

TR COBOT

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TECNOROBOT

The ideal companion for welding processes

The Fanuc **CRX** series **collaborative robots** integrated within the Tecnorobot systems are cutting-edge products that have become a **benchmark in the collaborative welding sector**.

A WORLD WHERE
MACHINE OPERATORS
WORK ALONGSIDE
COBOTS.

In this manner, the Cobots can perform heavy duties and repetitive work, while operators can devote themselves to less strenuous, and more specialised as well as value-enhancing activities.

Integrated within the existing production environments, **the Cobots collaborate directly with the operators, making them an integral part of the team.**





ADVANTAGES of welding with **TRCOBOT**

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0.1 SAVING

Welding process	MIG-MAG
Welding wire	SOLID WIRE 1.2mm
Material	S 235
Plate thickness	15 mm
Tube wall thickness	4 mm
Position	PB
Pieces/day	300
Hours of production	8

53%
TIME

67%
COST



WORKING CYCLE	MANUAL	TR COBOT
Voltage (V)	26	26
Current (A)	240	240
Welding length (mm)	400	400
Welding speed (mm/s)	6	6
Number of welds	4	4
Arc ON time (ms)	267	267
Efficiency (%)	35	75
Total welding time with matching efficiency (s)	762	356
Qualified welder hourly rate (€/h)	42	30
Pieces per hour	4,725	10,13
Total cost per piece (€)	8,89	2,96

0.2 PROGRAMMING

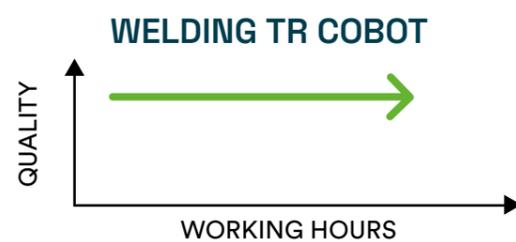
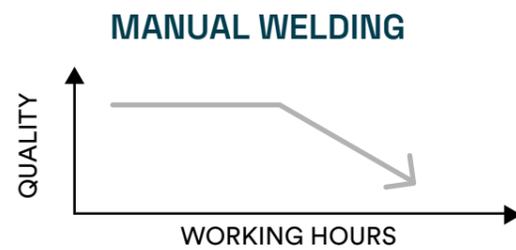
The Cobots' new **DRAG & DROP programming mode** is carried out using a 12" touch screen tablet: a **simple and intuitive tool** that can be used by any operator, regardless of their level of experience. Starting with the manual movement of the arm, the program can be created by performing DRAG & DROP operations on the tablet to save the positions reached.

As an alternative, the user can also use specific buttons installed directly on the Cobot's wrist to save the programme points without using the tablet.



0.3 QUALITY

Thanks to the accuracy provided by the robot, the welding quality remains consistent over time.



0.4 SAFETY

In the event of contact with an obstacle, **highly sensitive sensors** engage the safety stop device immediately. This function is certified according to the **ISO10218-1 standard** (including ISO/TS15066).



0.5 FLEXIBILITY

In particular, the CRX-10iA/L collaborative robot has a load capacity of 10 kg, a reach of 1,418 mm, and a **unique tilting motion**.

The TRCobot's **lightweight and compact design** allows it to be easily integrated within any existing system or work area, with no need for cranes or other lifting devices. All of these advantages help businesses **reduce costs, save valuable floor space, and improve profits**.



WELDING UNIT

TECNOROBOT

TR COBOT

MIG/MAG

Processes available for MIG-MAG welding with CEA system.



vision.
PIPE



vision.
POWER



vision.
ULTRASPEED



vision.
COLD



TECNOROBOT DIGITECH VP2		3200	4000	5000
TECHNICAL SPECIFICATIONS				
Power factor / cos φ		0,62/0,99	0,66/0,99	0,66/0,99
Efficiency		0,82	0,85	0,85
No-load secondary voltage	V	62	70	70
Adjustment range	A	10-330	10-400	10-500
Available Current at (40°)	A 100%	280	350	380
	A 60%	300	400	460
	A x %	330 (40%)		500 (50%)

All TR COBOT configurations can be set up for either Mig-Mag or Tig welding.

LAYOUT OPTIONS



TRCXM-XM CELL



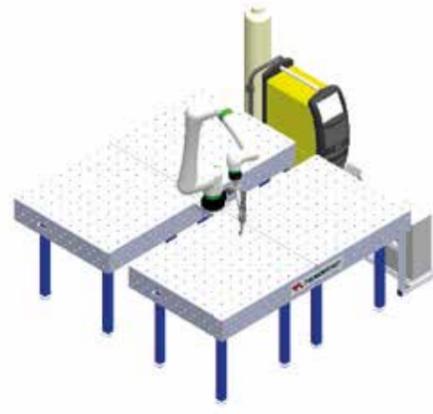
TRCX1 CELL



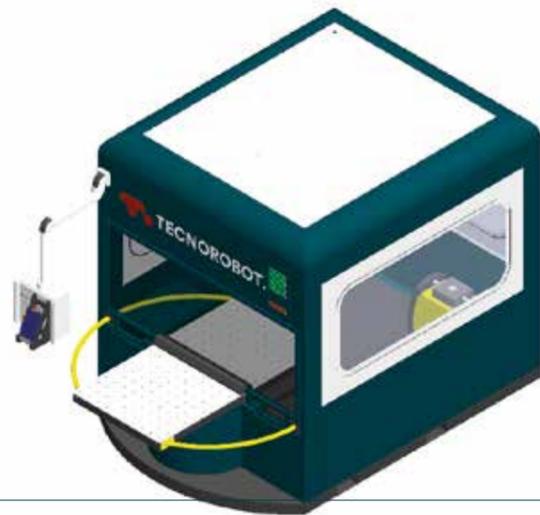
TRCX2 CELL



TRCX3 CELL



TRCX4 CELL



TR4403C

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