



PRESS RELEASE

NEW FANUC CNC features focus on easier operation and increased energy efficiency

Making its market leading CNC control systems easy to work with and providing the control requirements to drive energy consumption down are the two main areas targeted by FANUC with its recent new product introductions. High machine availability and easy programming both support production efficiency while controlling energy efficiency is increasingly the big issue affecting unit costs.

Easier operation

New functions that simplify operation include enhanced position control, full remote control through an intelligent pendant, enhanced 5-axis machining control, simple icon programming, status monitoring with auto-correction and safety functions to prevent machine collisions.

FANUC's Power Motion i-A CNC motion controller has now been enhanced with its High Response Motion Control function allowing multiple axes to be synchronised and positioned faster. Polling information for synchronisation is now available in cycles of 1ms enhancing positioning and motion control.

The 30*i* series, FANUC's high performance level CNC controller, now uses a new generation servo processor offering advanced 5-axis functions. Machining tolerances can be accurately programmed in, allowing the system to manage relative processing time while optimising surface quality and cycle time.

Completely independent operation, from the main CNC panel, is now available using FANUC's *i*Pendant. The pendants touch screen provides an identical image to that on the main panel screen providing greater flexibility for programmers and ease of operation. Further simplifying use and saving time, FANUC has also introduced 'smartphone type' programmable icons for calling up specific CNC screen content.

Safety receives attention with the introduction of the Safety machine Operators Panel; this is equipped with double contacts on all buttons and has provision to communicate directly with the CNC system using FANUC I/O Link *i*. Integration of the panel into FANUC's Dual Check Safety system is implemented automatically using the FANUC I/O Link *i* providing a proven safety solution for machine builders and OEMs. An additional machine safety function, FANUC 3D Interference Check, is built in to the CNC kernel of FANUC's mainstream 30*i*-B CNC controller family. The system prevents machine collision by constantly monitoring machine status and positioning during both set-up and operation.

Auto-correction is available on FANUC CNC Contollers using its Error Correction Code (ECC) function. Providing increased up-time the system monitors and corrects any internal data transfer errors that can occur as a result of oil contamination, electromagnetic interference, vibration and other typical conditions common in industrial environments. Engineers who need to be kept aware of the status can use FANUC Machine Status Monitoring which collects data from sensors and sends them via e-mail or to a smartphone.

Energy efficiency

Fanuc has focused on developing its products to meet the increasing demand for reducing energy consumption and three core areas - Detailed monitoring, quick restart and energy recovery - are already delivering improved energy efficiency to FANUC users.

The FANUC Energy Monitoring function has been developed to display detailed energy consumption levels down to component level. Providing sufficient detail to optimise machining cycles, identified components can be programmed to idle or to increase machining speed to contribute to increased energy efficiency.

Individual components set to idle become even more efficient now that FANUC has concentrated on Extremely Quick Restart. Machining centre OEMs already upgrading to the updated control technology are claiming spindle speed acceleration from 0 - 10,000 RPM in 0.16 seconds - almost twice as fast as previous systems without the fast start up technology and further increasing energy efficiency.

Available for some time now with FANUC CNC systems, efficient energy recovery from braking motors makes use of unused friction energy and as FANUC robots share the same control platform this function is now used across the FANUC product range.



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Image: Fa-170-02



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Notes to editors:

FANUC UK provides industrial automation solutions from the supply of CNC controllers, robots, drilling machines, EDM and injection moulding machines through to the complete integration of factory automation systems.

Providing a single customer support portal for its three core businesses, FANUC UK comprises FA – CNC Controllers, motors and drives, Robotics – industrial robots and systems, Robomachines – EDM, Injection Moulding, drilling machines.

FANUC Corporation is a world leading manufacturer of Factory Automation (FA), robots and Robomachines. Since its inception in 1956, FANUC has contributed to the automation of machine tools as a pioneer in the development of computer numerical control equipment. FANUC technology has contributed to a worldwide manufacturing revolution, which evolved from the automation of a single piece of machinery to the automation of entire production lines.

FANUC employs 6,500 people world-wide. Based at the foot of Mt Fuji, near Lake Yamanaka, FANUC's factory uses over 2,000 FANUC robots to support a monthly production capacity of 30,000 CNC controllers, 5,000 robots, 250,000 servo and spindle motors and 5,000 ROBOMACHINES and 250 CO₂ lasers.