FANUC

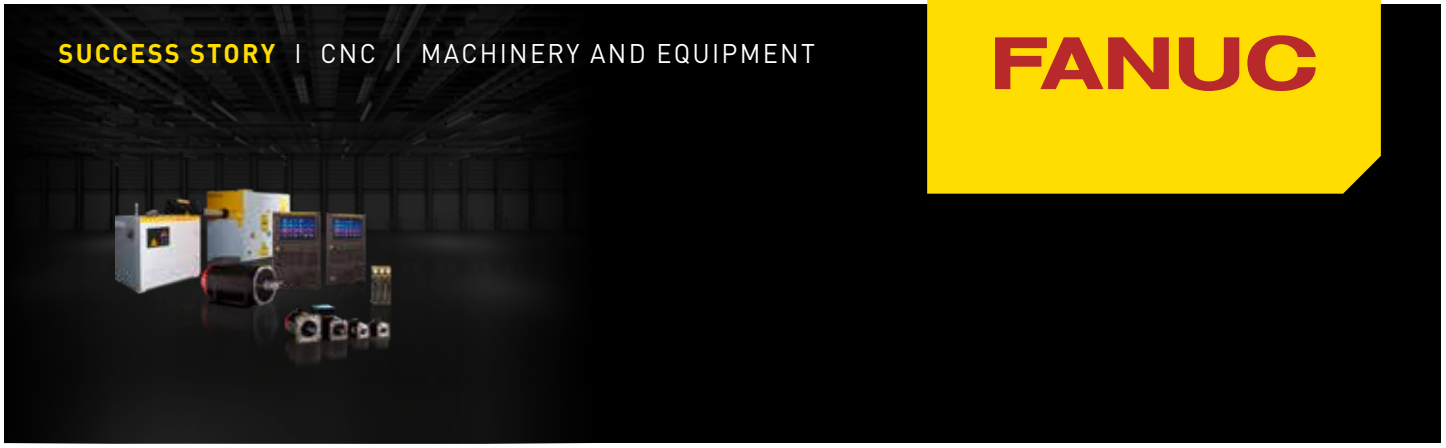
MACHINERY AND EQUIPMENT

FANUC for Mollart

Task To integrate a CNC into Mollart's new MicroDrill range that maximises the VDMF vertical micro-drilling machines' full potential.

Solution To partner with FANUC and control the micro-drilling machine using a FANUC 35*i*-B CNC. Primarily suited to milling and drilling lines, the 35*i*-B offers more capability than a PLC-based motion system, and benefits from a 100-Mbit Ethernet connection to facilitate high-speed part program transfers, data collection and remote trouble-shooting.

Result Thanks to the FANUC CNC, the MicroDrill is a best-in-class precision micro-drilling machine that is easy to programme, highly productive and can be easily retrofitted with robotic automation.



CNC micro-drilling machine – FANUC CNC offers efficiency and easy programming

Mollart unveils FANUC as exclusive CNC partner for the next generation MicroDrill range
Deep hole drilling specialists Mollart has unveiled FANUC as its exclusive CNC partner for its next generation MicroDrill range of VDMF vertical micro drilling machines.

The Mollart VDMF MicroDrill is used for highly precise small hole drilling applications ranging from Ø0.5 mm – 6 mm, and is available in 2 or 4-spindle variants depending on customer drilling requirements.

