

# Compact and high-performing



# Precision automation specialists

Epson is the global leader in robotics technology, offering an impressive combination of high-performance and simplicity. Backed by a worldwide reputation for reliability and outstanding support, Epson robots are bringing highly productive, automated manufacturing to an ever-expanding range of industries across the globe.



\*Market share based on unit sales of industrial SCARA robots, 2011-2023. (Source: Fuji Keizai "2012 - 2024 Reality and Future Outlook of Worldwide Robot Market").

We have been the #1 SCARA robot manufacturer in the world for more than 10 years

We have over 40 years' experience in robotics

We have installed more than 200,000 robots

We speak your language, localized organization and partners



# How we guarantee success

We have been building our robots for 40 years to be fast, precise and reliable. With current trends such as digitalisation, decentralisation of factories, and low-volume mixed production, automation today needs to be more than just high-performing – it also needs to be agile and adaptive. That's why Epson designs all new manufacturing solutions to keep up with automation trends and be simple, smart and scalable.

## Simple

- Easy to buy and use
- Simple installation of the system
- Easy to service

## Smart

- Enables smart integration in the factory eco system
- Predictive maintenance
- Condition monitoring
- Innovative mechanical design
- Energy and space saving
- One product ecosystem

## Scalable

- Over 500 models with one software for all
- Range of payloads and arm reach
- Unique price performance
- Installation environments

# All-round customer service

## Pre sales support

- Clarify Needs
- Targeting cycle time

## Technical sales support

- Validation of the Customer requirements
- Feasibility study/cycle time analysis
- Evaluation and choosing the right robot

## After Sales Service

- Maintenance
- Service operation
- Spare parts

## Application support

- Programming support
- Solution finding
- Ensure that the robot is up to date

## Robotic academy

- User Training
- Software Training
- Maintenance Training



# The built-to-fit series

The C-B series are compact and flexible six-axis robots, with impressive payload capabilities, as well as safety functions and battery-free operation. The series is versatile, easy to use, and has small footprints. Choose your tailor made solution and start to increase your productivity with ease.



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## C-B series

The C-B series is designed to perform highly sophisticated tasks in an efficient way. With its built to fit concept, the robots are tailor made and used to fulfil even the most difficult tasks. Equipped with the safety function, it not only increases machine safety, but at the same time, the space required by the machine and downtimes are reduced.

Choose your C-B robot from over 50 configuration options. Embedding it in your machine environment is easy, and comes with many different options like Epson Vision Systems, Part Feeding Systems, Force Sensing or even Conveyor Tracking to fulfill all expectations. Start to create safe and more efficient applications with our Epson safety functions like Safe Limited Speed (SLS) and Safe Limited Position (SLP). Define safe zones, safe speed and safety parameters by using the safety function manager with integrated 3D viewer.

	C4-B	C4L-B	C8L-B
<b>Payload</b>	4kg	4kg	8kg
<b>Arm reach</b>	600mm	900mm	900mm
<b>Repeatability</b>	± 0.02mm	± 0.03mm	± 0.03mm
<b>Mounting type</b>	Table top / Ceiling	Table top / Ceiling	Table top / Ceiling / Wall
<b>Installation environment</b>	Standard, Cleanroom (ISO Class 3) & ESD	Standard, Cleanroom (ISO Class 3) & ESD	Standard, Cleanroom (ISO Class 3) & ESD, Protected IP67
<b>Available controllers</b>	RC700-E	RC700-E	RC700-E

	C8XL-B	C12XL-B
<b>Payload</b>	8kg	12kg
<b>Arm reach</b>	1400mm	1400mm
<b>Repeatability</b>	± 0.05mm	± 0.05mm
<b>Mounting type</b>	Table top / Ceiling / Wall	Table top
<b>Installation environment</b>	Standard, Cleanroom (ISO Class 4) & ESD, Protected IP67	Standard, Cleanroom (ISO Class 4) & ESD
<b>Available controllers</b>	RC700-E	RC700-E

# Automation at your fingertips

The VT6 series robots can be purchased in our online store, along with peripherals, accessories and additional software options. Both series are versatile, simple to use, and have small footprints.



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## N series

Factory space costs money. The revolutionary N series robot from Epson is extremely agile and occupies less space than any other 6-axis robot ever built. The N series kinematics enable increased productivity in even smaller work cells. Able to reach every point within its working area without wasteful extra movements, it covers an action field that would normally require a 6-axis robot with a significantly longer arm.

	N2	N6
<b>Payload</b>	2.5kg	6kg
<b>Arm reach</b>	450mm	850 - 1000mm
<b>Repeatability</b>	± 0.02mm	Between ± 0.03mm and ± 0.04mm
<b>Mounting type</b>	Table top / Ceiling	Table top / Ceiling
<b>Installation environment</b>	Standard	Standard, Cleanroom (ISO Class 5) & ESD
<b>Available controllers</b>	RC700-A	RC700-A

## VT6-L

Whether loading and unloading, machine tending, picking and placing, packaging and palletizing, the VT6-L can be programmed to do all and offers a whole host of benefits in many different applications. It replaces inefficient manual tasks and its six axes offer greater flexibility than linear systems.

