new heights and give our expert team a call today.

Collaborative Robots can also be adapted to all our CubeBOX systems.



CubeBOXTM Blues DR

Thanks to our innovative, compact robot cell **CubeBOXTM** system, such that up to 3 CNC machines can be operated without downtime during loading and unloading the workpieces, from the new or existing machine(s) without any brand restriction.

Tezmaksan **CubeBOXTM** system gives you the flexibility to quickly respond to your clients. We enable you to profitably run small and medium-sized batches with quick set-up times.

Cubebox Blues Models:

BLUES DR - Drawer Type

BLUES MINI - Drawer Type with Narrow Body Construction

BLUES MAX - Drawer Type with Wide Body Construction

- Automation of all CNC machines (lathes, grinding and milling machines etc.) and presses as well
- Loading through the front or side door of the CNC machine
- Suitable for any brand of CNC machine
- 6-axis robot with a wide range of loads
- 7-axis robot with slider system
- Multiple production series in one production run
- Many different gripper options
- Standard 5 to 8 robust product drawers
- Refilling of products during operation
- Variable product heights due to a widely variable drawer system

CubeBOXTM Blues DR

Blues DR

- 1 **6 Axis industrial robot**
- 2 **Industrial PC with RoboCAM**
- 3 **Teach pendant**
- 4 **Gripper and finger set**
- 5 **Drawer + inlay**
- 6 **Area sensor/scanner**

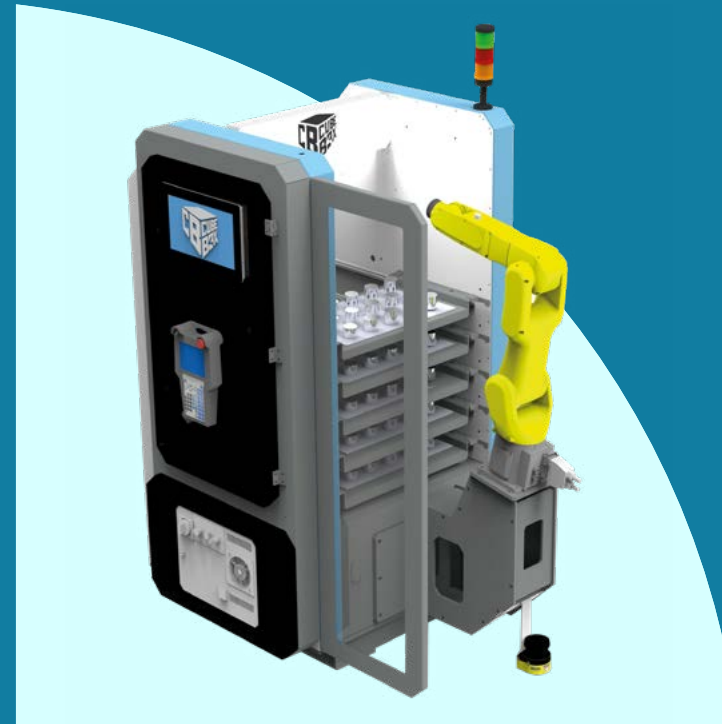


CubeBOXTM Blues

CubeBOX Blues system gives you the flexibility to quickly respond to your clients. We enable you to profitably run small and medium - sized batches with quick set-up times.



DR MINI



- › 6 Axis robot 7 kg. / 12 kg. payload
- › 5-8 Drawers with 600mm x 400mm size each
- › Suitable for tending 1 CNC machine
- › RoboCAM Smart Automation software
- › Easy and quick set-up



DR STANDARD

- › 6 Axis robot 12 kg. / 25 kg. payload
- › 5-8 Drawers with 800mm x 600mm size each
- › Suitable for tending up to 2 CNC machines
- › RoboCAM Smart Automation software
- › Easy and quick set-up



DR MAX

- › 6 Axis robot 25 kg. and above
- › 5-8 Drawers with 1200mm x 600mm size each
- › Suitable for tending up to 3 CNC machines
- › RoboCAM Smart Automation software
- › Easy and quick set-up



CubeBOXTM Blues Space Cabinet

- Uninterrupted operation of the system during loading the workpieces onto the stocking area
- Adjustable sliding door
- Standard 5 Drawers With of 400 x 600mm
- Tending one machine
- Portable system
- Compatible With 7 kg / 10 kg and 14 kg 6 axis robot
- Manual SPC station
- PC Touch panel



CubeBOXTM Blues Space Cabinet

Space Cabinet

- | | |
|-----------------------------|------------------------------|
| 1 3 Position drawer + inlay | 6 Industrial PC with RoboCAM |
| 2 Light barrier / curtain | 7 Teach pendant |
| 3 Adjustable sliding door | 8 Robot controller |
| 4 6 Axis Industrial Robot | |
| 5 Manual SPC station | |

Space Cabinet
Youtube Video



CubeBOXTM Blues

DR-3 Position

> Uninterrupted operation of the system during loading the workpieces onto the stocking area.

- 1 Industrial PC with RoboCAM
- 2 Teach pendant
- 3 Robot controller
- 4 6 Axis industrial robot
- 5 3 Position drawer + inlay



CubeBOXTM Blues

DR-3 Position

- > Compatible With 12 kg / 25 kg and 35 kg 6 axis robot
- > 5-7 Drawers with 900mm x 500mm size each
- > Suitable for tending up to 2 CNC Machines
- > RoboCAM Smart Automation software
- > Easy and quick set-up



- 1 Operator load & unload position during operation
- 2 Safety zone for operator and/or robot pull position
- 3 Robot pick & place position



