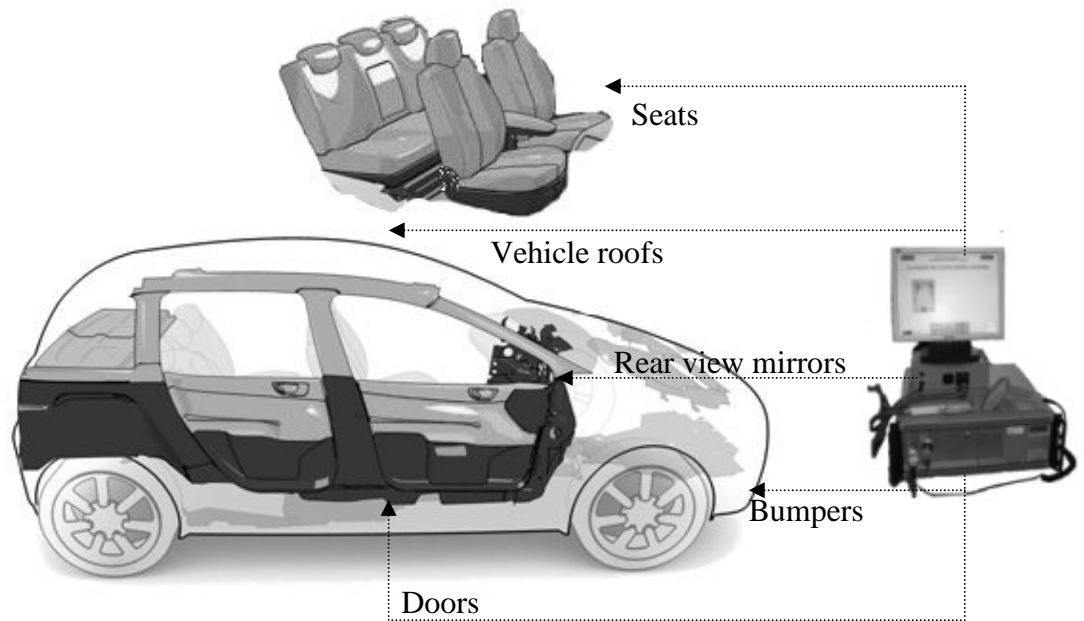


## End of Line Control System for vehicle application

This ECS-EOL test station is integrated on the car production lines, this permits the user to carry out controls and measurements automatically on various electric elements while ensuring traceability.



Modular and upgradeable system

Internal and external remote maintenance

Traceability



Elements tested	Types of measurements
Air Bag Pyrotechnic Elements	Values of the pyrotechnical element; insulation
Occupant Detection sensor on seat Belt pretensioner Heating seat covers	Control functions; measure of impedance
Mass and electric looms	Test of continuity ; test of consumption
Electric Motor	Test of consumption ; control functionality
Diagnostic calculator	Analysis response; tension/running
Lighting	CAV ; LIN ; KLINE ; VAN ; ...
Antenna	Control functionality; test of consumption
Microphone	Test of continuity
Position encoder	Control functionality ; test of consumption
Multimedia screen	Control functionality
Radar (rear, position, ...)	Test of connectors ; test of consumption
	Control functionality; test of frequency

Contact

➔ Daniel L'Amoulen et Olivier Lunel

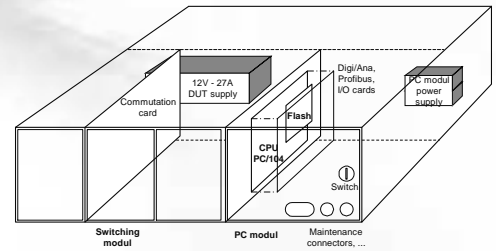
# Description of the means

## Materials

The control station consists of:

- a PC module embarked with format PC104
- a profibus interface
- an acquisition I/O card
- a modem card for remote assistance
- un switching module for signals and measurement
- an network access

The whole is integrated in a frame 19" equipped with a 12V, 27A power supply.

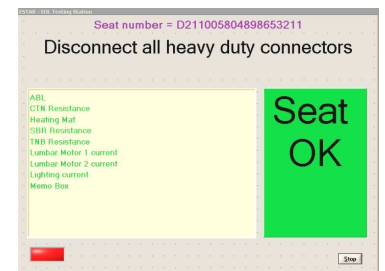


➔ *The system permits interchangeability of the principal modules (PC –Switching) thanks to the format of rackable modules.*

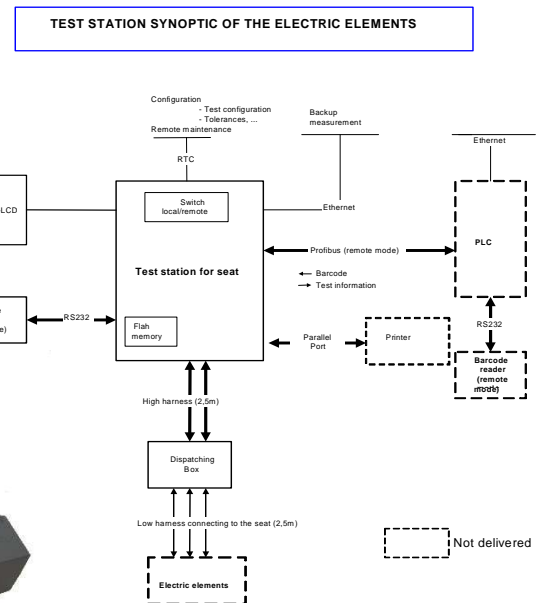
## Software

The software package consists of :

- Windows XP Embeded OS
- An application software of test developed under LabWindows/CVI/TestStand (National Instrument)
- A software of remote access.
- A software adapted to the calculator-communications



➔ *The test results are saved automatically in a distant network with a local storage for avoid possible failure during communications.*



## Connectic

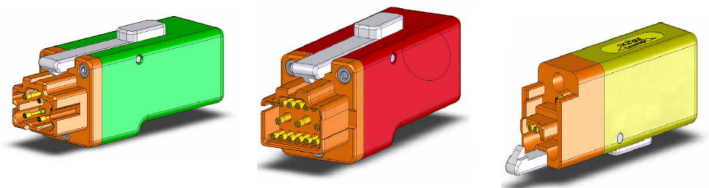
### Dispatching box



This case is used as intermediary between the connection-beams of the equipment to test and the test station. It gathers the whole of the resources of measurement and allows a simplification of the updates in the case of evolution of the elements to be tested.

### Industrial Connectors

Specific industrial connectors.



Traceability  
 Internal and external remote maintenance  
 Modular and upgradeable system