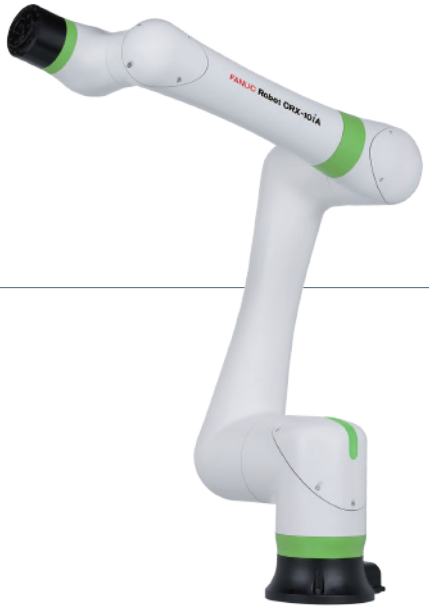
The Robot Award

Economy, Trade and Industry Minister Award



Collaborative Robot CRX

FANUC Corporation

A collaborative robot that is easy to use, even on the first try.

■Outline

Along with the aging population and low birthrate comes an increasingly insufficient labor force, and demand for a collaborative robot that can be automatized without a safety barrier in the manual manufacturing field is growing rapidly. However, despite this increase in demand, collaborative robots have still not yet become sufficiently widespread. The biggest reason that there has not yet been a collaborative robot that is both as easy as a smartphone or a toy to use and is highly reliable, safe, and doesn't break, even for workplaces where robots are not yet commonplace. With an aim to solve this issue, the Collaborative Robot CRX is a new robot developed to be safe, easy to use, and highly reliable. Even first-time users can easily operate it, and it has a simple, flexible automation that allows people and robots to divide the labor.

■Characteristics of Collaborative Robot CRX

The Collaborative Robot CRX has three major characteristics: safety, ease of use, and high reliability.

(1) Safety

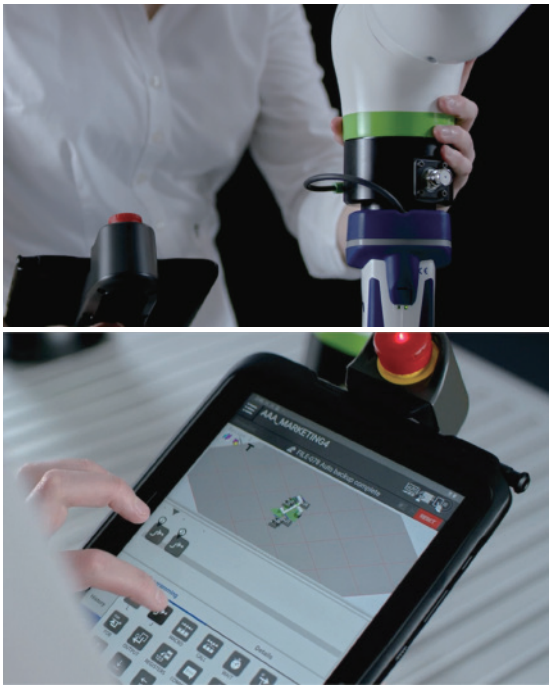
This began with the design, creating a rounded exterior that gives people a feeling of safety and willingness to work with it. A highly sensitive contact stop function ensures that the machine stops smoothly and safely with a light touch. The gap between the arms is large enough to prevent a person's arm from being caught. It is ISO 10218-1 certified for safety and can be used with confidence.

(2) Ease of use

The arm has been made as light as possible, it can be carried and installed by hand, and can be powered by AC100V, making it easy to install in any production site. The robot can be operated intuitively even if the operator is not familiar with robots. Users can create a teaching program through dragging and dropping icons with a finger, just like on a smartphone or tablet, without any specialized knowledge.

(3) High reliability

The highly-reliable design developed over many years includes a maintenance-free arm that is dustproof and drip-proof. It can be used with peace of mind because it won't break, even in tough environments where it is exposed to water and oil.



Direct teaching and tablet operation

■Achievements, development

In addition to the labor shortage, in this time of COVID-19, replacing some jobs where people work closely together with the Collaborative Robot CRX makes it possible to add more distance between people and avoid crowded conditions, which has made it very well-received. Demand is growing rapidly, and production capacity for the end of 2021 is scheduled to be three times higher than the present. The Collaborative Robot CRX responds to rapidly changing automation needs with its small footprint and ease of use that even first-time robot users can quickly learn.

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