

On target for robot welds

SCHWEISSEN & SCHNEIDEN, the international trade fair for joining, cutting and surfacing, will be the platform for NIMAK to present a new concept for robot welding guns. According to the German manufacturer, a supplier of resistance welding technology, the new generation of robot welding guns is aimed both at the requirements of the multi-material mix and use in large-scale production for conventional steel applications. It features a centralised motor and gear unit that enables significant weight reduction and lowers interference contours. NIMAK will also highlight a new welding process on its booth at the trade fair.

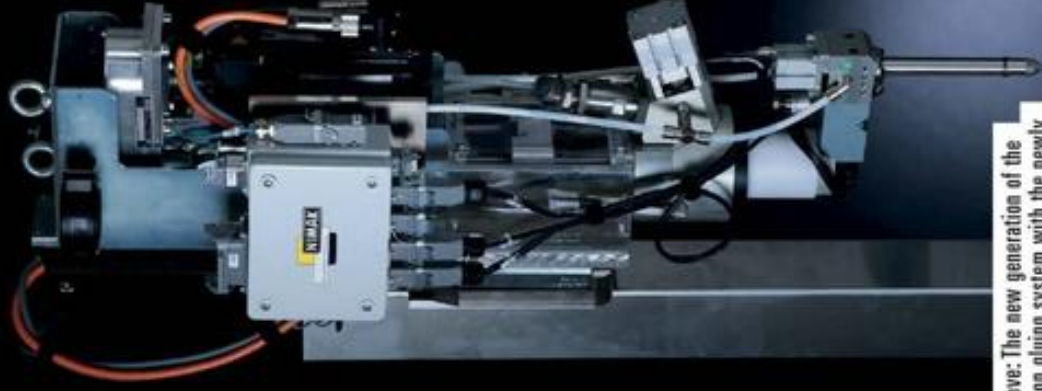
"The 'magneticDRIVE' drive type, which uses the high power and immense speed of microprocessor-controlled electromagnets, is also available for the first time in connection with new time welding (STW). This facilitates welding times of a few milliseconds, providing an alternative for the previous capacitor discharge welding. The prerequisite is an rapid power-generation and slip system in which the user can set an exact power profile which controls the rise and fall of the electrode force across a large range in milliseconds," explained the manufacturer.

Below: Robot welding gun, powerGUN, with STW and magnetic-DRIVE technology

"Together with STW, 'magneticDRIVE' can be used in all resistance welding applications, from stationary spot and projection welding machines up to robot welding guns. The new short and controlled welding process opens up new joining opportunities in the modern multi-material mix. That is especially interesting for spot and projection welding of aluminium with highly-varied alloys that are used in automobile construction as well as in the aerospace industry. We can optimise the quality but also significantly extend the service lives of the electrodes," it added.

During the trade fair in Düsseldorf, the company will also be presenting its new generation of 'a.tron' systems. For this glue dosing and application technology, NIMAK has developed a new decentralised controller. It is now integrated in the dosing feeder.

See www.nimak.de



Above: The new generation of the a.tron glue system with the newly developed, decentralised controller