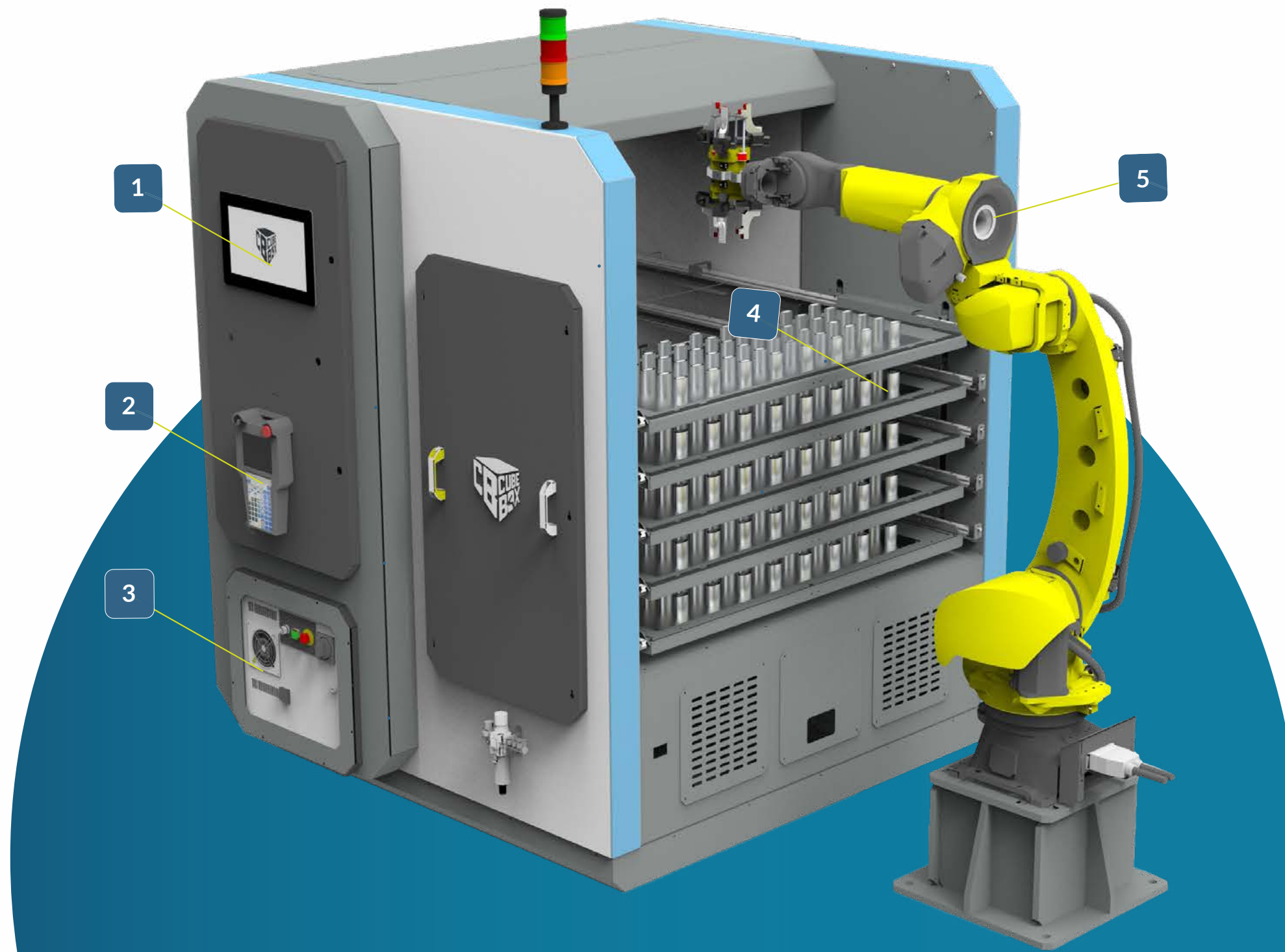
CubeBOXTM Blues DR Max-3 Position

- 1 Industrial PC with RoboCAM
- 2 Teach pendant
- 3 Robot controller
- 4 3 Position drawer + inlay
- 5 6 Axis industrial robot

CubeBOXTM Blues DR Max-3 Position

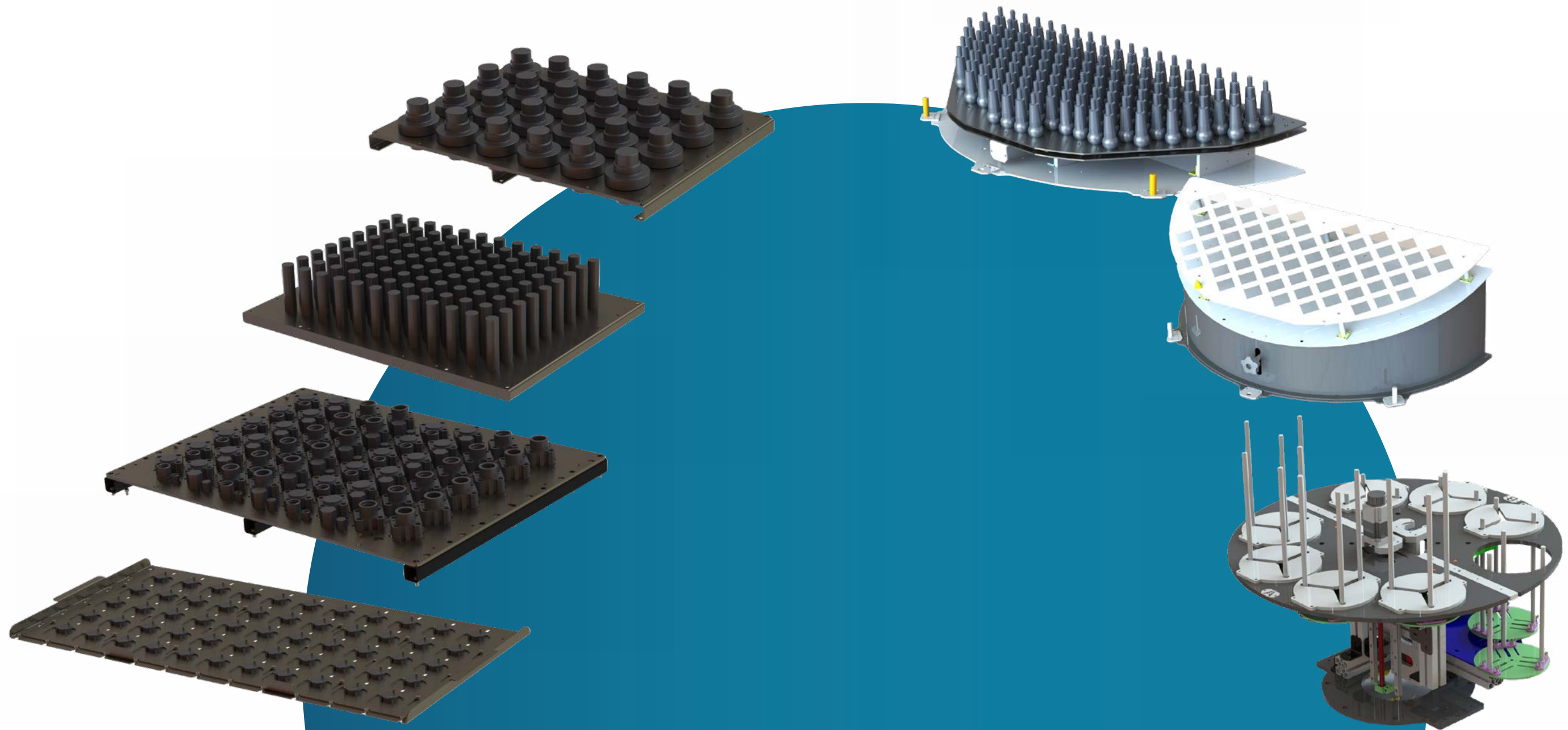
