

Compact robot set to find uses in manufacturing, electronics and laboratory industries

~TM Robotics launches a new version of the smallest robot in the Toshiba Machine range~

The new Toshiba Machine TH350A, launched in the UK and Europe by TM Robotics, is amongst the most compact robots in its class, a quality complimented by its high speed, high payload and built in PLC.

Arm lengths of just 350mm and repeatability of ± 0.01 mm mean that the TH350A is best suited to applications where precision and accuracy are paramount. It's payload of up to 3kg means that it has the ability to cope with the demands placed on it in the vast majority of such applications. However, when carrying a pay load of just 1kg it can deliver impressive cycle times of only 0.41 seconds. In addition, the robot's clean room class ten equivalent ($0.1 \mu\text{m}$) means it is suitable for use in low pollutant manufacturing environments.

Combined with the TH350A's high level of accuracy, the clean room classification makes it ideal for manufacturing electronic equipment, such as semiconductors or hard drives for instance, or for laboratory use. The robot is also expected to find applications in the general manufacturing industry handling small components.

"It has recently been predicted that by 2015 10% of Japan's workforce in assembly and process operations will be robotic," explained Nigel Smith, managing director of TM Robotics. "The UK and Europe have quite a lot of catching up to do in order to remain competitive. Around 920,000 industrial robots were in use worldwide in 2005. Of these 52 per cent were in Asia, 32 per cent in Europe and 15 per cent in North America. Our ageing population and inflating wages mean we are more and more likely to become a community of knowledge workers. Robots like the TH350A allow manufacturers to remain competitive as this happens."

The TH350A's built in PLC can, regardless of robot operation and program, control I/O equipment. The SCARA uses a Toshiba Machine TS1000 robot controller and can be programmed using SCOL, a proprietary language similar to BASIC. As an option it can feature devicenet or Profi-bus connectivity. A further option is the Toshiba Machine teach pendant, an external switch pad that can be used to direct the robot through a sequence of movements.

Weighing just 14kg with a maximum height including the cable harness of 635cm the robot is suitable for use in very small cells, further emphasising its versatility. The TH350A will replace the TH350 in the Toshiba Machine portfolio of industrial robots.

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Editor's note: If you want to stay constantly up to date on the latest news from TM Robotics, paste the following link into your RSS reader <http://tmrobotics-pr.blogspot.com/atom.xml>. If you don't have an RSS reader, I can recommend the following free package Sharp Reader.