

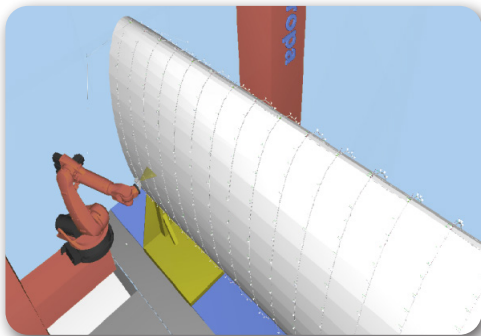


Easy off-line programming of paint and surface treatment robots.



Inropa™ Programmer is a practical and efficient PC-based off-line programming system for shop floor personnel and engineers. The program is a manual off-line programming system that allows the user to operate with a virtual model of a robotic cell.

With Inropa™ Programmer it is possible to create new robot programs without stopping the paint line. Inropa™ Programmer is easy to use and can handle all types and brands of industrial robots.



Programmer lets you work in a virtual robotic cell for your convenience.

EFFICIENT PROGRAMMING

With Inropa™ Programmer you can create new robot programs without stopping your paint line. This means more up-time in your production. Inropa™ Programmer system is simple

and requires little training or knowledge. Operators who can operate a Windows based PC will be able to use the system. Generally, there is

a fast learning curve for operators who use Inropa™ Programmer. Furthermore, the user interface is intuitive - making it possible to focus solely on the painting process.

CREATING ROBOT PATHS

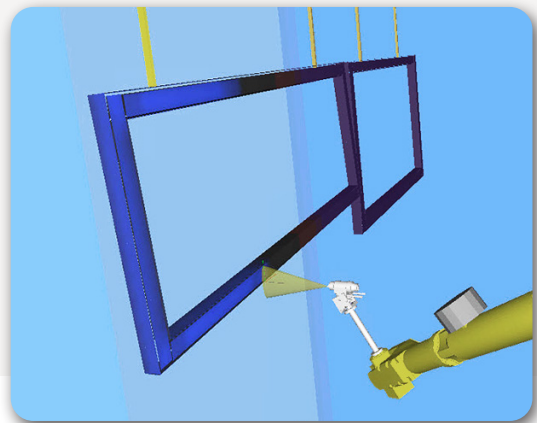
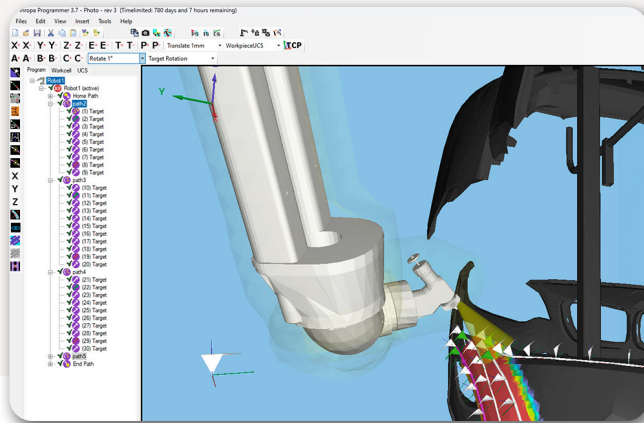
Robot paths are created by mouse clicks on the parts in the graphical window. It is possible to set any number of points in a path and edit the path by moving the points.

EDITING ROBOT MOTIONS

All motions are shown in a tree

view, and each path can be expanded to show each robot target with indication of the target type; Linear, Joint, Circular, Gun-On or Gun-Off. When selecting a robot target it is possible to see or change the parameters for the robot target. Robot motions are simulated be-

fore releasing the program to the physical robot. Singularities and collisions are automatically shown in the off-line programming system so potential problems can be fixed before transferring the programs to the physical robots.



Inropa™ Programmer requires fewer programming steps than average software and therefore reduces time consumption and personnel costs. Make robot paint programming easier with Inropa™ Programmer.

VISUALIZING THE PAINT JOB

With Inropa™ Programmer it is easy to get an overview of the paint job; the paths are shown along with the paint tool, robot, parts, and fixtures. A tree structure shows all movements and points, and a property window will show all information on selected movements. The tool can be visualized on the robot target when this is selected. Changing position or angle is done with a single mouse click and without having to jog the robot.

MANAGING PAINT PARAMETERS

It is possible to manage all paint parameters using the built-in Paint Brush Table. Each brush has a unique colour. You can select a unique paint brush for each path or

for a group of paths. The path will then be visualized with the unique colour of the brush.

OPTIMIZE PROGRAMS

It is possible to create a robot program with Inropa™ Programmer, test it on the physical robot and do the fine tuning in the Programmer software instead of using the physical robot line for optimization. This will save valuable time in the production line.

INDUSTRIAL ROBOTS

Inropa™ Programmer can handle all types and brands of industrial robots and it can handle several different robots in the same robot cell – even different types and brands.