



6-axis cleanroom robots are a cost effective solution for the semiconductor industry

KUKA cleanroom robots provide simplified integration in Siemens Equipment Control System

## Let it robot

KUKA Roboter GmbH has developed a series of cost effective 6-axis cleanroom robots dedicated to the semiconductor, flat panel and pharmaceutical manufacturing processes. The high-performance controller from KUKA features a Profibus interface, Siemens WinAC logic control and a library component for Siemens ECS, to configure and implement your robot in record time while reducing the cost of engineering.

hensive range of cleanroom robotic units allows KUKA to cover the majority of applications that arise in the cleanroom production area.

### Clean according to FS 209 E

The cleanroom models differ from standard KUKA robots in their specially ground and painted surfaces which guard against the build-up of particle deposits. Modified seals prevent abrasion. In addition, every cleanroom robot is fitted with a connection for dust extraction. All models are constructed to be compatible with either class 5 (according to DIN EN ISO 14644-1) or 100 (according to US Federal Standard 209 E) cleanroom operation.

### Partnership with Siemens

KUKA Roboter GmbH and Siemens Automation and Drives (A&D) have set up a joint partnership agreement to develop software components allowing simplified integration of robots in Simatic Equipment Control System (ECS).

“Connecting robots to a PLC-based automation system is nothing new,” said Ralf Ziegler from KUKA Roboter GmbH. “What’s unique about the KUKA robot family is that the robots are programmed and controlled directly from the customer’s equipment control platform. Using Siemens ECS de-



Picture: Supfina

Picture: KUKA Roboter

Robots are increasingly becoming the universal core element of automation. At the same time, an increase in the robots’ functionality can be observed. This trend has given rise to new fields of application in, around and beyond the semiconductor industry.

KUKA Roboter GmbH, one of the world’s leading suppliers of industrial robots, has developed a series of cost-effective 6-axis cleanroom robots dedicated to the semiconductor, flat panel and pharmaceutical manufacturing industry.

The KUKA family of cleanroom robots are based on the field proven technology of standard KUKA industrial robots. These six-axes high-performance robots featuring a 6 degree of freedom wrist with compound movement profile, allow handling of objects at virtually any angle. With payloads available from 3kg to 500kg, this compre-

signer, modules, components and aggregates can be organized into hierarchical modular trees. The ready to use library components can be easily arranged on a worksheet using drag and drop functions. Finally, the system automatically generates all required automation functions such as hardware configuration, GUI generation, GUI tag management and database population, standard object and screen design and all system messages in the alarm logging system database”.

“This technical partnership allows us to integrate our cleanroom robots in the most advanced and innovative control hardware and software platform for the field of semiconductor manufacturing,” says Ziegler. ■

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