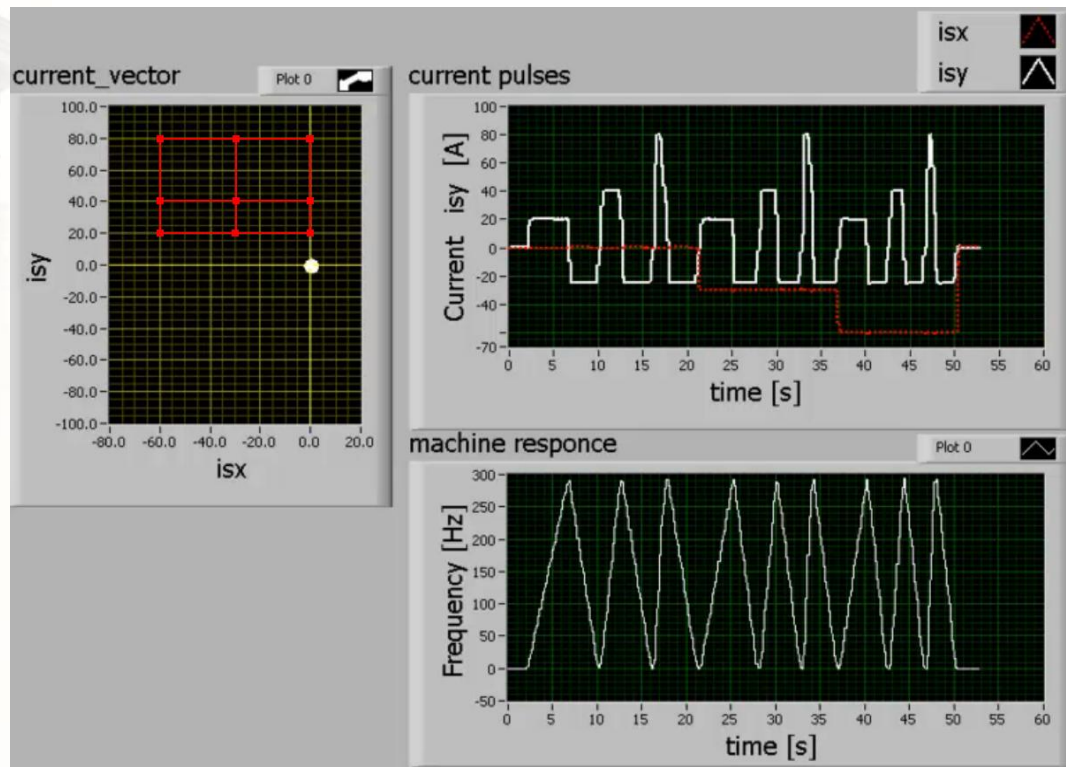




Dynamic Testing of Electric Machines

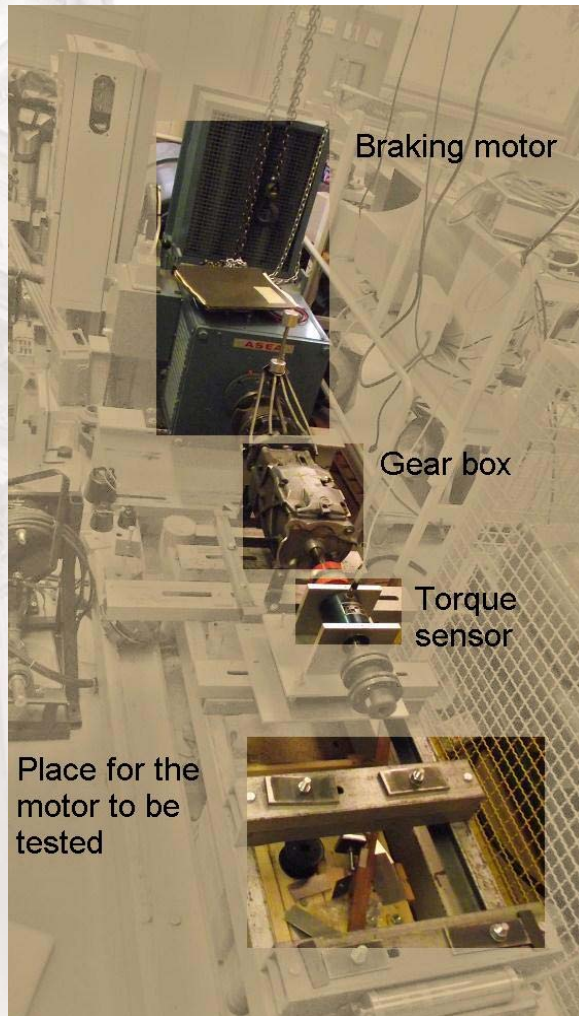
Project Goal

- Further develop this convenient, fast and accurate method to measure the power and performance characteristics of electric machines built for electric vehicles.

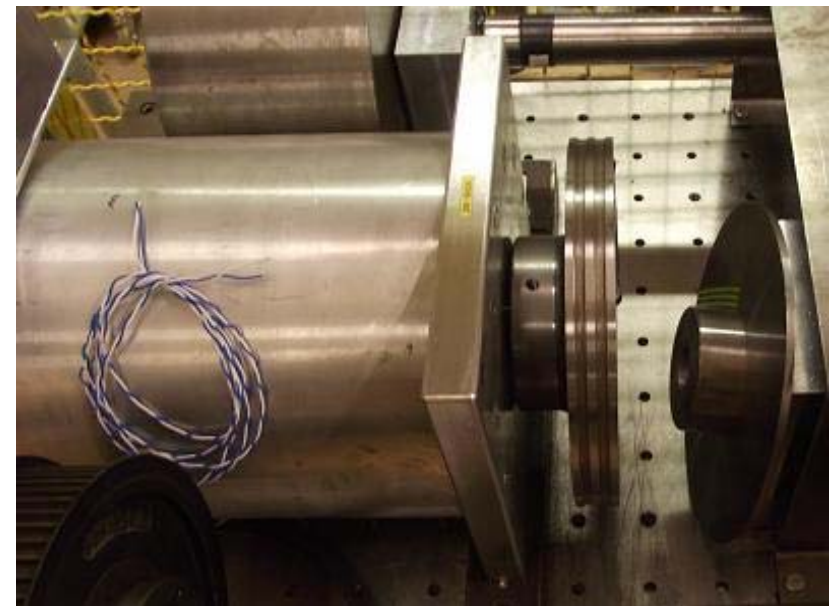


Advantages of the dynamic Testing Method

- The motor characteristics are measured within minutes
- A brake bench or a torque sensor are no longer needed.
- Temperature rise is less than 2 °C



Traditional method: brake bench



Dynamic test: only the motor and ev a flywheel are needed

Project Scope

- Further development of high performance measurement and control system of electric machines based in FPGA technology.
- Power losses identification
- 'In Situ' measurement of electric machines
- Drive cycle simulation
- Development of a user friendly measurement unit.

Partners, Resources & Timeframe

- **Partners**

- SP Technical Research Institute of Sweden
- AB Volvo

- **Resources**

- Power Systems lab @ Lund University

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More material:

- **Papers:**

- <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6063677>

- **Reports**

- *Hyperlink to IEA page*

- **Thesis:**

- *Hyperlink to IEA page*