

## DESCRIPTION

A test bench for hybrid traction systems has been developed for testing different vehicle powertrains .

The bench allows testing different topologies of electric vehicles. The goal is to provide a solution and decision making tool for design, sizing , selection and construction of hybrid traction systems based on hydrogen fuel cell, batteries and / or supercapacitors. In this way, information is provided to optimize a new powertrain or verify a existing one according to specific driving patterns.

## FEATURES

The test bench is composed of the following subsystems:

SUBSYSTEM	COMPONENTS
Hydrogen fuel cell	<ul style="list-style-type: none"><li>• Pressure regulator</li><li>• Magnet valve</li><li>• Flow meter</li></ul>
Heating sink	<ul style="list-style-type: none"><li>• Heater</li><li>• Fan</li><li>• Water pumps</li><li>• De-ionizing filter</li></ul>
Electric traction	<ul style="list-style-type: none"><li>• Converters</li><li>• Contactors</li><li>• Diodes</li><li>• Power fuses</li></ul>
Load profile simulation	<ul style="list-style-type: none"><li>• Programmable electronic loads</li><li>• Resistive loads</li><li>• Power contactors</li></ul>
Control and data adquisition	<ul style="list-style-type: none"><li>• I/O card</li><li>• Adquisition and management software</li></ul>
Auxiliary electric supply	<ul style="list-style-type: none"><li>• Battery charger</li><li>• Power supply</li></ul>



## FUNDED BY



## CONTACT:

Aragon Hydrogen Foundation  
[www.hidrogenoaragon.org](http://www.hidrogenoaragon.org)

Telephone: +34 974 215 258  
[fundacion@hidrogenoaragon.org](mailto:fundacion@hidrogenoaragon.org)

