



MAESTRO THE HIGH LEVEL COMPLETE SOLUTION FOR COATING DOOR AND WINDOW FRAMES

The frame production market demands ever increasing flexibility. The introduction of a versatile, reliable robotised system like **Maestro** from **Superfici** simplifies small batch management. It also guarantees the continuity typical of robotised solutions. Add to this the possibility of fast colour changes with reduced coating wastage, and it is clear how a robotised system is perfectly suited even for production with custom finishes, managing numerous different small orders.

The robot can be used with pneumatic or electrostatic application systems and easily adapts to any coating requirements.

Main benefits of a Maestro anthropomorphic robot spraying line:

- **reduced production times**
- **uniform and continuous application quality**, which is difficult to achieve manually.
- **improved control of product quantity** and, therefore, savings in terms of paint/coating consumption.
- **easy, flexible robot control.**

The spraying robot fits perfectly in coating lines that can, for example, include rotation of workpieces on the conveyor system to allow spraying of both faces, or the use of two opposite robots, where this is justified by the capacity required. The robot is often used in lines complete with drying systems, even sophisticated ones with microwave technology that considerably shorten production cycles, further extending the flexibility of the entire plant.

Maestro, Technology Highlights:

WIDE SPRAYING AREA

The system was specially designed for spraying large items, typically door and window frames. Working area size: 3000 x 3000 mm. If necessary extendable by adding a 7th axis.

KAWASAKI ANTHROPOMORPHIC ROBOT

The Kawasaki high-performance anthropomorphic robot is perfectly integrated in the system, guaranteeing build quality and reliability. The robot has 6 axes, which can be extended up to 11 if necessary.

OPTIMISED SPRAY GUN HOLDER TOOL

The spray gun holder tool is designed for fast gun positioning that is always precise, allowing uniform application in the various areas of the frames to be coated.

PRECISION WORKPIECE SCANNING DEVICE

The frames are scanned using a reading bar, to adapt the movement of the spraying arm accordingly.

FLEXIBLE, USER-FRIENDLY SOFTWARE

The control software easily manages recipes and colour changes: defining distances, angles and spraying speeds is possible for any operator, using an intuitive program interface to save and retrieve the types of processing.



MATRIX LED UV SYSTEMS THE NEW FRONTIER IN SUPERFICI UV POLYMERISATION

In the sector of development of UV driers towards the use of LED systems in place of conventional lamps, Superfici has devised its own LED UV solutions, with performance perfectly suited to the most innovative UV coating cycles.

Thanks to intensive work with leading coating manufacturers, Superfici has optimised the various systems in its range to meet the applied energy, emission wavelength and efficiency requirements for the different coating products.

LED UV system applications, widespread in particular in the digital printing sector and graphics industry, are now available to use in the coating of wood, partly thanks to the increasingly strong development of suitable coating products at increasingly attractive prices.

Advantages obtainable with LED UV systems:

- **significant energy saving**
- **No more heating the workpiece during processing**, thanks to LED emission, without infrared, allowing considerable benefits in terms of finished product quality, energy savings and lower investment. With LED UV technology there is no need for the expensive workpiece cooling systems that are often necessary above all for heat-sensitive materials
- **No more expensive and noisy extraction systems** because LEDs do not produce ozone gas
- **solves the problem of disposing of mercury UV lamps.**

The Superfici range of solutions includes both low-/medium-powered systems used mainly in pinning stations, and high-powered systems for total polymerisation.

The LED UV system can be used on its own or with hybrid systems in combination with other UV sources.

Such combinations are often an excellent compromise for entering the new era in order to benefit from the major energy saving and reduced temperature build up on the workpiece treated, highly specialised chemicals for paints.

Superfici's team of specialists designs modular, customised solutions for every need and application. They use advanced know-how gained concerning every aspect of the LED system, from perfecting cooling devices to control drivers, feed, control software and its graphical interface.

Visit the Superfici laboratory in Monza for tests and demonstrations on LED UV modules.