	VT6-L (Also available in DC version)
<b>Payload</b>	6kg
<b>Arm reach</b>	920mm
<b>Repeatability</b>	± 0.1mm
<b>Mounting type</b>	Table top / Ceiling / Wall
<b>Installation environment</b>	Standard, Cleanroom (ISO Class 4), Protected IP67
<b>Available controllers</b>	Built-in

# Robot ecosystem

Following the principles of being simple, smart and scalable, our robot system supports all conventional fieldbus systems and offers a high integration level to every factory ecosystem to enable a high digitalized and efficient production.



## Force Sensing System

Smooth action in force-guided operations



## Integrated software tools

Vision Guide  
Force Guide  
Part Feeding Control  
GUI Builder  
etc.

## Teach Pendant

Easy and safe robot controlling



## Integrated image processing with Epson Compact Vision System

Measurement  
Quality inspection  
Error detection  
Parts positioning  
Tracking on conveyors



## Communication and I/O Boards

Optional fieldbus, digital and analog I/O cards.



## Controller



## Part Feeding System

To separate or singulate the parts for the robot to pick up.



## Robot



## Software



## Euromap67 Option

To provide interchangeability between injection moulding machine and the handling robot.



## High-speed conveyor tracking

Enables high-precision synchronisation with moving objects.



# Industry solutions

Epson Robots is a leading supplier to a wide variety of manufacturing industries including Automotive, Medical, Electronics, Consumer Products, Industrial and many more. Our customers range from large Fortune 100 companies to small manufacturing facilities.

## Automotive

Epson Robots are used to manufacture various automotive parts including brakes, clutch components, ignition systems, instrument panels, headlights, mirrors, locks and more.

## Electronics

Our robots are vital components in major electronic and semi-conductor facilities across the globe. Industry-specific applications include chip handing and placement, encoder assembly, board and laser diode testing and wire bonding, amongst others.

## Consumer products

One of the broadest industries supported by Epson Robots. High speed and high precision functionality help provide the perfect fit for consumer product applications, including the manufacturing of mobile devices, furniture, shoes, jewelry and more.

## Medical

Our robots are used widely in the production of medical instruments, where their flexibility and high-precision capabilities deliver outstanding results. Epson robots help manufacture contact lenses, glasses, dental instruments and implants, hearing aids, pacemakers, blood test systems and much more.

# Success stories

Since its foundation in 1957, KnitMesh Technologies has developed an enviable reputation for the research, development, and supply of precision Knitted Wire Mesh components around the world. The company had the Epson VT6L All-in-One 6-Axis robot installed to automate the production of bespoke, wire mesh components used in a variety of functions across multiple sectors.

Many of KnitMesh's projects involve high volumes of components and the company has historically relied on pneumatic based automation systems to streamline its processes and meet production quotas on time. However, a recently secured contract to produce 48 million electric vehicle (EV) filter components over eight years afforded the opportunity to move to a robotics-based automation solution instead, which KnitMesh seized with both hands.

After careful evaluation, Epson's VT6L All-in-One 6-Axis robot was selected. KnitMesh installed the VT6L at its Holywell manufacturing facility in North Wales in September 2021 and quickly put it to work producing the new EV filter components. Since implementation, KnitMesh has experienced a tenfold reduction in downtime. Furthermore, the VT6L's incredible repeatability of just +/- 100 microns has produced a 20 percent increase in productivity and virtually eliminated rejects.

**Engineering Manager Craig Jones** said, "The robot unloads the formed component from a rotary press, loads it into a welding system, waits for the weld to be completed, then deposits the component into the parts chute for transfer to sealed containers, all in less than 8 seconds."

"The Epson VT6L has a great feel and came highly recommended by Nortech. It only took 30 minutes to learn how to programme and felt so intuitive to use, making it a hit with our engineers.

**Craig Jones, Engineering Manager, KnitMesh Technologies**

## Applications

Epson Robots are extremely versatile and provide a wide range of automation possibilities such as assembly, pick & place, palletising, inspections and testing. With a powerful image processing system, tasks that require precise recording can be mastered with high clock rates. Even highly fragile components can be packed and palletised accurately and reliably providing solutions for a range of challenging production lines.

Assembly  
Pick and place  
Material handling  
Packing  
Kitting/Tray loading

Machine tending  
Screw driving  
Dispensing  
Palletizing  
Lab automation

Inspection and testing  
Finishing  
Grinding



# High quality customer support

At Epson, our reputation is built on the high quality of our products and services, and maintaining that quality is a worldwide priority. Our outstanding robot lifetime cycle helps you before, during and after your purchase. Benefit from pre-sale, technical sale, and application support, as well as our Robotic Academy and an after-sales service.

## Want to learn more?

Book your free digital or personal tour of our unique hybrid ISC+ trade fair now and let our application specialists advise you on your solution.

From the SCARA entry-level model to agile 6-axis robots to special kinematics that take up extremely little space - our robots show what they can do.

Experience in real-world applications how Epson robots help increase yields and improve quality, including:

Sensitive force measurement

Flexible parts feeding

Pick & Place and Palletizing

Spacesaving order picking

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