



Hydrogen fuel cell engineering

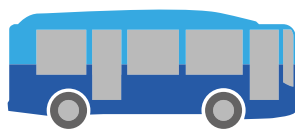
Stacks – Systems – Industrialization – Test benches



Field of applications



Fuel cell electric vehicles



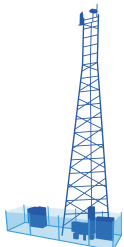
Buses



Trucks



Material handling



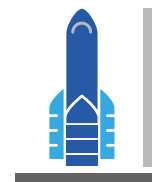
Stationary power supply for off grids



Marine



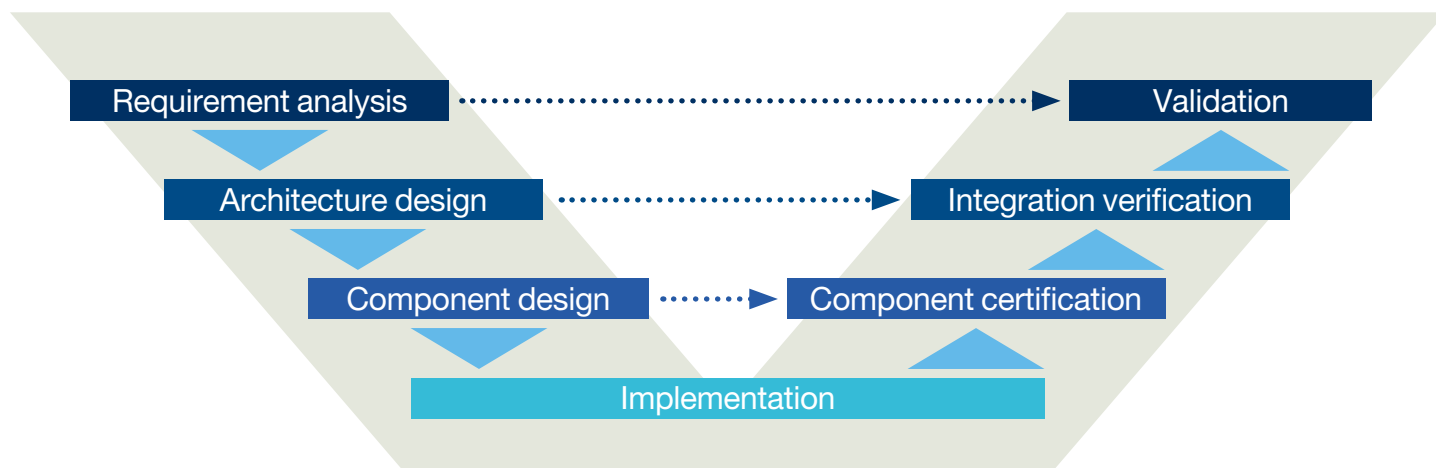
Aerospace



Space, etc...

Axane, a subsidiary of the Air Liquide group, designs tailor-made solutions and provides hydrogen fuel cell engineering that covers every aspects required to customize your project involving fuel cell technology.

Typical "V cycle" development plan



Our benefits

More than 15 years of PEM* fuel cell solutions



From the AME to the integrated solution (design, prototyping, industrialization, production and operation)



Power density:
1.25W/cm² @ @ 0.65V
under automotive conditions



More than
20,000 hours
MEA lifetime in operation



Heat control: -20 / + 50°C
ambient temperature
(storage, start-up, operation)



Low hydrogen consumption:
0.7 Nm³/kWh
for complete system



A proprietary technologies portfolio:
liquid-cooled stacks (graphite closed cathode cells), air cooled stacks, balance of plant, including the design of key components

* PEM: Proton exchange membranes

Unique experience feedback



Thousands of systems deployed worldwide with "Axane inside"



Open industrial scheme:
Licenced production, technological transfert and intellectual propetry sharing





A test center for hydrogen energy and fuel cells applications

- Fuel cell tests
- Hydrogen storage systems functional tests
- Components tests



Strength of a Group

- Axane is a 100% Air Liquide subsidiary
- Air Liquide hydrogen solutions can be handled globally and worldwide
- Patented technologies

Contacts

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