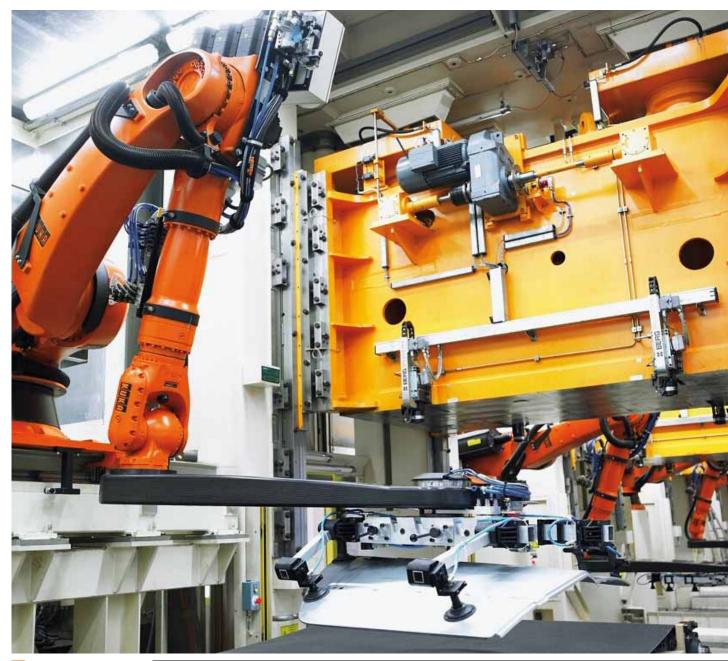
KUKA



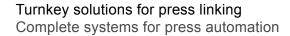
KUKA Systems

Press automation



Press automation with KUKA Systems

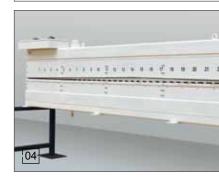
The requirements are clear: "Trouble-free operation with maximum output and top component quality". That is what productive press shops must achieve today. KUKA Systems has the comprehensive expertise required for the automation and linking of press lines. Using flexible robot systems, the presses are linked together to ensure maximum sustainable reliability and productivity. Modern simulation tools and automation and visualization systems enable an optimal design of the linking system.



KUKA Systems always has the right turnkey solution on offer – whether using the KUKA WaveLine, the first robot-based press line with continuously running presses, or a tandem press line for classic production in start/stop mode. Combined with the use of standardized components, the customer can select from a wide-ranging portfolio of specially developed system elements. Alongside the "Press-to-Press" automation, the areas upstream and downstream of the press line also contribute to the performance of the overall system. As well KUKA Systems offers a wide variety of service-proven press shop modules. For the "Front of Line" area, this includes a range of destacker solutions, also for aluminum and stainless steel blanks. For the "End of Line" area, solutions for stacking the finished parts can be supplied, for example. In addition to service-proven modular software packages, individual customer needs can be implemented – from basic requirements right up to the full range of functions.







Robot-based press automation

KUKA Systems has developed special robotic solutions for press automation. Different variants are available, with a payload capacity ranging from 60 kg to 120 kg and a reach of up to 8.5 m. Longer reaches are implemented using a KUKA Systems linear unit.

O1 KUKA Interpressor

The KUKA Interpressor is based on a 6-axis robot and is used for handling the blanks between the presses. Equipped with specific electrical and pneumatic interfaces, the KUKA Systems software KS PressTec and a fully integrated function package for component handling.

02 KUKA Transpressor

The KUKA Transpressor is also a 6-axis robot, supplemented by a specially designed carbon arm as an extended kinematic system. This makes the KUKA Transpressor the ideal solution for high-speed handling of large workpieces or multiple workpieces in a single cycle.









03 KUKA Cobra

With the KUKA Cobra, an additional linear and swivel axis is mounted on the arm of a 6-axis robot, enabling the presses to be loaded and unloaded even faster. The KUKA Cobra is the central automation component in the KUKA WaveLine system concept.

64 KUKA Oiler

The KUKA Oiler is a spray greasing system for the total or partial application of deep-drawing lubricants on the blanks, for optimal support of the forming process. Depending on the requirement, single or double-sided application can be selected. The KUKA Oiler is a complete system that is integrated into the Front of Line process.

05 Software

From cutting blanks to press linking and stacking finished parts, the intelligent software solutions from KUKA Systems give press shop operators greater output, high availability and improved component quality. The basic modules KS PressMaster and KS PressTec are suitable for modular expansion at any time with a range of different applications.

With KUKA InterPressControl and the use of Ethernet technology, both line and safety functions can be implemented in a single bus system.

Benefits

- Wide range of pressed components due to high flexibility in the motion processes
- Faster loading/unloading of automation presses
- Designed for ease of maintenance and assembly
- High repeatability
- Modular system
- Reduced retooling times due to automatic tool change

KUKA



KUKA Systems is the international supplier of flexible automation systems for the Automotive, Aerospace, Energy and Technology Solutions segments. Some 3,600 employees worldwide work on ideas, concepts and solutions for automated production and the provision of products and services for virtually all tasks in the industrial processing of metallic and non-metallic materials. In the Technology Solutions segment, KUKA Systems supplies solutions for all aspects of joining, assembly and handling. The process technologies, which include numerous types of welding, bonding, cutting and press automation, are constantly being developed and refined to produce independent solutions for manufacturing industry.

For further information, please contact us at pressautomation@kuka.de

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Bluecherstrasse 144 | 86165 Augsburg | Germany Phone +49 821 797-0 | Fax +49 821 797-1991 info@kuka.de | www.kuka-systems.com Specifications regarding the characteristics and usability of the products do not constitute a warranty of properties. They are intended to serve informative purposes only. Some items of equipment depicted in the illustrations are optional, and are not included in the standard scope of supply. Solely the respective contract of sale shall be binding in respect of the extent of our supplies.