FANUC ROBOTICS

PRESS RELEASE

New long-reach, high-speed food robot offers five axes flexibility

A new high-speed robot, designed specifically for the food industry, has been introduced by FANUC Robotics. Suitable for picking of primary and secondary foods, the M-430*i*A/2F Robot has a long reach of 900mm and five axes flexibility to accommodate horizontal or vertical product placement positions.

FANUC Robotics has used an anthropomorphic arm design to produce a large work envelope that allows the M-430iA/2F to quickly rotate or flip back on itself, if required, to cover an area of up to1.8mtr diameter. The arm can be vertically mounted, providing clear access when machine maintenance is required, or base mounted.

Two high-speed heavy duty motors for each of the major axes, joints one, two and three, use FANUC's Dual Drive Torque, Tandem Control Technology. This allows very high speeds to be achieved by the M-430iA/2F – carrying out the industry standard benchmark test where the arm moves up vertically 25mm, horizontally 300mm and then down

25mm, the new robot achieves 120 cycles per minute (cpm) with a 1kg payload and 100cpm with a 2 Kg payload.

The M-430iA/2F has been designed to meet stringent cleanliness requirements and has a smooth exterior surface with no contaminant trap areas – the paint has a high gloss finish and is resistant to acids and alkaline materials.

Designed for hose down cleaning, the robot is sealed to meet IP 67 standards and double seals on the major axes not only keep fluids out but ensure that its food grade grease stays within the durable casings. Joints four and five use nylon gears and do not require any lubrication.

The M-430iA/2F's runs with the new intelligent controller – the R-30*i*A series. The new FANUC Robotics controller provides enhancements to performance, an increase in the number of robot arms it can control and a fully integrated vision control system.

The R-30*i*A controller has improved vibration control which allows its motors to have shorter acceleration and deceleration times – essential for high speed food picking operations. Further control enhancements, including high performance constant path, help to speed up programming significantly.

Where vision is required the R-30*i*A controller helps reduce integration time and cost with its new integrated *i*RVision system. No additional hardware, other than a camera, is required to integrate vision with the new controller.

The *i*RVision system manages all image processing on the robot controller and by direct connection to the FANUC web server provides intuitive setup information. A clear camera image and programming data is displayed on the controller teach pendant making it easier for installation engineers to access information.

Control of up to 40 multiple axes is available with the R-30*i*A controller and when used in multi-arm mode one controller can control four arms and four auxiliary axes groups.

Further reducing the additional control hardware common to any installation, the new controller can be completed with its own Programmable Machine Controller (PMC). The PMC has an integrated monitor which allows the user to monitor the PMC ladder in a graphic display for all levels and sub programs that reside in the controller.

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Notes to editors:

FANUC Robotics UK Limited provides integrated robotic process solutions for manufacturing industry. A wholly owned subsidiary of FANUC Limited of Japan, FANUC Robotics has been established in the UK since 1982. Operating from its 2,200 sq mtr facility in Coventry, FANUC employs over 45 staff, and supports an installed UK base approaching 6,000 robots.

FANUC Limited was established in 1972 and employs over 2000 people world-wide. Based at the foot of Mt Fuji near Lake Yamanaka FANUC's factory uses over 1000 FANUC robots to support the production of over 24,000 robots per annum. The global installed base of Fanuc robots is over 160,000.