

Test Bench 1879  **TRUNK AND BONNET FATIGUE TEST**

Applications

This equipment constitutes a **lightweight and hard system** for automatic fatigue and endurance tests of opening and closing trunk doors and bonnet of any kind of vehicles. The system uses an arm, driven by brushless motor, mounted on a column in vertical position

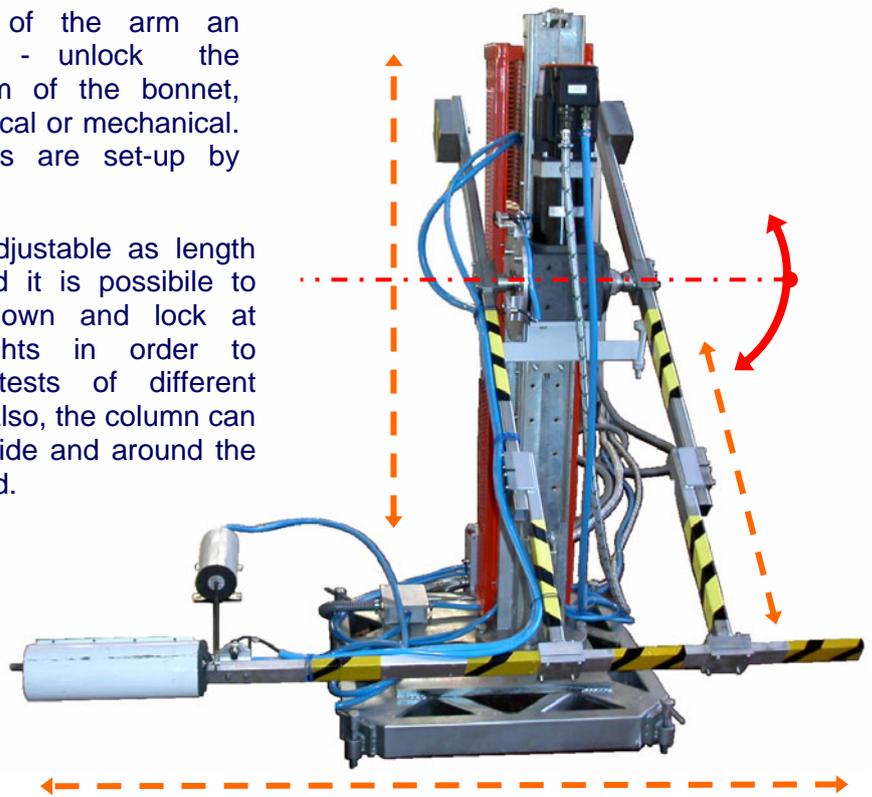


The brushless motor let input all kind of turning movements of the arm you want to have, on a very wide angle, with high precisely position control by resolver. So, you can open and close with different speed, stop and so on, with maximum flexibility.

On the top of the arm an actuator lock - unlock the closing system of the bonnet, whether electrical or mechanical. All movements are set-up by computer.

The arm is adjustable as length and width and it is possible to move it up-down and lock at different heights in order to accommodate tests of different kinds of car. Also, the column can be moved beside and around the car to be tested.

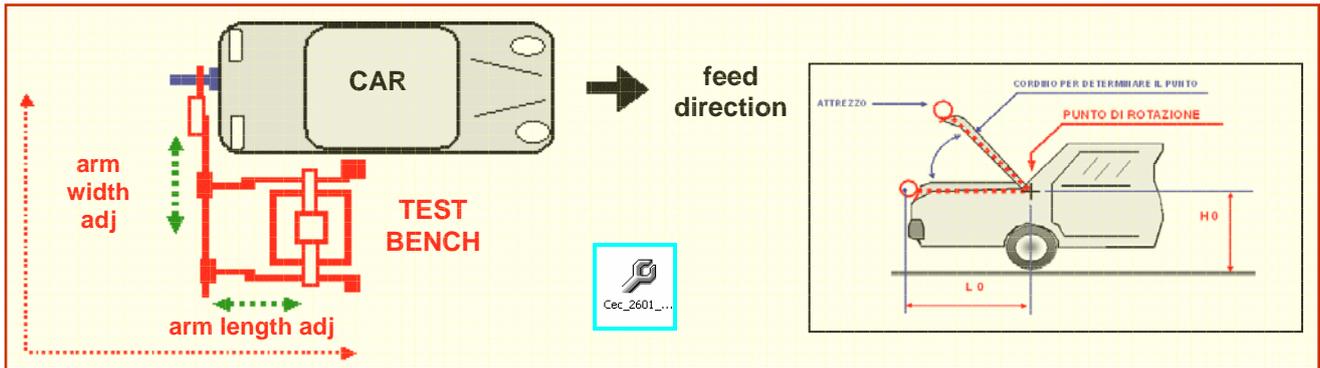
All the bench is made of stainless and aluminium to work in climatic chamber from -30 to 80° C. Some microswitches mounted in the correct positions control that the bonnet is correctly opened/closed or in the right positions.



