

COLLABORATIVE ROBOTIC SOLUTIONS



ABOUT

ICONSYS is a leading UK automation solutions provider and systems integrator, using the latest automation technologies to deliver best-in-class solutions to help our customers achieve their business objectives.

Established in 1987 **ICONSYS** has an outstanding track record of successfully completed projects. We are specialists in the design, manufacture and commissioning of integrated solutions incorporating multiple variable speed drives, servos, **Robotics**, PLCs and SCADA with a vast experience of integration to higher business systems. With our extensive Engineering skills and the range of Technologies offered, we can provide and implement solutions successfully across a wide range of Industries.

So what do you know about a collaborative robot?

Collaborative robots are safe to be around, requiring a much smaller footprint, and are cost-effective enough to provide a rapid return on investment. They are the solution of choice for manufacturers looking to reduce overall costs, improve quality and reliability in their operations. Previously industry looked to automation for volume production. Now industry seeks flexibility, as labour rates rise and consumer demands constantly changing, pushing companies to compete in a global market.

There are a multitude of varying collaborative robots currently in the market place, single arm, double arm with varying lengths of reach and weight carrying capabilities. Some have built in vision capability and some do not.

ICONSYS supplies customers with robust automation solutions using collaborative robots. As a business we focus on providing customers with an automated solution that will reduce their production costs and ultimately save them money. As an independent robotic integrator **ICONSYS** can help you identify the most cost-effective, suitable solution for your application requirements.

Human & Robot working together

Out go the large and heavy imposing robots, it's time to make way for collaborative robots!

These robots are now capable of picking up an object and giving it to a human, acting as an assistant, in a cooperative environment, very different to that of the more traditional manufacturing robots which were kept behind cages and programmed by highly paid specialists.

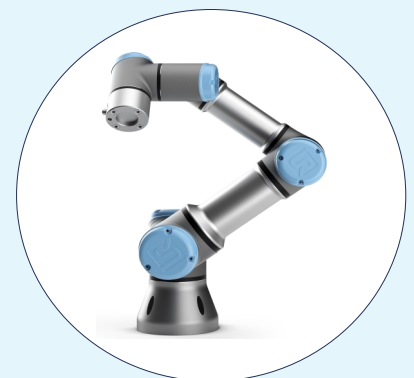
Most collaborative robots are capable of "learn by demonstration": An operator will guide the robot arm through the required position, which will then remember these movements and repeat them. This revolutionary learning-by-doing approach is a technique that non computer-programming operators can quickly master.

Due to their smaller footprint and lighter weight, collaborative robots no longer need to be confined to a single task: They can be integrated into numerous projects, making them much versatile and therefore more profitable. They can be easily reprogrammed, moved (by mounting them on a mobile base for example) and redeployed at different stages in the production chain!

A collaborative robot can be used to tend machines and relieve employees of dull and repetitive work – freeing their time to be used to add value to your business. They are able to quickly adapt production lines to new products.

Examples of solutions include:

- CNC machine tending
- Small press tending
- Injection moulding
- Production line picking
- Small parts assembly
- Electronic assembly and test
- Inspection systems



The benefits of collaborative robot solutions include:

- Increased operator safety
- Decreased manufacturing labour
- Reduced overall costs
- Short implementation times
- Teach by demonstration
- Operational flexibility
- Smaller footprint

EOAT Design

ICONSYS are highly experienced at addressing difficult issues with innovative workable solutions.

Designing tooling to suit your application requirements incorporating:

Standard Parts— Quick delivery of components & spares

Lightweight— Reduce robot wear and maintenance

Rigid—Precise placement

Modular—Easy to adjust and make changes

Durable—long life with lower maintenance

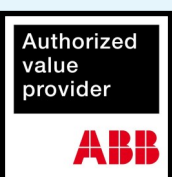
ICONSYS integrate vision systems, bar code readers, Servo and Pneumatic actuators enabling our customers to be able to pick, handle and assemble the most complicated parts.

3D Robotics simulation

Our in-house Robotic team will recreate a complete 3D virtual model of the working environment and the robots themselves. A 3-dimensional simulation offers advantages to both the customer and the robotic team; reducing the costs, as robots can be programmed off-line, eliminating down-time for assembly line. Robot actions and assembly parts can be visualised in a 3-D virtual environment prior to the prototypes are even produced. Ensuring the robot system is running in its trimmest and most efficient configuration.

Independent

Our engineers are able to commission all major collaborative robotic brands such as: ABB, KUKA, Yaskawa, FANUC and Universal Robot.



ICONSYS are an ABB authorised
Robotic partner

Interested in implementing a collaborative robot in your facility or simply want to know more about it?

Contact ICONSYS on:

T: 01952 607300

E: info@iconsys.co.uk