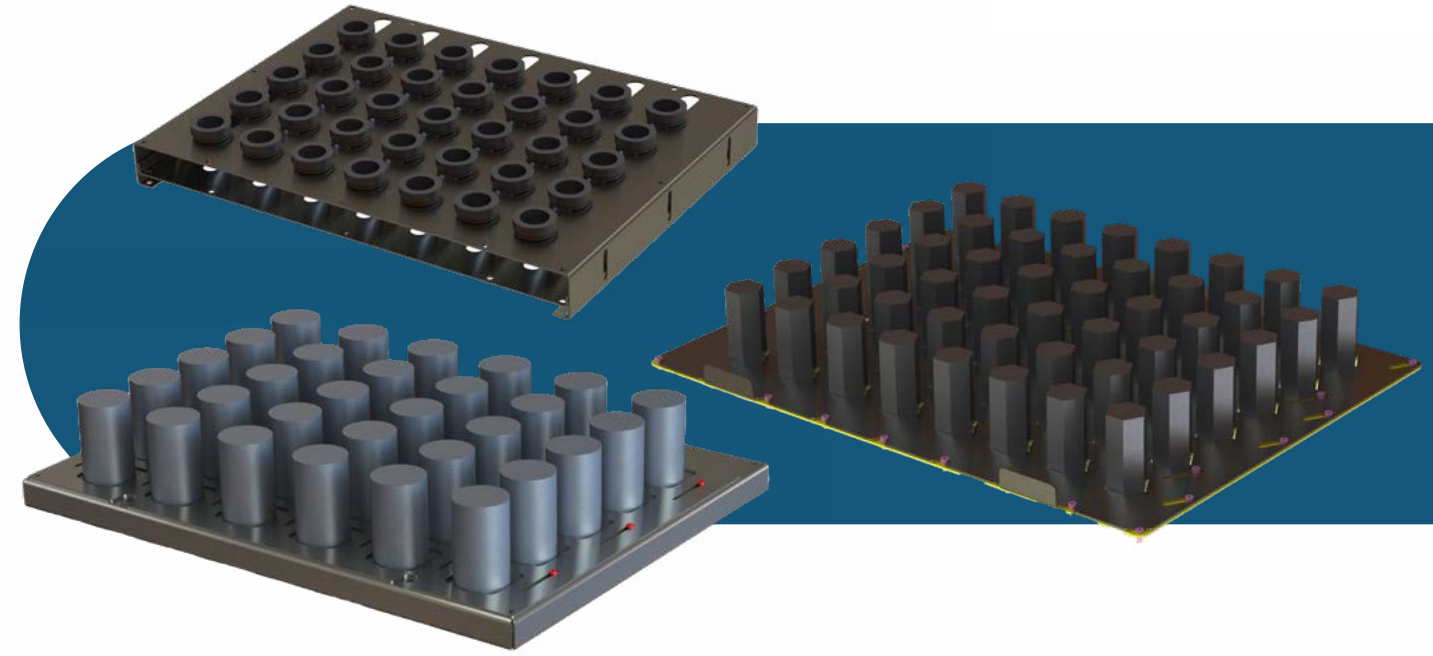
- > Compatible With 25 kg / 35 kg and above 6 axis robot
- > 5-7 Drawers with 1300mm x 500mm size each
- > Suitable for tending up to 3 CNC machines
- > RoboCAM Smart Automation software
- > Easy and quick set-up

