



# AUTOMATIC

## AUTOMATION - ROBOT TECHNOLOGY



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**KiGO** painting in movement  
Painting & Conveying Systems



In order to meet high expectations for quality, as well as a requirement for uniform surface treatment and increased efficiency, more and more choose to use robots to automate their finishing tasks. Robot technology can be integrated into total solutions, wet painting & powder coating. Our products ensure the highest stability, quality and uniformity in the completed finishing tasks, while installation, system integration and programming ensure a good service and maximum performance with the robot.



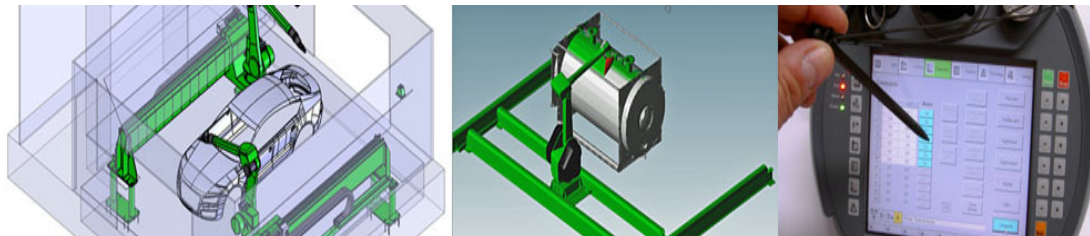
### Self learning program - Off-Line Painting Program

#### Self learning program.

In the direct self-learning programming, the user drives manually, through a joystick, the robot in a complete spraying cycle over a sample. The computer control stores all the paths and commands received; in order to be able later to repeat them faithfully with the desired speed. This method makes very easy the use of the robot because, during the sample parts processing, it is possible to check the program on progress and any eventual error can be correct easily. So, it's very useful to varnish complex-shape pieces.

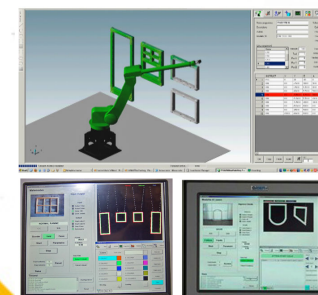
#### Off-Line Painting Program.

The program generation over personal computer The off-line system is a program that allows to develop and verify the painting program made by the robot. The system starts with a 3d model of the piece, on which are put the painting points; later, they will fix the paths carried out by the robot. Moreover, the program manages all the gun painting parameters with the aim to obtain the desired color; a rendering system with different colors will show the varnish quantity in each point of the piece to be paint. The software uses the same interface located on the robot controller and it includes a manual instructions on line with suggestions about its abilities. Once it is saved, the program is sent to the robot, to be processed as a real painting program; at the same time, the programs performed on the robot can be visualized by the software for any further changed and thus reloaded over the robot.



### Automatic generation of the painting cycles

Self-generating program software, equipped with all control movement parameters and application mode, that can be set up by the user according the type of piece or the required quality. The system is provided with a reading barrier for the dimensional relief of the details in transit on the conveyor chain. A scanning system placed before the panting zone takes picture of the object to be varnished, the reading data are sent to a personal computer to be handled by means of a software, in order to create a working program for the robot. The program is transferred to the robot who, depending on the pre-established tables, associates the image with a kind of painting optimized by rules which are distinguished according the thing to be painted.



#### Advantages:

- Automatic generation of the painting cycles
- Not necessary a technician to manage the robot
- Outstanding and homogeneous finishing quality