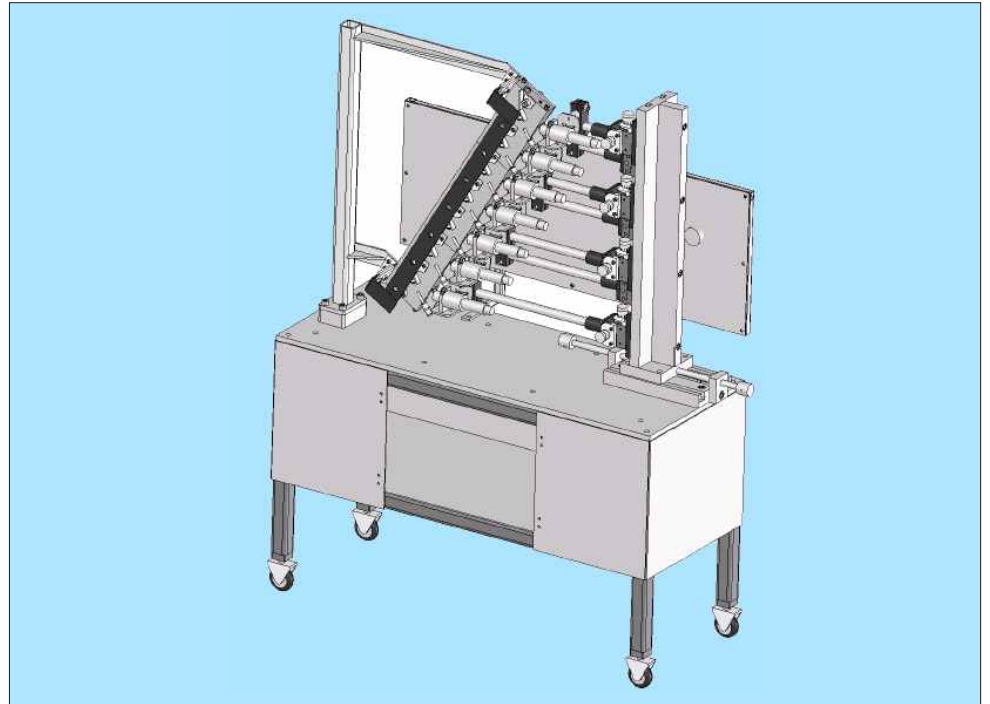


## Glow Plug Endurance Test Bench



**Software Tools :** Solidworks

**Industry :** Micro-Electro-Mechanical Systems

**Services :** Design, manufacture and supply

### The Challenge

Developing automated test equipment to perform accelerated endurance tests for glow plugs and speed up the testing cycles. The following design aspects had to be met:

- Create the test bench at engine working condition
- Effective cooling system
- Pyrometer setup and adjustments

### The Solution

GPETS consists of 4 main assemblies viz., block assembly, XY slide assembly, XY slide column assembly, pyrometer bracket assembly and pneumatic system which catered in maintaining the test bench at engine working conditions, to adjust the focal length of the pyrometers and cool the glow plugs with air jets in each cycle. Each plug was subjected to 15,000 test cycles and approximately to 500 hours without much human intervention.

### Metrics

Successfully working till date since 2004.

