TechUpdate

Punch-Laser Combo Engineered to Optimize Throughput

Amada America, Inc., Buena Park, CA, introduces the LC-C1NT combination punch-laser machine, engineered to reduce the time required to transition a sheetmetal blank between modes from the typical 5 sec. down to as little as 2.2 sec. The cumulative effect of this time savings across a full sheet of nested parts, say company officials, can easily add up to 2 min. or more per sheet of reduced run time.

In addition to the reduced transition time, the C1 has been designed with new Y-axis punch- and laser-positioning drive modules that employ digital direct-drive servo motors, eliminating the need for gearboxes. This provides positioning accuracy to ±0.003 in., some 25 percent more accurate than machines that use a gearbox in their Y-axis drives, the company says.

Amada America, Inc.: 877/262-3287; www.amada.com

Machine-Foundation Experts Solve Press-Pit Challenge for Automotive Stamper

Progressive-die stamper and tool and die shop Wellington Industries, Belleville, MI, recently installed a 2000-ton press that required a unique foundation solution. When preconstruction soil testing revealed a water-soaked sand base insufficient to support the 1 million-lb. press, machine-foundation and press-pit experts Delta Industrial, Chesterfield, MI, excavated the site to remove the sandy soil.

The 22-ft.-deep excavation project required support by 30-ft. steel pilings; Delta pumped water from the pit through six well points. Then, after allowing the ground to dry, Delta used an epoxy-based non-shrink grout for the press pit that the firm says is five times stronger than concrete. During press installation, Delta

placed four 3-ft. by 2-in.-thick leveling base plates atop the foundation, 20 ft. apart, that were within 0.001 in. variance—no additional leveling was required.
Delta Industries: 586/598-1390; www.deltaconcrete.com

New Servo Press Features Nine-Point Support System, Zero-Clearance Slide Gibs

Aida-America Corp., Dayton, OH, has introduced a new servo-press version of its ULX-series precision stamping press, the ULX-D. It adds the firm's direct-drive ServoPro technology to the ULX presses, which feature a rigid nine-point support system, zero-clearance slide gibs, and a no-connecting-rod design. This combination of features, the company says, has allowed manufacturers to shift from secondary machining processes to precision near-net-shape metalforming.
Aida-America: 937/237-2382; www.aida-america.com

Pre-Engineered Application-Specific Robotic Cells

ABB Robotics, Auburn Hills, MI, has developed the Universal Small Cell (USC), a standard robotic-cell platform that can be integrated with the necessary process equipment for specific applications. The pre-engineered features of the USC provide a building block of elements common to all robotic applications, simplifying installation of wiring and components.

The common platform minimizes mechanical and electrical engineering design costs, and the volume production of a common unit reduces labor, assembly and material costs. It's built with modular equipment, allowing the cells to be used independently or as part of a multi-cell assembly zone, an assembly line or a complete workshop.

Standard features include an IRB 1410, 1600 or 2400 robot with controller and graphical HMI teach pendant; a 180-in. manually indexed two-station positioner; all of the required safety equipment and perimeter guarding; a metal mounting base; and dual cell doors with interlock device. Customize the USC for assembly, arc welding, cutting, deburring, grinding, trimming and polishing.
ABB Robotics: 800/435-7365; www.abb.com/robotics