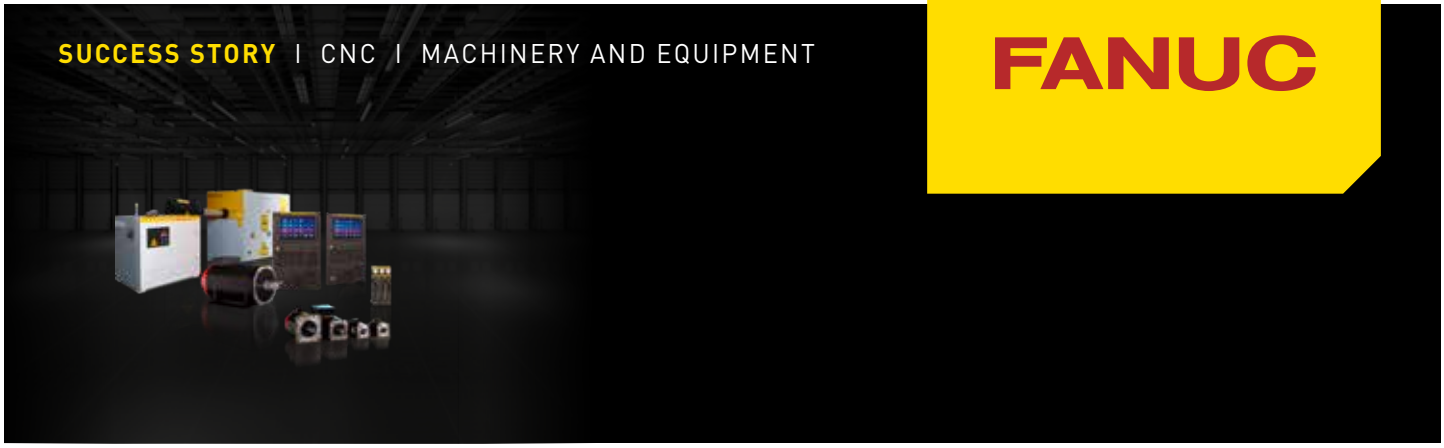
Improved accuracy and cycle times
First unveiled to European customers at EMO 2017, the new MicroDrill offers a 25 per cent cycle time improvement compared to its predecessor, and now boasts a new W-axis alongside a two-axis coordinate table for the drilling of prismatic parts or, alternatively, on-board loading options.

Greater drilling accuracy can be achieved thanks to an optional tailstock for component counter rotation of on-centre drilled components, while the MicroDrill – which has a compact footprint of just 2 m x 2 m – can also be configured to include a number of loading systems offering chip to chip times as low as five seconds.

The FANUC 35*i*-B CNC
One of the stand-out features of the latest version of the MicroDrill, is the integration of FANUC 35*i*-B CNC to control the machine. Primarily suited to milling and drilling lines, the 35*i*-B offers more capability than a PLC-based motion system, and benefits from a 100-Mbit Ethernet connection to facilitate high-speed part program transfers, data collection and remote trouble-shooting.

The CNC can also reduce cycle times thanks to five simultaneously-executing independent PMC ladders, which also eliminate the need for external PLCs; while the graphical user interface can facilitate faster programming times and quick access to real-time machining data.

Reaching its full potential
Ian Petitt, Managing Director at Mollart Engineering, said: *"When we first acquired the VDM it was clear that the machine had tremendous qualities, but needed significant upgrades to the drives and CNC in order for it to reach its full potential in the marketplace."*
He continued: *"We've worked with FANUC for more than 25 years and they were the natural partners to help us*



develop the machine. We believe that, together, we have now developed a best-in-class precision micro-drilling machine that is easy to programme, highly productive and can be easily retrofitted with robotic automation. Most importantly, the VDMF has a highly competitive price point for a machine of this quality."

Efficiency meets easy programming

Tom Bouchier, Managing Director at FANUC UK, added: *"Our partnership with Mollart is well-established and we were delighted to be invited to partner with the company on the upgrading of its micro-drilling machine. The inclusion of FANUC CNC in particular has made the VDMF much more efficient and easy to programme, compared to its predecessor. FANUC CNC is the most popular CNC in the world, which means that programmers will feel comfortable with the programming language and its capabilities – all of which help to deliver a more efficient production environment."*

Universal control

The move to FANUC CNC on the VDMF Drilling machine is the latest step in a close working relationship between Mollart and FANUC. It follows the creation of fully-bespoke Factory Automation system for a Taiwanese Mollart customer. Ian continued:

"The beauty of the FANUC CNC is that it can be configured to provide universal control across both a machine and any peripheral technology, such as process measuring equipment, rather than using PLCs which are of course bespoke to each application."

"Ultimately, Mollart prides itself on delivering precision drilling solutions that can be tailored to a customer's exact application requirements. Our relationship with FANUC ensures that we can extend the same level of control that we offer on our drilling machines, to the entire customer system – be it automated loading and unloading, or testing and measurement – from one central point of contact. This is why FANUC are our preferred CNC supplier, and we are very much looking forward to progressing our close working relationship with the company over the coming years."