

RESISTANCE OF SEAT BUSES – R80

Aries Ingeniería y Sistemas offers a fully digitally controlled **servo-hydraulic test system** to perform impact tests against the back side of seats at different heights, according to applicable automotive regulations and R&D testing procedures.

This test bench is an optimum combination of:

- High stiffness frame with two loading stations where two independent servo-actuators are included.
- Flexible positioning of the loading stations along the lateral axis (Y) and of the servo-actuators along the height axis (Z).
- State of the art digital servo-controller developed by ARIES to cover virtually any closed loop control applications.

Different number of loading stations can be included for a variety number of simultaneous test scenarios (single or double seats). ARIES' expertise in servo-hydraulic benches will enable the definition and supply of the optimum hydraulic power pack solution, either through the connection to an existing hydraulic distribution line or through the supply of a dedicated HPS.



MAIN FEATURES & BENEFITS

- Testing in accordance with: **ECE R80**
- Increased lifespan of the system through the dual guidance of each cylinder
- Rotation of the loading forms along the height axis (Z)
- High performance servo-valves for demanding dynamic tests
- 2 or 4 simultaneous actuators (Possible upgrade for further positions)
- Fully digital Servo-control with integrated Data Acquisition spare Input Channels
- Optional bed plate to rigidly fix test bench and test samples
- Fully automated movements (optional)

TECHNICAL SPECIFICATIONS

Hydraulic Actuators	
Number of units *	2 or 4
Static Force (@210 bar supply)	20 kN
Dynamic Force	16 kN
Stroke *	600 mm
Instrumentation	High performance load cells
	Transducers
Regulation Range	
Maximum height of upper actuators over bed plate *	1340 mm
Minimum height of lower actuators over bed plate *	940 mm
Minimum vertical distance of actuators *	150 mm
Maximum lateral distance of the loading stations *	1400 mm
Minimum lateral distance of the loading stations *	280 mm

(*) different values and dimensions available under request

The **ServoHydro Advanced Hardware and Software Suite** comes with functionalities for definition of all actuator parameters, PID control tuning, limits and alarms management, data acquisition handling and optional report generation tool. Specific templates for test regulations included.