CE



Inlays

Tezmaksan's dynamic and talented engineering team is 24/7 available to support the needs of the customers. In our customer-specific, workpiece-specific design work, we always offer you solutions by prioritizing flexibility and the ability to automate diverse workpieces.



CubeBOXTM Blues RT

The **CubeBOXTM Blues RT** is a versatile system and can be used in a variety of industrial applications. It offers a wide range of features for workpiece feeding, high-precision processes and efficient production.

- > It has a double palletized workpiece loading unit, which ensures a continuous workflow and increases productivity.
- > Can be used as a feeding unit for lathes and vertical machining centres, ensuring accurate and timely feeding of workpieces.
- > Fast and easy set-up time with **RoboCAM** software, facilitating quick configuration and start-up of processes.
- > Offers adjustable stock area according to the workpiece diameter, allowing easy placement of workpieces of different sizes.
- > Provides maximum efficiency with minimum space utilisation, saves space and enables more efficient use of the production area.
- > Portable cell
- > PC touch panel
- > Easy and quick set-up
- > **RoboCAM** Smart Automation Software
- > Suitable for tending up to 2 CNC machines



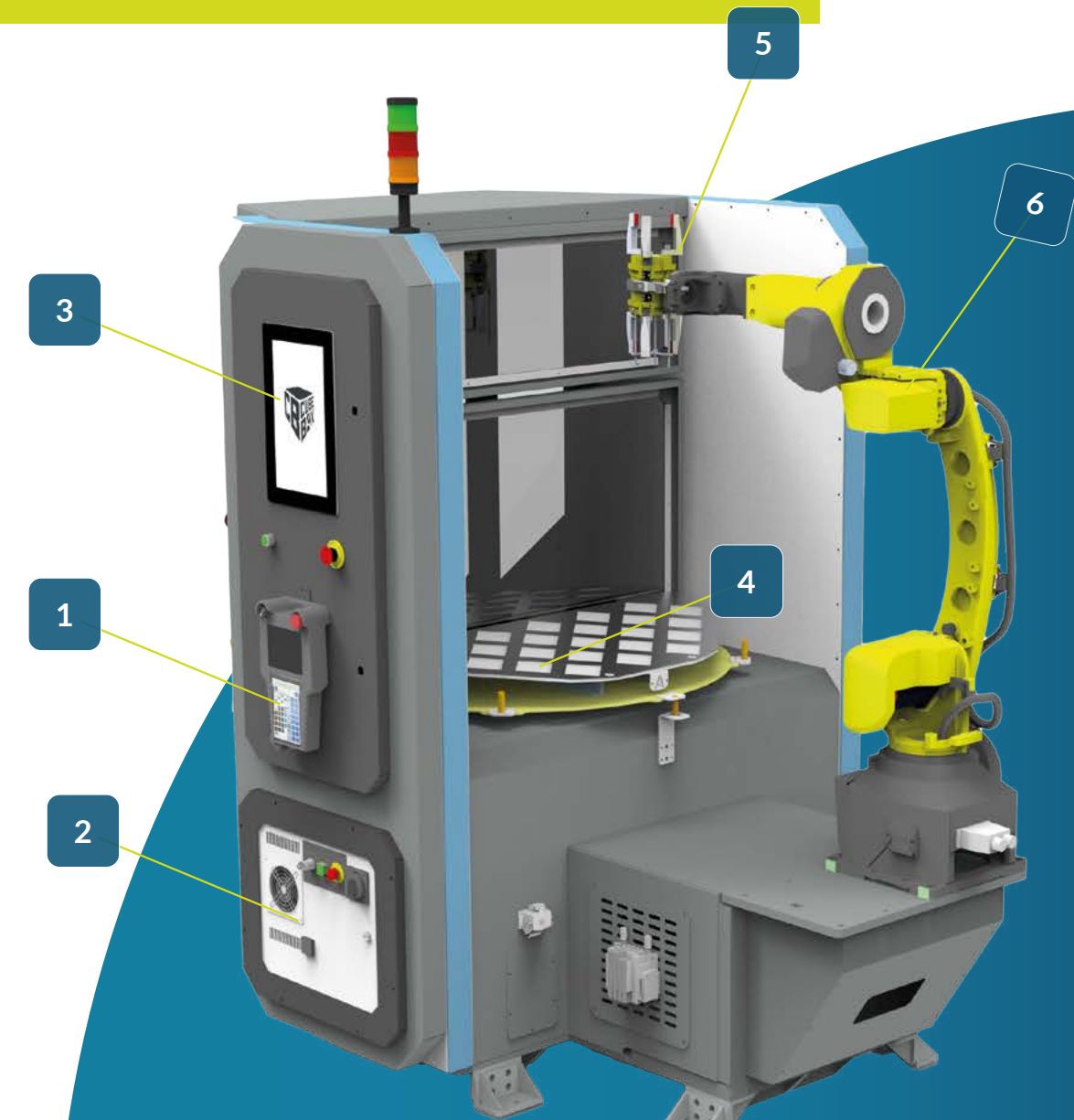
CubeBOXTM Blues RT

It has single machine and double machine loading and unloading capability, it can serve more than one machine and allows workpieces to switch quickly.

Compatible with robots with payload capacity of 12 kg, 25 kg and 35 kg, it can carry workpieces of different weights and perform operations.

BLUES ROTARY TABLE

- | | |
|------------------------------|---------------------------|
| 1 Teach pendant | 5 Gripper |
| 2 Robot controller | 6 6 Axis industrial robot |
| 3 Industrial PC with RoboCAM | |
| 4 Rotary table | |

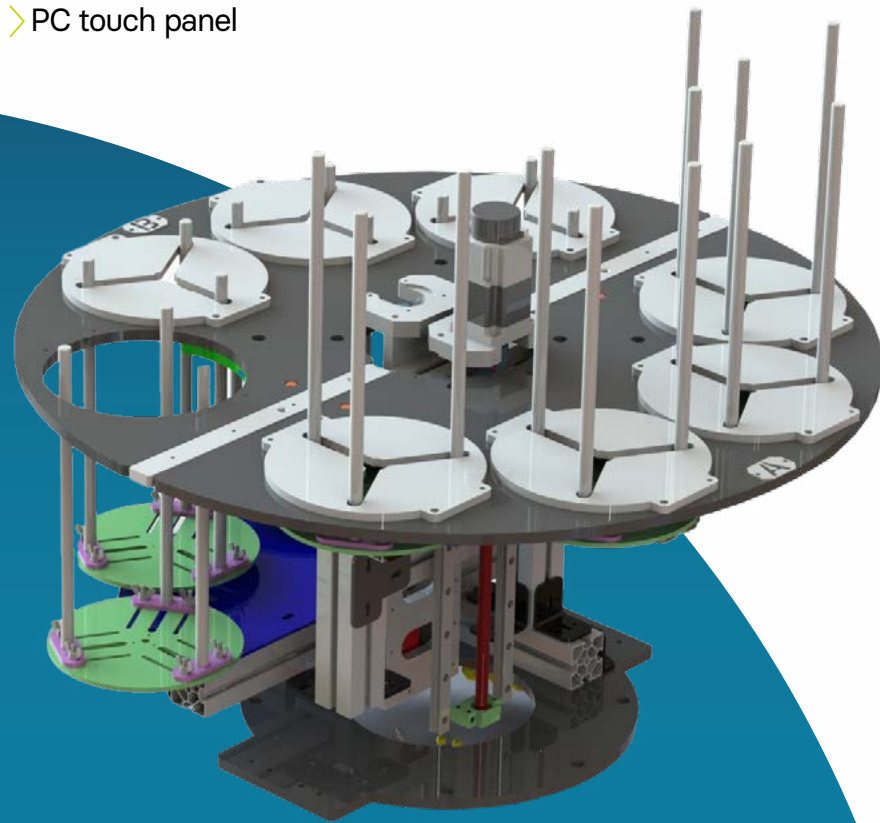


CubeBOXTM Blues RT-S

With the **CubeBOXTM Blues RT-S**



- › You can stack round parts on top of each other to create more stock space
- › You can integrate long round bar parts into the automation system
- › With servo motors, it can control the spindle height according to the workpiece, ensuring that the workpiece is kept in the correct position and the processes are carried out with high precision.
- › Uninterrupted operation of the system during loading the workpieces onto the stocking/stacking area
- › Portable cell
- › Suitable for tending up to 2 CNC machines
- › **RoboCAM** Smart Automation software
- › Easy and quick set-up
- › PC touch panel

