COMBINATION OF CNC MACHINES AND LOADING ROBOTS: GREATER EFFICIENCY IN MANUFACTURING

Capacity expansion through automated loading

Collaboration between machine tool manufacturer HURCO and suppliers of automated loading systems has resulted in higher productivity and greater returns. Automated loading enables capacity expansion in individual piece and small series production without a need for additional personnel to operate the machines. Loading robots can also be deployed in unmanned shifts or on weekends.



Pliening, Germany, March 2019: With automation solutions, HURCO offers medium-sized manufacturing companies in particular the chance to successfully counter the growing shortage of skilled workers. If work such as loading and unloading CNC machines is taken over by a robot, skilled workers can be deployed for more demanding tasks. This leads to a reduction in unit costs and more efficient use of personnel. “We cooperate with various suppliers of automated loading systems,” reports Michael Auer, Managing Director of HURCO Germany.



Combination with different loading systems possible



“This enables us to meet different process requirements and provide our customers with a sustainable way to increase productivity while maintaining production quality.” In practice, this means that HURCO informs customers about suitable automation solutions on the market, such as EROWA, BMO Automation or ZeroClamp, and supports them in their implementation. This can go as far as integrating the machine tool into an existing process control system via the DNC interface. Its software thus takes over the organizational tasks and processes production orders on the connected machining centers in accordance with the program.

Second or third shift without personnel

In the practical application example, an EROWA Robot Compact 80 or the Titanium robot from BMO each operates two CNC machining centers docked to the right and left of the loading system. The parts to be machined are provided on trays in the robot cell. The robotic arm integrated into the cell positions each of them individually in the HURCO machining center and removes them after completion to place them back into trays in the cell. The new Zerobot® loading robot from ZeroClamp also flexibly changes tools and grippers during the course of a manufacturing process.



“All that remains for the operator is to program the machine tool and load the racks in the cell,” explains Auer. Like many contract manufacturers, Peter Lemke, managing director of MAL Metall- und Anlagenbau Lemke GmbH, sees the automation of individual manufacturing steps as the only way to meet the good demand for orders despite a lack of personnel. “We have been desperately seeking machining mechanics for quite some time,” he says, describing the situation. “The integration of a loading robot with pallet station allows us to run a second or third shift without personnel.”

Contact:



HURCO Werkzeugmaschinen GmbH
Alexandra Banek
Gewerbestraße 5 a
85652 Pliening
Phone +49 89 905094 29
abanek@hurco.de



CONTACT

HURCO Werkzeugmaschinen GmbH
Alexandra Banek
Gewerbestraße 5 a
85652 Pliening

phone+49 (89) 905094 - 29

E-mailabanek@hurco.de

Back to overview

Download PDF

Follow us

