



Automatic scanning and robotized painting of steel rafters



Inropa™ SteelPainter automatically programs the robot by 3D-scanning parts. Inropa™ SteelPainter ensures high flexibility and surface quality and reduces personnel and paint material costs.



Consistent flow
higher throughput



Reduced time consumption and personnel costs



Consistent, superior finish over large surfaces



Inropa™ SteelPainter makes painting easier and creates reliable results.

AUTOMATIC PROGRAMMING

The operator mounts the parts on the conveyor and sends them through the paint line. Inropa™ SteelPainter then scans the parts and programs the robots on the fly. This means that no human robot programming is necessary.

The laser scanning system operates in 3D, which means that the posi-

on and orientation of each individual part are taken into account. Different dimensions of components within the same part will be handled to achieve optimal surface quality and minimal paint material consumption.

Furthermore, it is possible to specify different colours and coverage for individual parts, and to adjust the general settings of all painting parameters for specific paint and quality requirements, such as angles, speed, and paint pressure.

Because each part is programmed automatically on the fly, the Inropa™ SteelPainter is ideal for painting lot size one products.

Very large steel constructions can be

handled using robots with an external axis. The external-axis movement can be calculated and controlled automatically by the SteelPainter system. This may reduce the number of robots required.



The operator mounts the parts on the conveyor, and the parts are then sent through the paint line and scanned in 3D. Based on these scans, the Automatic Programmer generates the robot programs automatically.

HIGH SURFACE QUALITY

The 3D scanner is parameter-based, which means that the speed and angle values remain the same for a given surface. As the risk of manual errors is eliminated, the system ensures a consistently high surface quality which ultimately contributes to a higher market value of the products.

INCREASE PRODUCTION CAPACITY

The parts are painted while moving on the conveyor in a constant flow. The system ensures a smooth flow in the paint line, and it enables efficient integration with upstream and downstream production to create synergies. Just-in-time production is strongly supported.

The speed of the conveyor is automatically adjusted to run as fast as feasible while painting the part. The

system automatically optimizes the capacity of the paint line.

REDUCE PRODUCTION COSTS

Because of the consistently high surface quality, the Inropa™ SteelPainter system will, in most cases, reduce paint material costs and the need for repainting. Using robots will also reduce ventilation and heating costs by recirculating the air in the spray cabin.

Personnel for painting and moving parts will in most cases be reduced significantly, since the parts are painted by robots and automatically transferred to the drying area.

In addition, Inropa™ SteelPainter can be combined with automatic color-change equipment, enabling fast color changes with minimal paint waste.