



# **TPS**

*WeldTech*

***A new era of collaborative technology begins...***

## ***Discover the FANUC CRX Cobot***

Collaborative robots for welding and cutting.  
More choices, more flexibility, more control.

***Automated welding solutions,  
built on decades of experience***

**TPS**  
WeldTech  
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TPS Weldtech offer automated welding and manufacturing solutions built on decades of experience. We are proud to offer FANUC solutions to our customers - the world's leading supplier of CNC, robotics and Robomachine automation.

### ***Why choose the FANUC CRX Collaborative Robot?***

FANUC's collaborative robots offer more choices, more payload, more reach, and more speed than any other cobot series on the market.

Safety-certified, FANUC cobots work hand in hand with humans to add value to your processes. Cobots are the perfect choice for high mix to low volume tasks, with endless usecases for welding and cutting.



### ***Easy Installation***

Covering the needs of medium- and small-sized businesses as well as automation beginners and large corporations, the CRX range contains an ideal solution for your business.

A flexible collaborative robot, FANUC's CRX offers quick deployment and easy setup. The CRX cobot and its controller are lightweight and compact, with industry leading arc tool software.



**Quick  
Deployment**



**8 Years  
Maintenance  
Free Operation**



**Easy  
Setup**



## FANUC CRX COBOTS

The CRX's small footprint and powerful R-30iB mini plus controller requires zero fencing or guarding, and runs on standard 230V power outlet – making setup a breeze.

Cobots are a great solution for low to medium volume production tasks. With FANUC CRX, the features of industrial robots being introduced to cobots. **Touch sensing, through arc seam tracking, weaving and root path memorisation** allow endless welding possibilities.

These factors make collaborative robots a natural fit in welding and cutting applications. With a wide range of options available for end of arm tooling (EOAT) makes it easy for a collaborative robot to switch tasks as well.



The FANUC CRX cobot is the only collaborative robot on the market with FANUC reliability offering 8 years of Zero Maintenance on Motors, Reducers, Sensors, Cables and Grease.

An icon based tablet makes the CRX easy to operate, with a userfriendly interface for pausing or switching between functions.

# **FANUC CRX Cobot For Welding Applications**

## **Option: Longer reach robot arm**

Fanuc ArcMate CRX-25iA 6 axis robot arm.

This offers 1,889mm reach (additional 471mm of reach!) over the more widely used CRX 10iA/L.

Allows optimised torch reach for use with larger components, or with additional headstock.

## **Option: Touch sensing package**

Allows automatic offsetting of weld path prior to welding, to compensate for component variation/misplacement.

Includes wire cutter to ensure precise touch sensing through the wire.

## **Option: Through Arc Seam Tracking (TAST) package**

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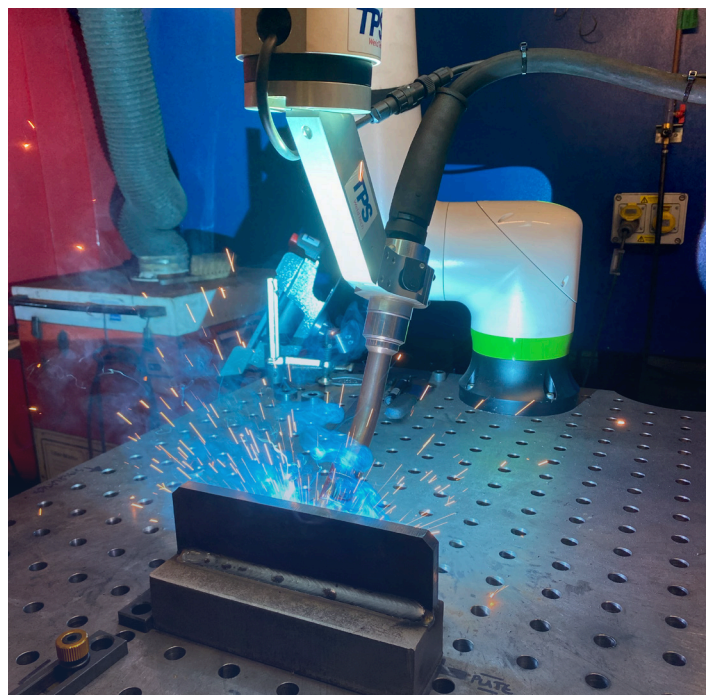
Allows automatic offsetting of weld path during welding, to compensate for component distortion/variation/misplacement.

## **Option: Multipass welding with Root Path Memorisation (RPM)**

For heavy welding applications, multi pass welding which welds the same weld pass repeatedly and is generally used to increase the weld size.

Decreases the time for teaching operation of multi pass welding

Decreases the time for teaching of large joints with multiple weld runs. Uses Root Pass Memorisation (RPM) to offset weld paths for 2nd and further additional passes.





## ***The SCC: Your Self-Contained Cobot Welding Solution***

A complete, mobile welding system designed to bring the power of automation directly to your workpieces. This innovative trolley eliminates the need for fixed installations, offering unparalleled flexibility and productivity.

***Plug-and-Weld Mobility:*** The SCC is built on a robust, purpose-built steel trolley, allowing you to easily move it around the shop floor. Simply plug it in, connect your welding wire and gas, and start welding.

