



Automatic scanning and robotized painting of cabinet doors and similar products



Inropa™ CabinetPainter automatically programs the robot by 3D-scanning the parts. Inropa™ CabinetPainter ensures high surface quality, reduces costs for personnel and paint material and increases production by ensuring a constant and optimized paint line flow.

AUTOMATIC PROGRAMMING

Inropa™ CabinetPainter utilizes the Inropa™ LaserScanner.

The operator mounts the parts on the conveyor and sends them through the paint line. The Inropa™ CabinetPainter then scans the

parts and programs the robots on the fly. This means that no human robot programming is necessary.

The Inropa™ LaserScanner system operates in 3D, which means that the position and orientation of each individual part is taken into account. Also different dimensions of parts will be handled so that an optimal surface quality and minimal consumption of paint material can be reached. Furthermore it is possible to specify different colours and coverage for the individual parts.

It is also possible to adjust the general settings of all painting parameters for specific paint and quality requirements, such as angles, speed of the



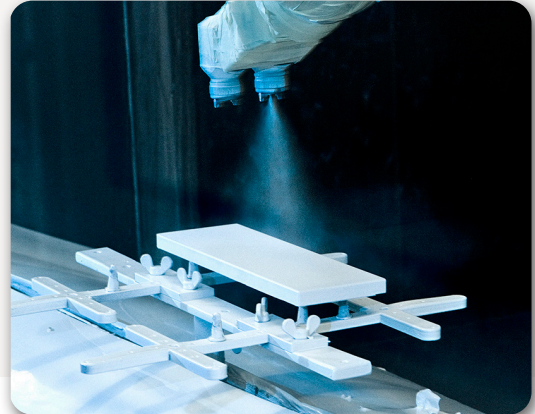
CabinetPainter creates the robot programs automatically.

conveyor, and paint pressure. As each part is programmed on the fly based on the system parameters, the Inropa™ CabinetPainter is optimal for painting lot size one products with low complexity.

HIGH SURFACE QUALITY

The 3D-scanner is parameter-based

which means that painting speed, and angles remain the same for a given surface. As the risks of manual errors are removed, the system will ensure a repeatable high surface quality which will ultimately contribute to a higher market value of the products.



The operator hangs the parts on the conveyor, and the parts are then sent through the paint line, where a laser scanner scans them. From these scans, the Automatic Programmer generates the programs automatically.

INCREASE PRODUCTION CAPACITY

The parts will be painted while moving on the conveyor line with a constant flow. The system will ensure a smooth flow in the paint line and it will be attainable to gain synergies by efficient integration with upstream and downstream production. Just-in-time production is strongly supported.

The speed of the conveyor is automatically adjusted depending on the complexity and size of the part. The system will automatically optimize the capacity of the paint line therefore a minimum of waiting time is achieved.

REDUCE PRODUCTION COST

Because of the repeatedly high surface quality, the Inropa™ CabinetPainter system will in most cases reduce costs for paint material and for repainting. Using robots will furthermore reduce ventilation and heating costs by re-circulating 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.

Also, the system can be combined with automatic color change which will enable fast color changes with minimal paint material waste.