



MODULAR WELDING MACHINES

Project # 6

EN

Automotive industry applications

The Project:

Design an modular equipment configuration able to weld metal sheet component, nuts and/or studs.

Required resources:

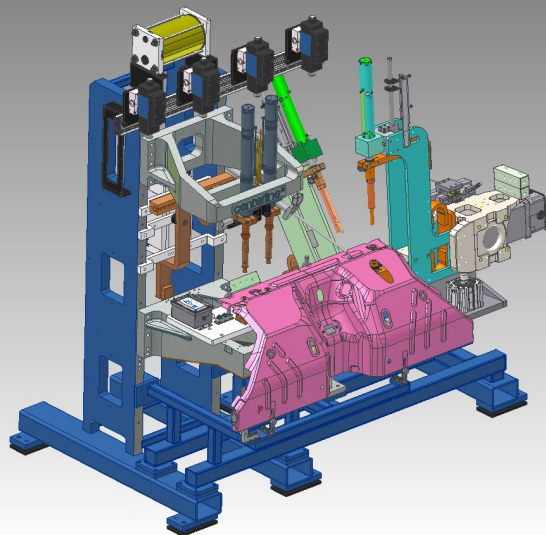
This type of projects are leaded by experienced engineers with extended knowledge about all the components integrated in welding equipment. CAD Resources: Autodesk INVENTOR 2011.

Features:

The project requires analysis of the pressed sheets 3D model, supplied by the customer, in order to generate the welding machine configuration. Actuators are selected according to the required welding force and stroke. Electrodes geometry are designed according to the elements that will be welded. Solutions for loading / unloading of welding components are developed to best fit customer requests. The welding machine is designed so that it can be quickly converted towards a new customer application.

Achievements:

Modular welding machines are high productive equipment that allows in a cycle of loading / unloading the welding of several components.



The action:

Depending on dimensions and shape of pressed sheets that will be loaded the grabbing fixture is designed.

Depending on the components that are to be welded the parameters for actuators, transformers and electrodes geometry are defined.

Subsidiary automatic feeding equipment and positioning control devices are attached.

The result is a modular, easily reconfigurable welding equipment by subsequent applications of the customer.

Peculiarities:

- Analysis of 3D models provided by the customer.
- Generating a configuration for the welding machine.
- Calculation and selection of the configuration components.
- Reconfigurable system.