ROBOTIC AUTOMATION... from Weldon Solutions

In manufacturing, many tasks involve the transfer of parts and components to and from machinery. Parts need to be loaded and unloaded into CNC grinders, lathes, mills and other processing equipment. Everything from raw materials to finished goods need to be moved throughout manufacturing. Parts need to be deburred and have imperfections removed. Adhesives and sealants need to be dispensed in exact amounts and patterns. Goods must be loaded into containers or packed into cases and palletized and moved throughout storage and distribution systems. Robots are ideal for such tasks, eliminating inefficient and tedious manual labor and expensive custom-built machinery.

MACHINE TENDING

Consistent feeding of parts is the key to efficient machine tool operation. Robots excel at quickly and accurately loading and unloading parts into workholding devices. The smooth production flow resulting from robotic automation supports the lean manufacturing objectives of quality, efficiency and waste reduction.

MATERIAL HANDLING

Raw material, work-in-process, finished goods, dunnage and containers must be constantly moved throughout a manufacturing facility. Robots are ideal for handling heavy or bulky items and can eliminate lost time accidents that result from repetitive motion or exposure to a hot, dusty or noisy environment.

MATERIAL REMOVAL

Many manufacturing processes create parting lines, flashing, rough surfaces and irregular welds on a part. These must be removed in order to eliminate sharp edges or other undesirable features. Robots are able to reliably perform material removal tasks that result in the same quality finished part every time.

PACKAGING & PALLETIZING

High-speed manufacturers produce a steady stream of goods that must be prepared for delivery to various downstream processes or to external customer facilities. Robots offer custom-designed grippers, machine vision systems and programmable motion that allow them to gently package or palletize product with accuracy, efficiency and speed.

DISPENSING

Joining materials together with adhesive or sealing joints are tasks that can be reliably performed by a robot. An automated system ensures that the exact amount of material is applied every time in exactly the right place. Controls keep track of timing parameters that are critical for long term integrity of the bond.
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TURNKEY SYSTEMS...

Weldon Solutions delivers the ingenuity, expertise and commitment you need to make your next robotic system installation a success. We are an Authorized System Integrator for FANUC Robotics, North America’s leading supplier of robots. FANUC high performance robots, coupled with our advanced systems engineering, project management skills, and extensive industry experience have enabled us to successfully automate numerous applications across a variety of industries.

When you choose Weldon Solutions, you’ll soon discover we’re not just an automation supplier - we’re a member of your team. From concept design through production and installation, we deliver all the services you need to efficiently and effectively automate your manufacturing process. In addition, we provide ongoing service and technical support to help you operate, maintain and optimize the equipment and systems we install.