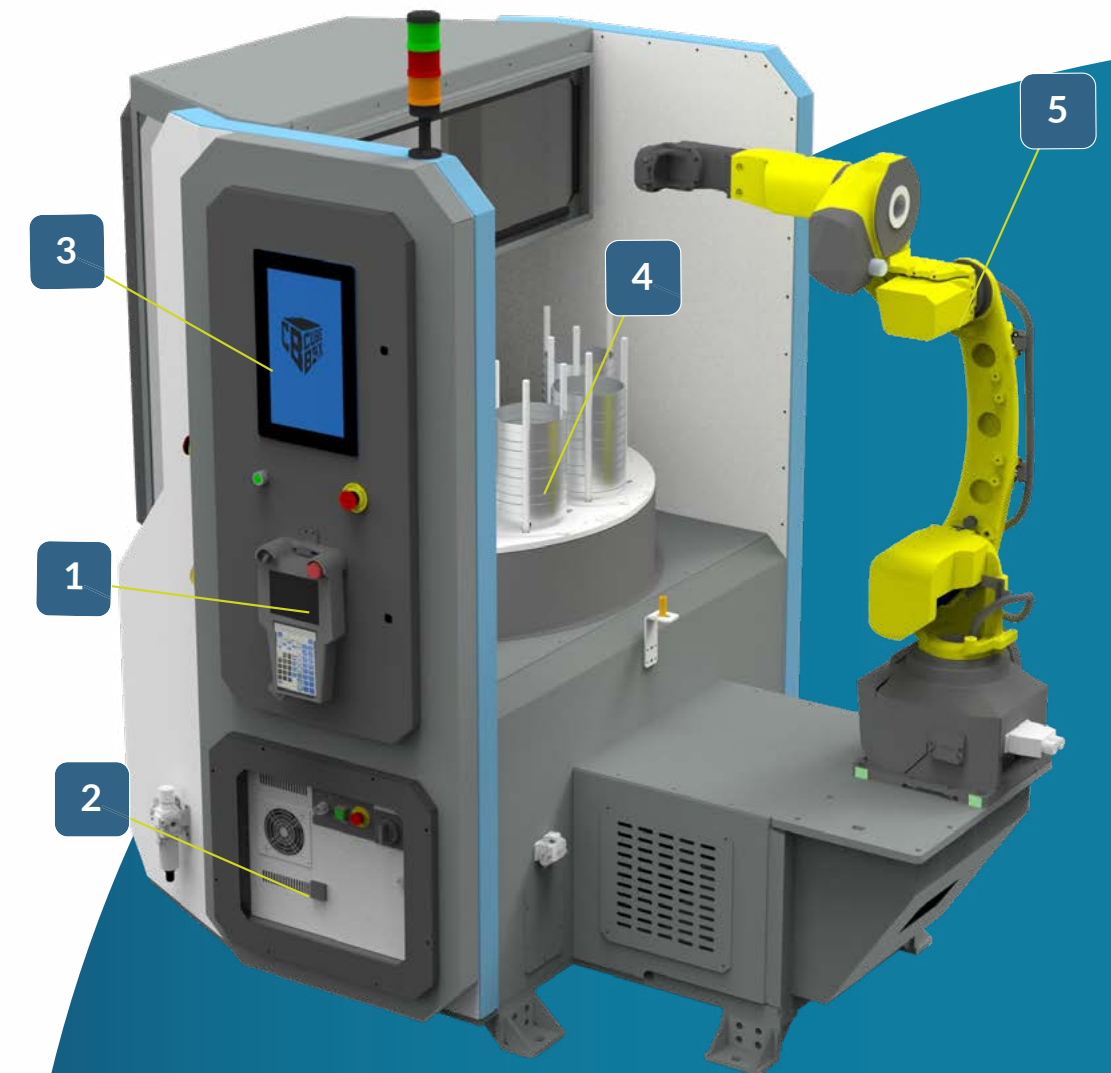


CubeBOXTM Blues RT-S

Blues RT-S

- 1 **Teach pendant**
- 2 **Robot controller**
- 3 **Industrial PC with RoboCAM**
- 4 **Rotary table**
- 5 **6 Axis industrial robot**

CubeBOX Blues
RT-S Youtube video



CubeBOXTM Soul

CubeBOXTM Soul is designed especially for casting industry where there are heavy casted and with different surface formed workpieces and mass production.



SOUL M



- > **RoboCAM** Smart Automation software
- > 11 pieces of Metal Tray (rack) 1000mm. x 600 mm
- > Suitable for tending up to 2 CNC machines
- > Easy and quick set-up

CE

SOUL S



- > **RoboCAM** Smart Automation software
- > 11 pieces of Metal Tray (rack) 800mm. x 500 mm
- > Suitable for tending up to 2 CNC machines
- > Easy and quick set-up

CE

SOUL L



- > **RoboCAM** Smart Automation software
- > 11 pieces of Metal Tray (rack) 1/2/3 Euro-pallet sized
- > Suitable for tending up to 3 CNC machines
- > Easy and quick set-up

CE

- 1 Adjustable sliding door with interlock
- 2 Trays - standard 11
- 3 6 Axis industrial robot
- 4 HDMI with RoboCAM
- 5 Light barrier / curtain



CubeBOXTM Vision

- **RoboCAM** Smart Automation Software
- Easy and Quick set-up
- suitable for tending up to 3 CNC
- Industrial PC With RoboCAM
- Designed for similar workpieces with wide range of dimensions.

2D and 3D vision guided solutions with worldclass camera applications

Wide range of extra options:

