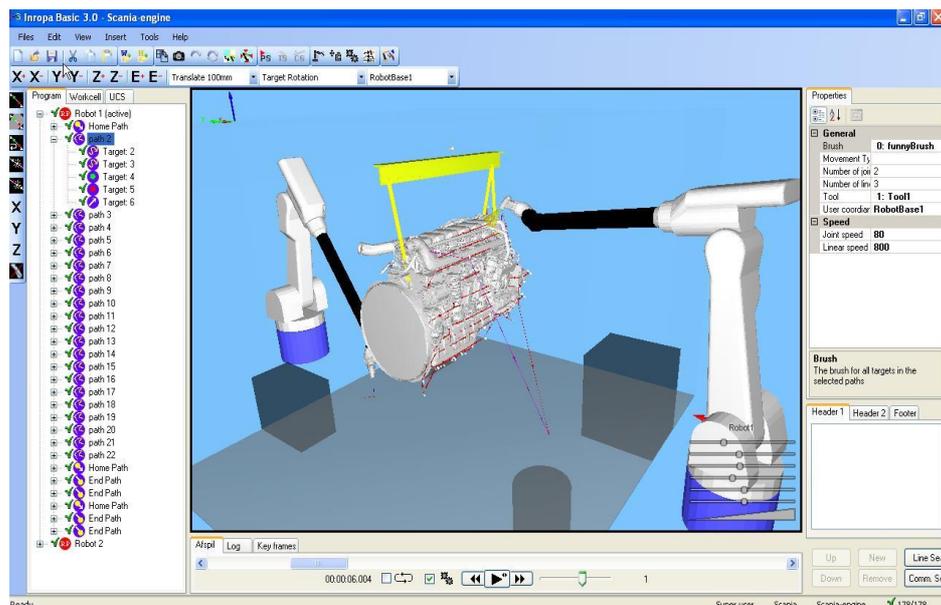




Inropa™ EnginePainter

Automatic Scanning and Robotized Painting of Truck Engines.

Inropa™ EnginePainter is a well-proven technology that ensures a high surface quality, reduces costs for personnel and paint material, and increases production by ensuring a constant and optimized flow in the paint line.



■ EnginePainter exists in a semi-automatic version -



■ And a full-automatic system.

SEMI-AUTOMATIC PROGRAMMING

With an Inropa™ EnginePainter system, the operator loads a cad model into OLP CAD (for more information, read our product sheet on OLP CAD). The operator uses the EnginePainter module to create a template model of the various engine types. A template is selected and used to quickly create a program for the loaded cad model. The program can manually be adjusted to make optimizations. The system is then used to calculate how the robot can execute the program. The system is given an amount of freedom to avoid singularities or similar. These freedoms include minor rotations of targets or alternative robot configurations.

FULL-AUTOMATIC PROGRAMMING

The Inropa™ EnginePainter also exists in a fully automatic version. The operator mounts the parts on the conveyor and sends them through the paint line. Inropa™ EnginePainter utilizes a scanning system to automatically scan the parts. The scans are either used directly in system or used to calculate the pose of a detailed cad model. An input is given to determine which template model to be used by Inropa™ EnginePainter. The template is used to create a customized program for the specific engine, and utilizing the assigned freedoms the program is simulated and sent to the robots.

HIGH SURFACE QUALITY

It is possible to adjust painting parameters such as angles, speed, and painting pressure for each area of the engine. This means that it

is possible to vary the quality for the engine, maximizing the quality and specific areas while giving a basic coverage at other. As the settings are constant regardless of the size and shape of the parts within each template, a repeatable high surface quality is obtained when using Inropa™ EnginePainter.

FLEXIBILITY

The system is based on templates which makes it is easy to make adjustments during production. Therefore, it is always possible to make optimizations even during full production. As a result it also limits the production line downtime to a minimum when changes are required or new engine types are to be integrated.

REDUCE COST OF PRODUCTION

Because of the repeatable high surface quality, the Inropa™ EnginePainter system will in most cases reduce costs for paint material and re-painting. Using robots will furthermore reduce ventilation and heating costs by re-circulating the air in the spray cabin.

Also, personnel for painting and moving parts will normally be reduced significantly since the parts are painted by the robots and automatically transferred to the drying area.

PROVEN TECHNOLOGY

Both the semi- and full-automatic technologies are running in industrial paint lines.

For further information, please visit our website www.inropa.com