Software Wind-Data©, running on WINDOWS™ environment, is the powerful application program that manage the Test Bench; it can shows in real-time the arm position, everything happen during the test and all testing parameters.

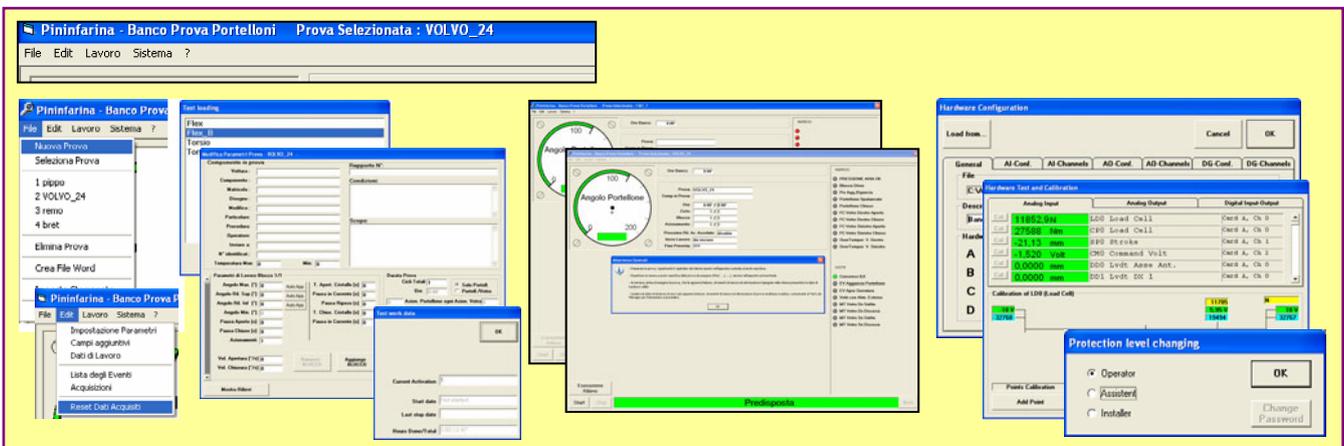
Tests that can be carried on.

- 1 Opening and closing cycles of one trunk door at a time, including door lock (mechanic or electric) driving.
 - 2 Opening and closing cycles of one bonnet at a time, including door lock (mechanic or electric) driving.
- ☛ As option, to be bought separately, the equipment can also provide the User to test up/down motion of two car windows with electric or manual command.



Features

- AC Power Supply:** 400 VAC, 6 KVA, 3-phase
- Compressed Air Supply** 6 Bar, free of oil and moisture
- Air drying unit:** included in the equipment
- Test Bench** Mechanical including rotation motor, 2 pneumatic actuator, arm regulation tools and monitoring sensors.
- Arm Motor** Brushless motor with Gearbox; Load: up to 500Nw; velocity: 3 m/s max;
- Arm rotation** from 0 to 180 degrees, adjustable
- Temperature range** from -30 to +80 degrees, for use inside environmental test chambers
- Overall sizes (mm)** 2000 (L) x 1800 (W) x 2000 (H) **Weight** about 200 kg
- Electronic Cabinet** PC, CPU Pentium class, includes TFT monitor, keyboard, mouse,; Brushless motor; inverter Power Supply; commands panel, electric circuitry
- Overall sizes (mm)** 600 (L) x 600 (W) x 1820 (H) **Weight** about 100 kg



This equipment is to be tailored around the typologies of vehicles to be tested. Send to us your requirements and we will offer the better solution to meet your needs in testing.