Presence inspection

Quality inspection

Positioning / alignment

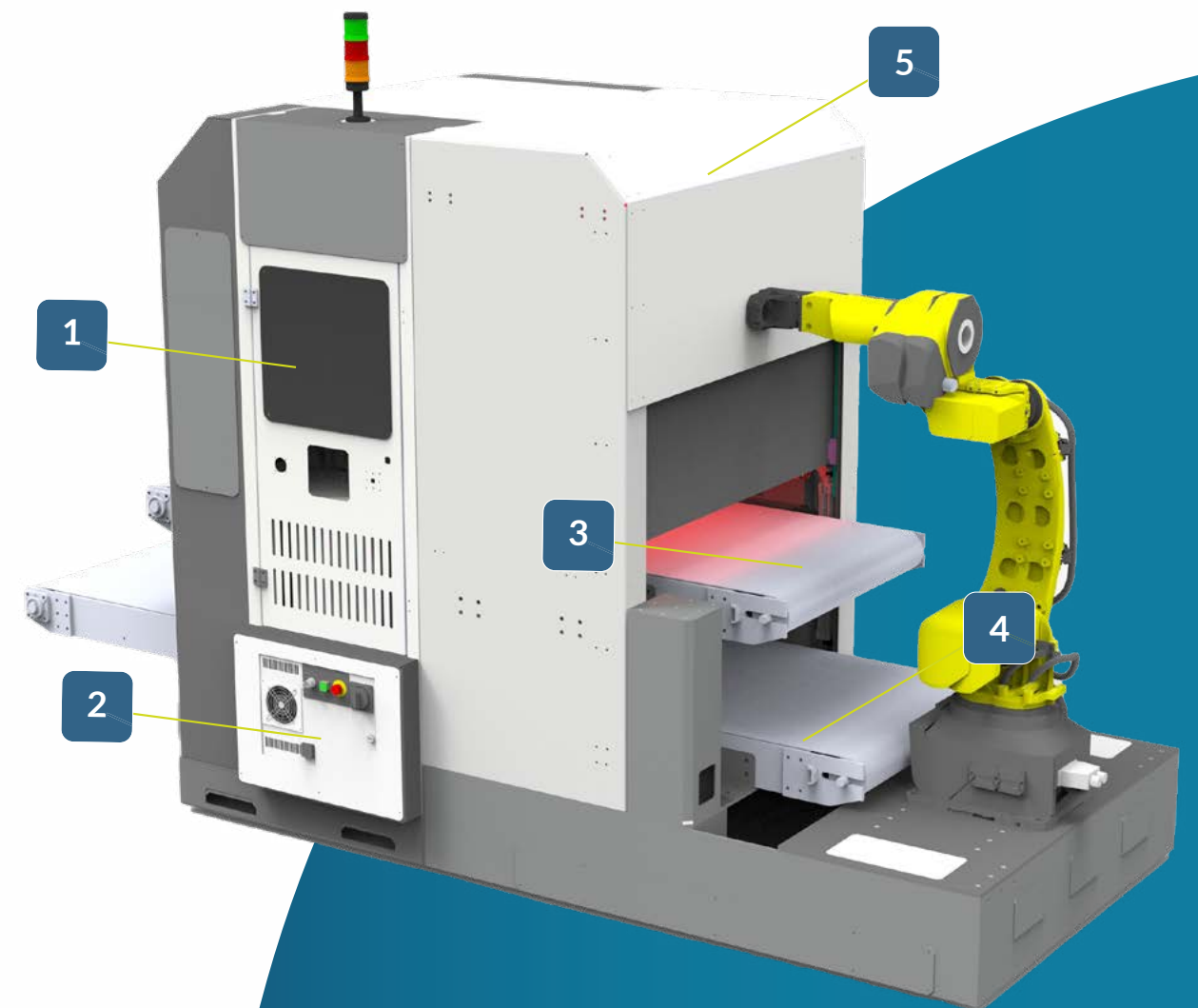
Dimension measurement



CubeBOXTM Vision

Vision

- 1 **Industrial PC with RoboCAM**
- 2 **Robot controller**
- 3 **Feeding conveyor**
- 4 **Exit conveyor**
- 5 **Camera cabinet**



New Product

CubeBOXTM Pallet Pool PT

CubeBOXTM Pallet Pool (also called as Pallet Tower and Pallet Changer) is an automation solution allowing one operator to run multiple jobs for faster changeover times. This option is used for automation cells with limited floor space making them an economic investment option to expand pallet storage and production on a single machining center.

The **CubeBOXTM Pallet Pool** Automation, which we present to you as a Compact and Expandable System, has a space-saving design, consist of the pallets arranged in a compact circle in front of the machine, and an industrial 6 axis robot that loads and unloads pallets in the middle of that circle.

It is an automatic operating system for small/medium scale production. It is the ideal solution for high productivity if you have high mix, low batch production.

The automated loading systems donated with a software for Flexible Manufacturing System "FMS", increase the productivity. They tend machines quickly and accurately and free up operators/engineers (employees) to perform more value-added business.

Our **flexible manufacturing system RoboCAM-FMS** philosophy encourages the use of robotic automated systems for loading a set of machines.

Flexible manufacturing software, also known as flexible manufacturing systems (FMS) software, is designed by TezmaKsan software R&D team, to optimize and streamline manufacturing processes in environments where there is a need for versatility, adaptability, and rapid changeover.

Production Planning and Scheduling, Resource Allocation, Inventory Management, Quality Control, Real-Time Monitoring and Reporting, Changeover Management, Scalability and Customization are some of the features and functionalities typically found in our flexible manufacturing software.

PALLET POOL
Youtube Video



PALLET POOL PT-24

- Compatible with 25 kg and 35 kg and above 6 axis robot
- 24/7 Non-stop production
- One pallet station for loading
- **RoboCAM-FMS** software
- 16 + no. of Tool Changer
- 24 no. of Pallet
- Developed for single and/or multiple CNC machine(s)
- Optional specifications (barcode reader, BUS communication etc.)



PALLET POOL PT-18

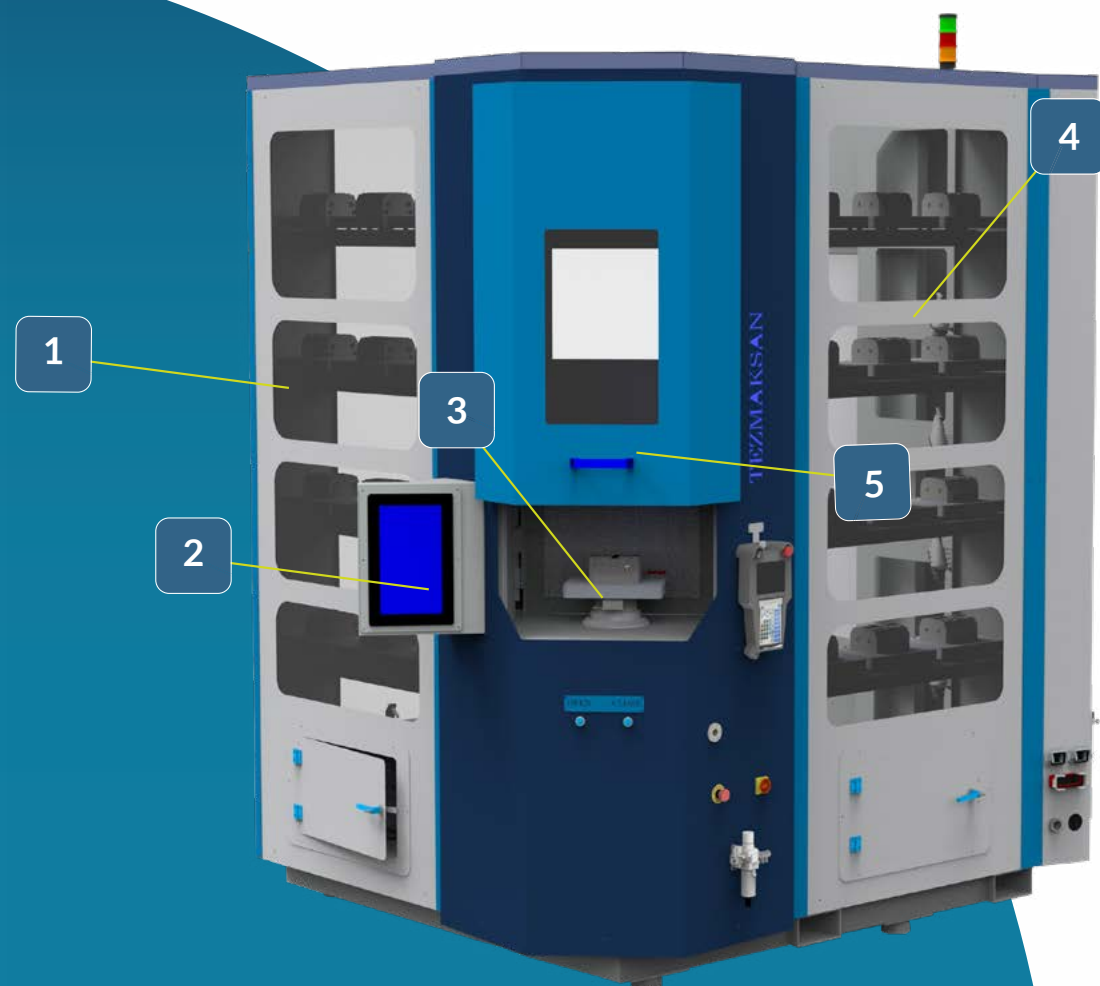
- Compatible with 12 kg / 25 kg and 35 kg and above 6 axis robot
- 24/7 Non-stop production
- One pallet station for loading
- **RoboCAM-FMS** software
- 18 no. of Tool changer
- 18 no. of Pallet
- Developed for single and/or multiple CNC machine(s)
- Optional specifications (barcode reader, BUS communication etc.)



