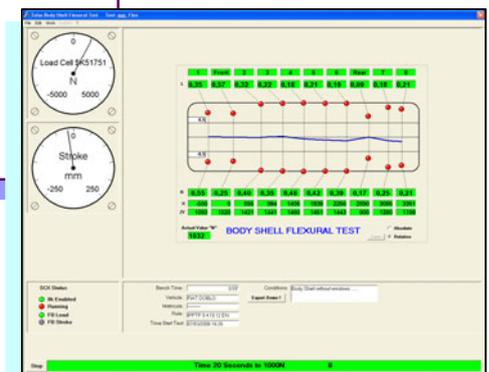


Test Bench 2512  **VEHICLES BODY STIFFNESS****Applications**

Body Stiffness is a sophisticated and effective equipment **developed for automatic check of the elasticity performance**, under mechanical torsion and flexure, of vehicles body. The system can also make a **real time detection and analysis of the elastic flexural deformation of the body** over all the testing time.

The design is based on a powerful computer interacting in real time with both the data acquisition system and measurement equipments. This solution set with the high precision sensors applied, offers the best resolution in detecting body deformations, even if minimum and temporary only.

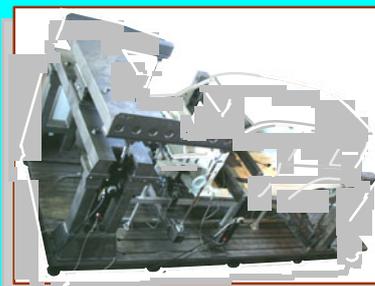
As for all our testing system, the Test Bench is designed and manufactured including all the facilities to guarantee a very **easy maintenance and a long time reliability** to the Customer. CEC applies use only high quality components and checks 100% of parts before assembly.

**Standard tests that can be carried on.**

-  **Body Torsional elasticity check**
-  **Body Flexural elasticity check.**

The system can also acquire the flexural elastic line that crossing all the body under test. All test data can be stored, printed and moved as a standard file, directly compatible with statistics programs or spreadsheets like Excel.

CEC has many other solutions for working place. Don't hesitate to ask us for the most convenient solution, based on over 30 years' experience in this field.



Specifications

Test Bench

Test Bench Bed is a mechanical equipment manufacture and it has a Base (plinth) and a Horned Tower, the top of the tower can move (rotate) by the actuators.

On the Base is to be placed the body to be tested. Many adapter tools are available.

The hydraulic actuator for the torsional check is mounted aside of the Horned Tower while the actuator for the flexural check is to be locked to the plinth. Each actuator gives it own load cell for measures.

H.P.E

The Hydraulic Pressure Equipment generates the high pressure required by the hydraulic actuators.

Workstation

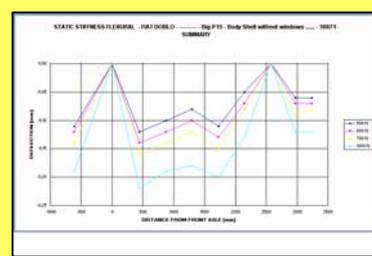
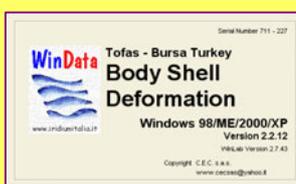
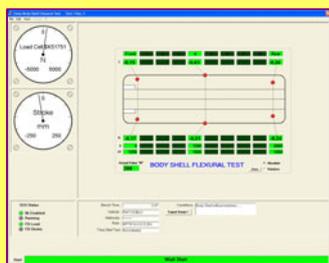
The Workstation is made by few stand alone parts, that are:

One Central Processing Unit (PC), inside including data acquisition cards; external TFT monitor, keyboard, mouse and ink-jet colours printer.

One CEC Servocontroller 2 Channels.

One 3U rack I/O and DC Power Supply

One CEC WinData application software tha permits to program tests, configuring the system, make the tests, processing and printing the tests results



Features

AC Power Supply: 400 VAC, 6 KVA, 3-phase

Pressure Supply H. P. E generator. Hydraulic Pressure: 200 Bar max, normal working 100 Bar,
Hydraulic actuator maximum axial load: 20kN, Others on request
Moving frequency: 0 to 30 Hz max, in use 0,01
Moving range: 300 mm max

Test Bench Mechanical including 2 hydraulic actuators, including load cell each.

Servocontroller CEC, model SCX_2CH, 2 analogs channel, rack 6U

Workstation PC, CPU Pentium class, includes TFT monitor, keyboard, mouse, printer.

Software CEC WinData, standard languages: English and Italian. For other foreign countries languages, please ask for the cost of translation.

Sizes (mm) and mass

Workstation	800 (L) x 1800 (W) x 900 (H)	mass: 60 kg
H.P.E.	800 (L) x 1000 (W) x 1700 (H)	mass: 120 kg, with empty oil tank
Test Bench	6000 (L) x 2500 (W) x 2600 (H)	mass: plint = 10 tons, tower = 4,5 tons