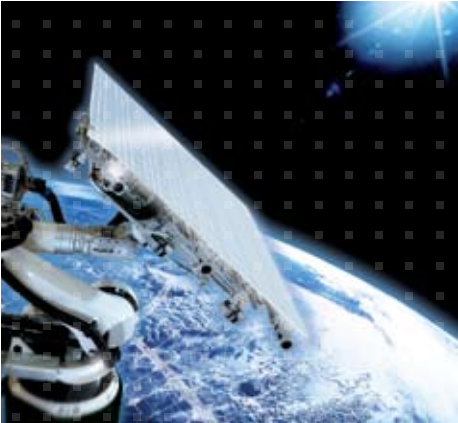


KUKA

KUKA Systems Corporation North America

AEROSPACE DIVISION



■ AT KUKA SYSTEMS EVERYTHING REVOLVES AROUND AUTOMATIC MANUFACTURING PROCESSES

KUKA CORPORATE HISTORY

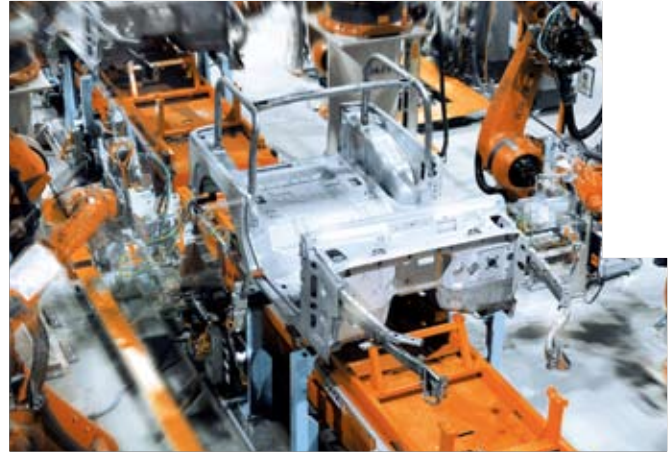
KUKA concentrates on advanced solutions for the automation of industrial production processes. Ever since the company was founded over 100 years ago, it has stood for innovation in mechanical and systems engineering; it is one of the world's leading suppliers in the field of robot technology as well as in plant and systems engineering.

KUKA SYSTEMS OVERVIEW

The KUKA Systems Group is one of the world's leading providers of engineering services and manufacturers of flexible automatic production systems. Our customers are companies from the industrial, automotive, aerospace, solar industries among others. Our range of performance encompasses products and services for almost all applications in the industrial processing of metallic or non-metallic materials. With some 3,500 employees in over 15 countries each of the companies works for the production solutions of the future.

Our customers should see our products and services as offering high quality and being innovative and competitive. We want long-term success – for ourselves and our customers. KUKA Systems offers solutions for joining, assembly and handling. Our solutions are based on process technologies that we are constantly improving and optimizing. This is why we place great emphasis on the health and safety of our employees, customers and sustainable management of the natural resources from the world around us.

MANUFACTURING AND PRODUCTION OPERATIONS



KUKA is the Body-In-White manufacturer of the Jeep Wrangler. The supplier park has 245 KUKA Robots used to material handle and resistance spot weld.



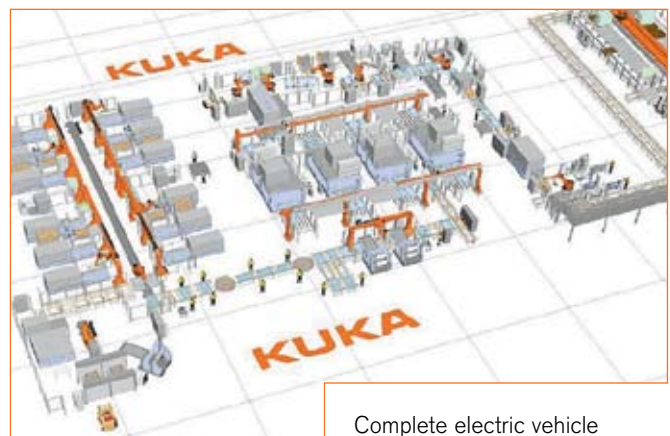
KUKA ROBOTICS

Innovative and intelligent robots offer enormous potential for rationalization.

KUKA WORLDWIDE

KUKA stands for global innovative technology in robot-supported automation of industrial manufacturing processes.

HIGH PRODUCTION PLUG-IN HYBRID VEHICLE ASSEMBLY PLANT (2012)



Complete electric vehicle assembly line including

- Car body assembly
- Chassis assembly
- Final production line

KUKA SYSTEMS ADAPTS ITSELF TO YOUR CORPORATE STRATEGY

- CUSTOM-TAILORED SOLUTIONS THROUGH FIRST-HAND AUTOMATION COMPETENCE**
- AEROSPACE INDUSTRY
 - AUTOMOTIVE INDUSTRY
 - ENERGY INDUSTRY
 - GENERAL INDUSTRY
 - PROCESS DEVELOPMENT CAPABILITY
 - MANUFACTURING/ PRODUCTION OPERATIONS



AEROSPACE AUTOMATION



Automated Guided Vehicles (AGV) and Transportation Solutions



Multi-Functional End Effectors



Mobile Robotic Platform for Drill, Countersink, Riveting and Fastening

ENGINEERING AND PROCESS DEVELOPMENT



KUKA Research and Development Lab



Full-Service CAD Modeling, Design, and Throughput Simulation



Capabilities-Based Process Development

GLOBAL AEROSPACE SYSTEMS AND PROGRAMS



45 to 100 Ton Omnimove Vehicles



Wing Box Assembly



Large-Envelope Fuselage Assembly

ASSEMBLY TOOLING AND JIGS



KUKA



**WOULD YOU LIKE MORE INFORMATION ABOUT KUKA AEROSPACE?
CONTACT US AT AEROSPACE@KUKANAO.COM OR CALL +1 586 795 2000 EXT. 4104**

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.

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