## **Project: TESTING EQUIPMENTS FOR AUTOMOTIVE INDUSTRY**

## Main objectives:

Design and manufacture of endurance testing installations for cars and their components, as well as to develop custom designed machines for car components testing:

- security belts,
- direction column,
- direction gear,
- knee-pan components.



Such machines can carry out fatigue and static mechanical testing for tensile, compressive and bending loads. In order to fulfill these requirements the solution was an electro-hydraulic system with the following characteristics:

- force +/- 10 kN,
- torque 100 Nm / static, 50 Nm / dynamic,
- frequency 20 Hz,
- velocity 0. 5m/sec,
- pressure 210 bar,
- posses temperature sensors for measurments,
- enable automatic operation,
- able to carry out forces and displacements data acquisition and analyses.

