



CAVITY WAXING

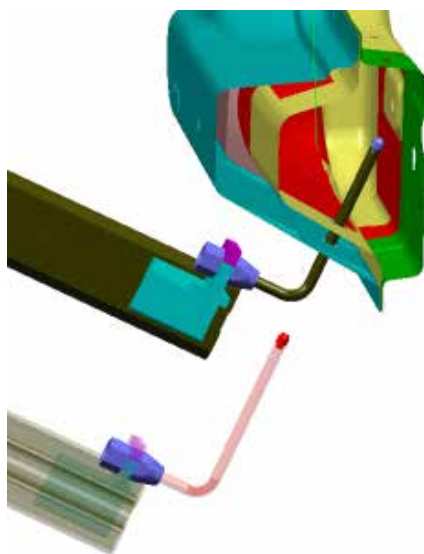


CAVITY WAXING

CAR BODY CORROSION PROTECTION

Simpro is specialized in the design, manufacturing and installation of automatic and manual systems for **spraying a protective substance within the car body cavities**. Such a car body treatment, chosen by several car manufacturers, permits to increase the lifetime of those vehicle parts more exposed to the **corrosion risk**.

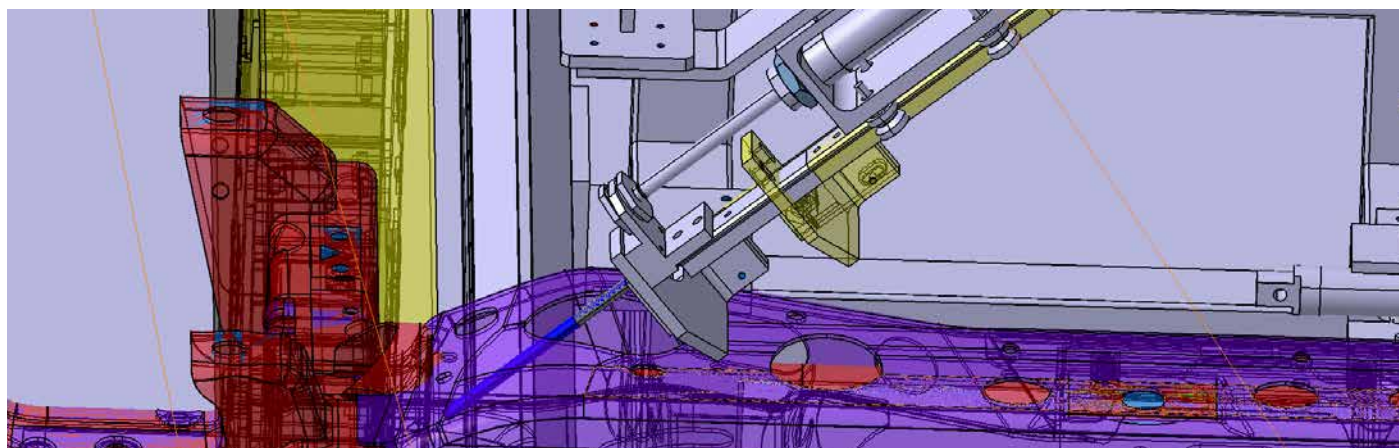
This system, turnkey supplied and manufactured in compliance with the standards under the provisions in force, provides a complete body treatment through the serial automatic introduction of **nozzles** specific for the vehicle body model to be treated. If required, it can be supplied together with a suitable **cell** equipped with a **ventilation** system for fume extraction.

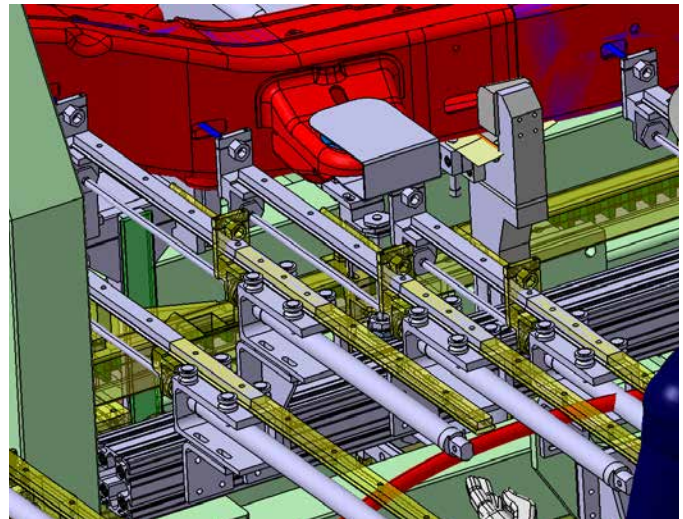


Further, Simpro supplies a downstream back-up station where it is possible to complete the body treatment manually, if needed.

During the study and design phase, Simpro, in close co-operation with the customer, examines the vehicle body to be treated, develops a **complete cavity spraying virtual 3D simulation** and performs practical spraying tests so as to optimize the spreading of the protective film onto the walls.

In order to obtain the best spraying quality, each nozzle of the system is tailor-made, as to shape and groove.