PALLET POOL PT-24

PALLET POOL PT-24

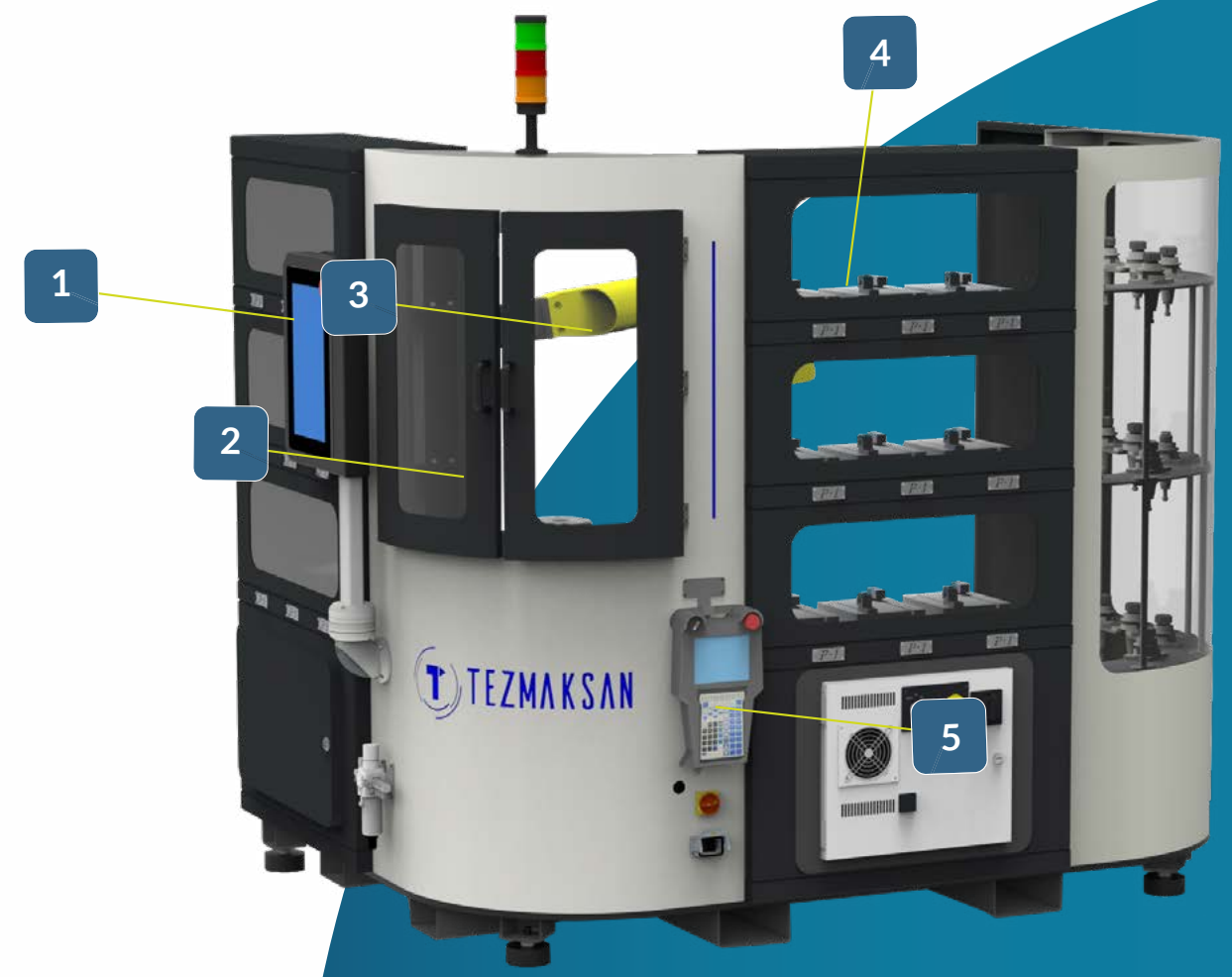
- 1 Tool location shelves
- 2 Pallet Pool controller with RoboCAM - FMS software
- 3 Operator Load / Unload station with zero clamping system
- 4 Pallet location shelves
- 5 Sliding autodoor

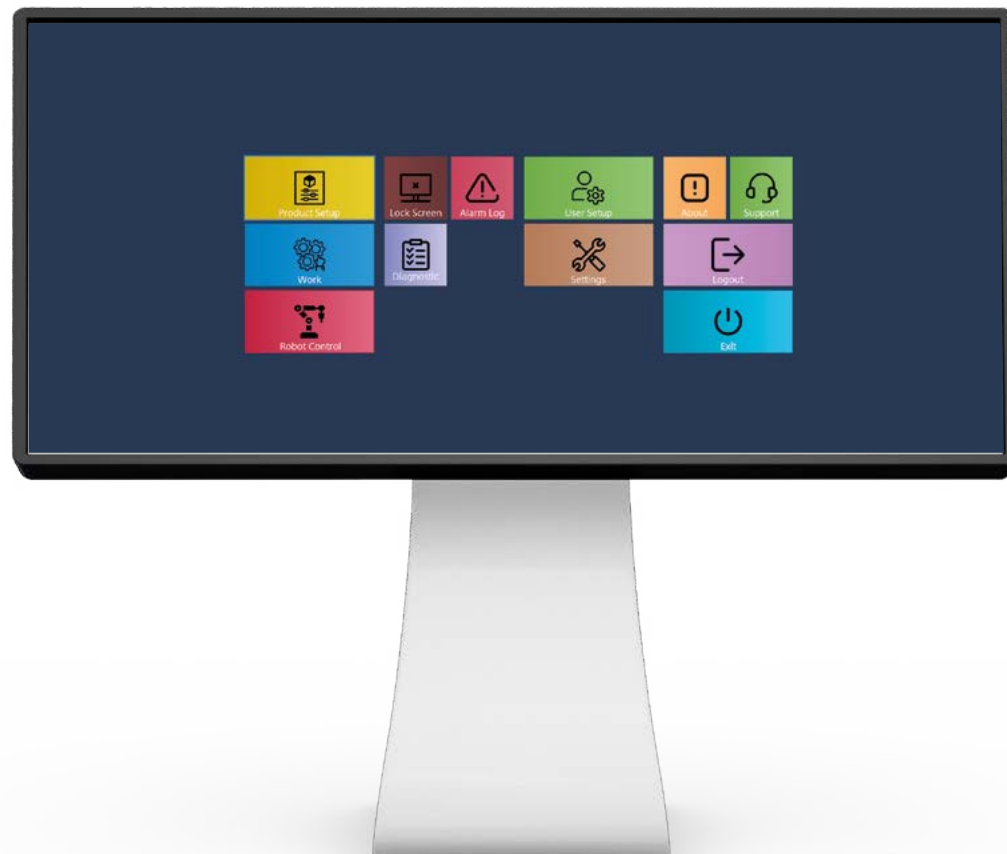


PALLET POOL PT-18

PALLET POOL PT-18

- 1 Pallet Pool controller with RoboCAM - FMS Software
- 2 Manual Door for Loading / Unloading
- 3 6 Axis industrial robot
- 4 Tool location shelves
- 5 Teach pendant





Thanks to our innovative, compact robot cell **CubeBOX** system such that up to 3 CNC Machines can be operated without downtime during loading and unloading the workpieces from the machine(s) without any brand restriction.