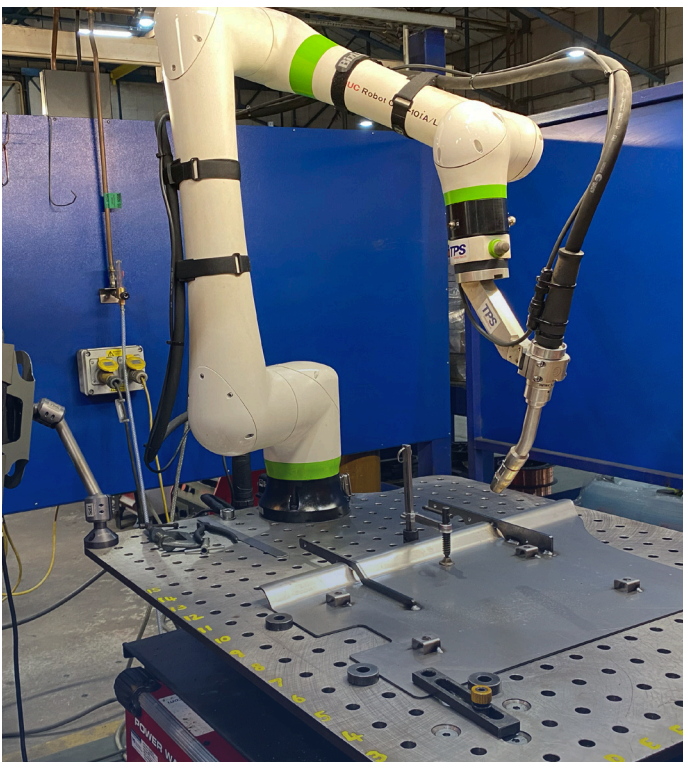
***All-in-One Design:*** This system comes complete with the CRX 10iAL collaborative robot arm, all necessary welding equipment, and ancillary components pre-installed on the trolley.

***Workshop-Ready Construction:*** The industrial trolley is specifically designed for welding and fabrication environments. Components can be welded on the 900mm wide x 1,100mm deep tabletop (with machined clamping points for precise workpiece fixturing), or even next to it.

***Optimised for Efficiency:*** Gas cylinders and welding wire are mounted on the trolley, along with a power distribution cabinet, simply plug in and weld.

### ***The PowerWave® R450 Advantage:***

At the core of our welding solution is the Lincoln PowerWave® R450 robotic welding power source, designed for superior performance and efficiency. This system provides fast travel speeds and minimal spatter, ensuring cleaner, stronger welds. It also features a Hibernate Mode that draws less than 50W, significantly reducing your operating costs.



## **The PowerWave® R450 Advantage - Key Features**

**450 Amp at 100% duty cycle:** Ready for continuous, heavy-duty welding.

**PULSE MIG Process Package:** Provides excellent control and quality for a wide range of materials.

**RapidArc High-Speed GMAW capability:** Maximises travel speeds and productivity.

**ArcLink/XT Interface to Robot:** Ensures seamless communication between the power source and cobot.

**Free software updates:** Keeps your welding system up-to-date.

**Industry-leading 5-year warranty:** Offers complete peace of mind.

### **Unlock Even More with Advanced Waveforms**

Enhance your welding capabilities with optional integrated modules:

- **STT Module:** Provides the original STT (Surface Tension Transfer), an industry-proven modified dip transfer GMAW arc for exceptional arc control and minimal heat input on thin materials. Also includes Rapid X, a highly stable modified Pulsed GMAW arc.
- **Advanced Module:** Includes STT and Rapid X, plus unlocks AC waveforms-
  - **AC STT:** Delivers excellent heat input control for even the thinnest materials, preventing burn-through and distortion.
  - **AC Aluminium Pulse:** Provides a highly stable modified pulsed arc for Aluminium, enabling increased travel speeds and superior quality.

## **Lincoln Autodrive 4R100 Wire Feed Unit**

The Lincoln Autodrive 4R100 Robotic Wire Feed Unit is a robust and reliable system that ensures consistent wire delivery.

It features powerful, heavy-duty motors and a MAXTRAC 4-roll wire drive system for a strong, consistent push on the wire, which is crucial for achieving stable arcs and high-quality welds.



INDUSTRY LEADING  
**5-YEAR**  
WARRANTY





# **MORE** versatility and **MORE** precision



**CRX-5iA**

Payload: 5 kg  
Reach: 994 mm

**CRX-10iA**

Payload: 10 kg  
Reach: 1249 mm

**CRX-10iA/L**

Payload: 10 kg  
Reach: 1418 mm

**CRX-20iA/L**

Payload: 20 kg  
Reach: 1418 mm

**CRX-30iA**

Payload: 30 kg  
Reach: 1889 mm

## **Key Features**

**INTEGRATION** - Integration has never been easier thanks to our cobots' lightweight, slim, and compact design.

**USABILITY** - Ready for business in no time: the FANUC CRX series is quick to set up and exceedingly easy to program.

**SERVICE** - Enjoy 8 years of maintenance-free operations.

**LIGHT TOUCH** - By default, every CRX device is equipped with FANUC's Force Sensor - for the ultimate in tactile precision.

**REPEATABILITY** Repeatability up to +/- 0.03 mm to repeat the same movement multiple times at the exact same dexterity.

## **TPS WeldTech Limited**

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