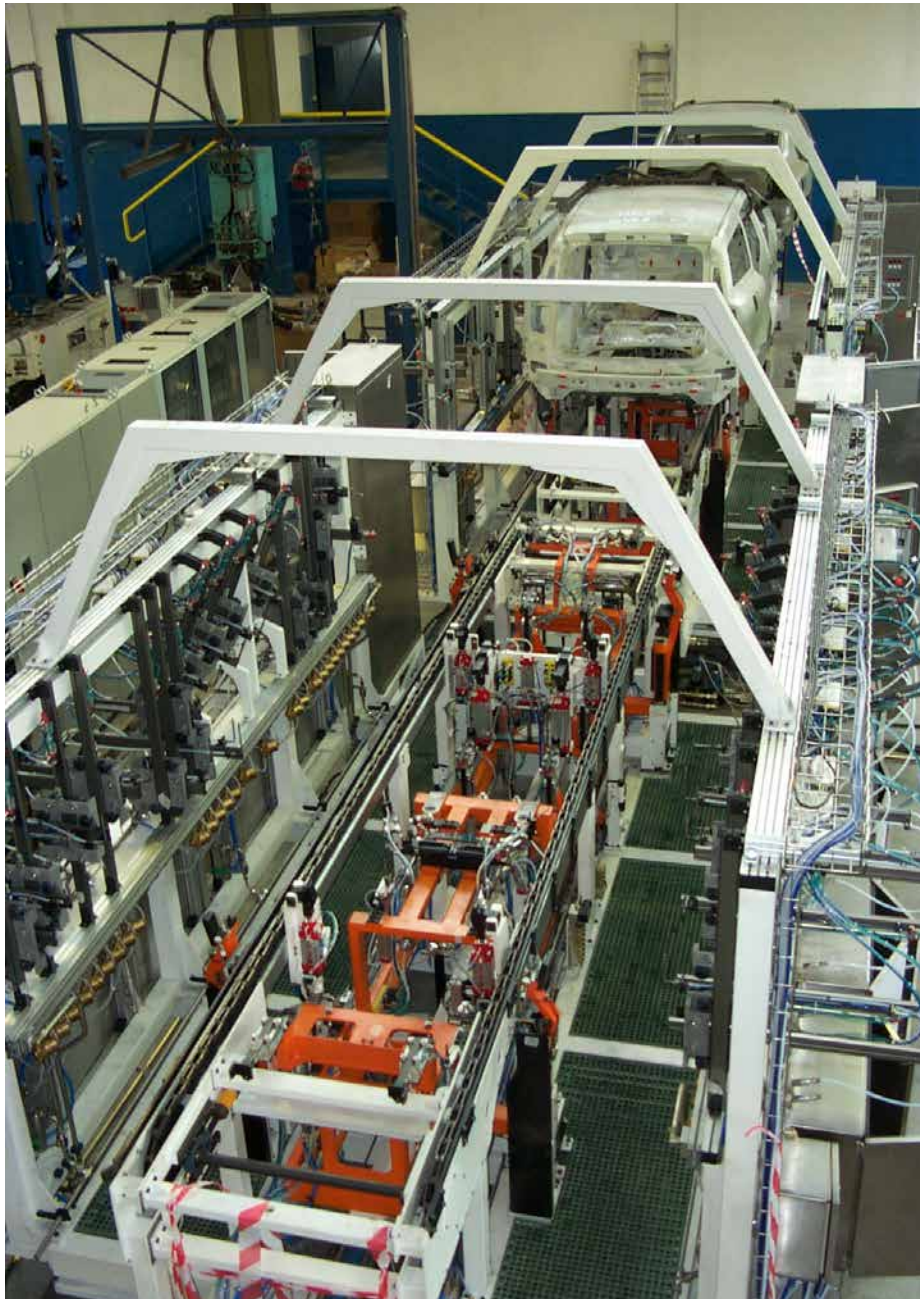


FEATURES

- Robot programming not needed;
- A **specific nozzle** for every single hole;
- **Reduced number of holes** to be waxed (60-70 nozzles on an average);
- **Fewer car holes** means lower forging costs;
- No use of universal nozzles:
 - no overspray
 - cleaner system
 - lower cleaning and disposal costs;
- **Customized control** of air blowing and wax metering for every single nozzle;
- A reduced quantity of wax used means **wax saving** (e.g. 60-70 nozzles = 500-600 gr.);
- Excellent layer thickness;
- **Automatic door spraying** (without cycle overtime);
- Possibility of **automatic masking** of wax-free parts by means of a Simpro standard system;
- Waxing of **several car body** types;
- A spraying fault in a nozzle does not compromise the efficacy of the adjacent nozzle;
- **Self-diagnosis** of the fault type;
- **Mechanical efficiency 97-98%** (average) means back-up only upon customer's request;
- **Higher productive capacity** with the same system;
- **Easy maintenance** means a reduction of MTTR;
- Modular-type mechanical adjustment;
- **Easy customization** of the mechanical spraying units;
- Fastening of the units to aluminium profiles;
- Bolt-on systems (split up in 3 parts for an easier installation at the customer's site);
- **Smaller space** occupied;
- Components resistant to solvents and chemical agents;
- **Easy system washing** with high-pressure hot water;
- Walkways inside the system for a thorough cleaning, visual maintenance check and maintenance action.



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MASKING

Unique in the world, Simpro has developed an innovative and fully automated system for protecting those car body parts that must be strictly kept wax free.

The so-called masking units are provided with specific pads designed with the plug-and-play system for an easy maintenance.



PUMP ROOM

Simpro supplies a system-integrated device for handling, pumping, filtering and conditioning the wax to be applied, so as to achieve the highest performance level in terms of efficacy and to ensure the most profitable relation between the amount of sprayed wax and a thorough wax application.



ENGINE SUBFRAMES

Simpro is specialized in the manufacturing of waxing systems for the engine subframes. Such systems are fully automated, capable of waxing the subframe in just one cycle (in less than one minute) by ensuring a proper spraying and optimizing the nozzle quantity.



NOZZLES

Simpro studies and develops every single nozzle according to the cavity configuration as well as to the type of wax or car body to be treated. Each nozzle is designed to be fitted and unfitted using a plug-and-play technology for an easy maintenance and cleaning. This system also permits an easy replacement of the nozzles in case the production should be re-planned for different car models.