Our user-friendly software **RoboCAM** converts 2D CAD Drawings of the workpieces to CAM, so Robot programming and CAM knowledge are not needed anymore. The operator has only one thing to do, loading and unloading the workpiece.

As an engineering company, we are focusing on Industry 4.0 with turnkey projects, automation integration, installation, and after-sales services.



- Creating a programmatic workflow that allows for any type of transport scenario
- Floor and part tracking thanks to the object-oriented structure
- Collision and error protection linked to part tracking
- Duration and efficiency calculation and reporting
- Station-based work structure where every point the part passes through is defined
- Multipart work allowing multiple parts to be stacked in the tray slot or at stations
- Fully compatible with Fanuc and Kuka robots
- Programming logic similar to the commands within the robot
- Ability to save and reuse robot movement positions
- U-Frame calculation from 3 points
- Real-time display of cell models created with RoboCell Software through 3D modeling
- Theme selection (Blue, dark, and light)

New Product

CubeBOXTM ServoDOOR

> **CubeBOXTM ServoDOOR - Single Door**

CubeBOXTM ServoDOOR You can use the single door model for your CNCs. Our one-door models are equipped with servo motors.

Stroke	L
750	1000
1115	1365
1615	2115
2115	2365

> **CubeBOXTM ServoDOOR - Double Door**

You can use the **CubeBOXTM ServoDOOR** double door single unit model for your double door CNCs. We have models equipped with servo motors.

Stroke	L
750	1000
1115	1365
1615	2115
2115	2365

CubeBOX ServoDOOR - Double Door Double Unit



New Product

CubeBOXTM ServoDOOR

> You can use the **CubeBOXTM ServoDOOR** double door double unit model for your double door CNC machines. We have models equipped with servo motors.

Stroke	L
2x750	1950
2x1000	2450
2x1250	2950
2x1500	3450
2x2000	4450

> **Energy consumption:** It saves costs to a minimum level. The energy consumption of it is equal to a 65W light bulb during operation.

> **Operator Errors:** It communicates with the CNC, minimizing the errors, malfunctions caused by the operators. the **CubeBOXTM ServoDOOR** is a universal system that can be connected to any brand of new or present CNC machines.

> **Work safety:** Protects operators from injuries and accidents.



NOTES

PROPERTIES		CubeBOX SOUL S	CubeBOX SOUL M	CubeBOX SOUL L
	VERSION	COMPACT V01***	COMPACT V01***	COMPACT V01***
	Min. Diameter of the Steel Workpiece**	5 mm.	5 mm.	5 mm.
	Max. Diameter of the Steel Workpiece**	100 mm.	180 mm.	No limit
	Min. Side Length of the Hexagonal Steel Work	10 mm.	10 mm.	10 mm.
	Max. Side Length of the Hexagonal Steel Workpiece**	100 mm.	180 mm.	180 mm. and more
	Max. Hight of the Steel Workpiece**	100 mm.	100 mm.	180 mm. and more
	Cell Width	2150 mm.	2500 mm.	Min 5000 mm.
	Cell Length (Depth)	1700 mm.	2000 mm.	Min 5000 mm.
	Cell Hight / Fence Hight	2150 mm.	2200 mm.	2200 mm.
	Cell Total Weight	600 Kg.	1000 Kg.	1250 Kg.
	Supply Voltage	Mono-Phase 220 V AC	Mono-Phase 380 V AC	Three-phase 380 V AC
	Air Consumption	<80L/Min.	<80L/Min.	<80 L/Min.
PAYLOAD	LRM200iD7L			
	M10iD12	•		
	LR10iA		•	
	LRM200iD14L		•	
	M20iD25	•	•	
	M20iD35		•	•
	M710iC50			•
	M710iC70			•
	Above 70 Kg. Payload			•
STANDARD SPECIFICATIONS	Quick Set-up	•	•	•
	Automatic door for 1 CNC	•	•	•
	Safety Fence for 1 CNC	•	•	•
	2 Safety light barriers on the operator side	•	•	•
	Portable Cell	•	•	•
	Disassemblable / Disengageable Robot and Cell			
	Separator Type Workpiece Stacking	•	•	•
	Suitable for Round Workpiece	•	•	•
	Suitable for Hexagonal Workpiece	•	•	•
	Suitable for Casted and Pressed Workpiece	•	•	•
	Suitable for Tending the Second Machine after OP1	•	•	•
	3-Colour Industrial Signal Tower	•	•	•
	Suitable For Single Gripper	•	•	•
	Suitable For Multiple Grippers	•	•	•
	RoboCAM Smart Automation Software and Industrial PC	•	•	•
	Cleaning with Air Blow Nozzle	•	•	•
	Residual Emulsion/Oil Collecting Area on Workpiece	◦	◦	◦
	Suitable for Tending One Machine	•	•	•
	Suitable for Tending Two Machines		•	•
OPTIONAL ACCESSORIES	CNC Door Automation	◦	◦	◦
	Robot and CNC communication for more than one CNC	◦	◦	◦
	Area Sensor Safety	◦	◦	◦
	Fence and Light Barrier Safety	◦	◦	◦
	Fence and Door Safety	◦	◦	◦
	3rd safety light barrier on the operator side	◦	◦	◦
	Air-flow Cleaning Station	◦	◦	◦
	Manual Measuring Station	◦	◦	◦
	Automatic Measuring Station	◦	◦	◦
	Deburring Station	◦	◦	◦
	Gripper Force Control	◦	◦	◦
	CNC Modbus Communication Protocol	◦	◦	◦
	CNC Fanuc Communication Protocol	◦	◦	◦
	Adjustable Gripper Force	◦	◦	◦
	Adjustable Gripper Gap and Stroke	◦	◦	◦
	Universal Tool Changer	◦	◦	◦
	Workpiece Rotating Equipment	◦	◦	◦
	Workpiece Orientation and Adjustment Equipment	◦	◦	◦
	7 Axis Slider Equipment For 3 and more CNC Machine Tending			◦

NOTES

NOTES



TEZMAKSAN
ROBOT TECHNOLOGIES



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Version 070325

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