

Intelligent Work Piece Handling: Liebherr Robot System for Bin Picking

Kempton (Germany) September 16, 2013 – Bin picking is one of the most challenging industry automation applications. The foundation of this system is the automatic unload of randomly arranged work pieces out of dunnage. To date there are very few robot designs that meet both the sturdiness and cycle time requirements.

Liebherr offers flexible robot systems with which bin picking can be economically automated. Liebherr has designed and created robot systems that help automate manufacturing processes to increase capacity thereby lowering costs. Many tasks can be solved with the long established tried and tested work piece handling components from the Liebherr automation systems area. Liebherr possesses years of experience with automation systems in the most varied branches and fields of manufacturing. This produces proficiency in new technology development.

Unloading the work piece out of dunnage is a complex interaction between a vision system, software and robot. According to the part spectrum all process-relevant steps need to be synchronized to reach an optimum grip and positioning result.

Liebherr robot systems have a reliable and dynamic 3D object identification system based on powerful software which separates, identifies, and part selection. This robot system is also designed with a specially-developed gripper with additional axes for collision-free gripping and removal of the parts from dunnage.

Visitors to EMO Hannover will find Liebherr at Booth A11 in Hall 26.

About Liebherr-Verzahntechnik GmbH

The Liebherr Group has been designing and manufacturing gear-cutting machines for nearly sixty years. Since 1962, these activities have been centred at Liebherr-Verzahntechnik GmbH in Kempton, Germany. Today, Liebherr is one of the leading manufacturers of CNC gear-cutting machines and automation systems. The company manufactures gear hobbing machines, gear-shaping machines, generating and profile

grinding machines and gear-cutting tools. In the field of automation systems, in cooperation with well-known machine manufacturers, Liebherr supplies machining lines, automated machining centres, and system integration of machine tools with gantries, robot integration and pallet-handling systems.

Liebherr-Verzahntechnik GmbH is the divisional control company of the Liebherr Group's machine tools and automation systems division. This division employs about 1,300 people all over the world and has manufacturing facilities in Kempten (Germany), Ettlingen (Germany), Collegno (Italy), Saline (Michigan, USA) and Bangalore (India) along with a worldwide marketing and service organisation.

Captions

liebherr-automation-bin-picking1.jpg:

Liebherr's bin picking solution

liebherr-automation-bin-picking2.jpg:

Bin picking solution: collision-free removal of items

Contact person

Thomas Weber

Phone: +49 831 786-3285

E-mail: Thomas.Weber@Liebherr.com

Published by

Liebherr-Verzahntechnik GmbH

Kempten / Germany

www.liebherr.com