SafeGuiding
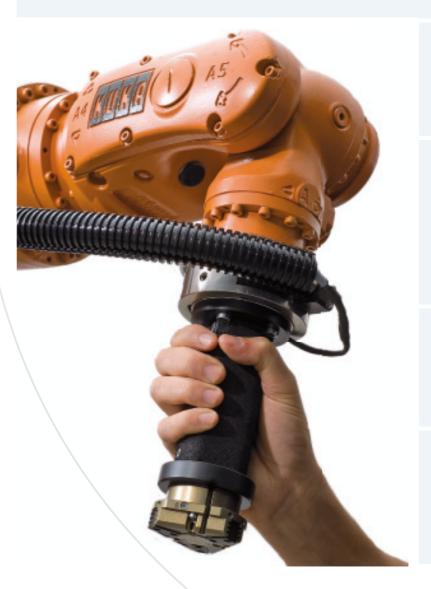
SafeGuiding Technology is an option for KUKA Robots ranging from a 5 – 500 kg payload, for moving the robot manually (hand guided).

The BG-approved safety functionalities fulfill PL = d (DIN EN ISO 13849) and allow a collaborative operation related to DIN EN ISO 10218

Applications – customer benefit

To move a standard industrial robot that offers a variety of new applications:

Intuitive Teaching of trajectories

Because of the manual guidance <u>also</u> trajectories can also be recorded. This is done by storing points in a fixed time or path interval (e.g. every 5 mm).

Manipulator mode: Force intensification for the human

Hand guided robots could replace conventional manipulators e.g. in the field of assembly. In that area ,the automatic and semi-automatic mode as well as virtual walls, offer large benefits compared to pure force driven systems.

Flexible Positioning:

Positioning of heavy parts e.g. for welding in pre-serial or small batch size production. Comfortable supply of components to the human e.g. for quality inspection.

Teleoperating

Even where the human is not in the work space of the robot, the Safe Handling technology offers interesting user cases. E.g. in the nuclear industry the robot can be moved

SafeGuiding

The technology package SafeGuiding offers the following features to a KUKA robot with KUKA.SafeOperation technology:

- External sensor (e. g. Joystick, SpaceMouse or Force Torque sensor) for intuitive, manual guidance of the robot

- Monitoring the robot's movement by virtual walls

- Configurable degrees of freedom (X, Y, Z and rotation A, B, C)

- Certified by German "Berufsgenossenschaft" (Occupational Safety Agency)

- Dual channel, three position enabling switch

- Control panel with emergency stop

- Safety related connection to the robot controller

- Retrofit (KUKA.SafeOperation must be installed in advance)

MRK-SYSTEME GMBH

Stätzlinger Strasse 70   86165 Augsburg, Germany
Tel +49.821.7949-580   Fax +49.821.7949-581
info@mrk-systeme.de   www.mrk-systeme.de