



BODY IN WHITE

ASSEMBLY AND WELDING

Simpro is leader in finding and concretizing solutions for manufacturing systems for the **assembly and welding of body sheet-metal parts**.

Moreover, Simpro manufactures **clinch**ing and **hemming** fixtures for moving units as well as control gauges for the geometrical check of the assemblies.

The lines, either manual or automatic, are designed in close co-operation with the customer in order to deliver a product perfectly fulfilling his production requirements and expectations.

These systems are turnkey supplied to the customer and, where required, a full customer service including a 24-hour assistance, personnel training and periodic maintenance will be provided.

These systems and fixtures are manufactured in strict compliance with the regulations in force in the country where they are installed.



SERVICES

- Concept Design;
- Simulation Engineering;
- 3D Design and Simulation;
- Turnkey Supply of the Complete BIW Assembly and Welding System:
 - design, manufacturing and worldwide installation;
 - commissioning and try-out;
 - start of production support;
- Robot Programming:
 - handling;
 - spot welding;
 - MIG – MAG;
 - laser;
 - plasmatreat;
 - hybrid (laser + MIG);
 - hemming;
 - FLS;
- riveting;
- friction weld;
- clinching.
- In-House:
 - design;
 - manufacturing;
 - assembly;
 - quality Inspection;
 - pre-Try-Out;
 - software (Catia, Ug Process Simulate, Robcad);
- R & D:
 - for coupling new metal parts;
 - for coupling metal and non-metal parts.



AUTOMATIC SPOT WELDING

- weld gun — at which ends two electrodes are placed — that, after gripping the parts to be coupled, welds them in one spot;
- no weld material used;
- reduced stress to which the body parts are subject;
- lower production costs;
- the operator can easily reach the car body to weld even in the most inaccessible areas.



MANUAL SPOT WELDING

- weld gun — at which ends two electrodes are placed — that, after gripping the parts to be coupled, welds them in one spot;
- no weld material used;
- reduced stress to which the body parts are subject;
- lower production costs;
- the operator can easily reach the car body to weld even in the most inaccessible areas.



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MANUAL ARC WELDING

- coupling metal parts by melting weld material, which is heated and brought to the required temperature by means of a welding torch;
- extremely resistant welds perfectly shaped to the parts to be coupled;
- the product is guaranteed to be highly resistant and reliable over time even in those body sections subject to an intensive stress.



AUTOMATIC ARC WELDING

- fully automatic process, except for loading and unloading the parts to be coupled;
- each movement controlled through a specific software.



LASER WELDING

- highly precise, thin and deep welding due to the concentration of the produced heating;
- fully automatic process, except for loading and unloading the parts to be coupled;
- each movement is controlled through a specific software.

