

High Pressure Hydrogen Tank Components

Why stainless?

- Does not become brittle after long exposure to hydrogen
- Durability.

Fabrication process:

Not applicable.

Grade:

Modified EN: 1.4435 (AISI: 316L).

Manufacturer:

Not available.

Hydrogen-powered cars will require high pressure (+700 bar) hydrogen tanks. The tanks must be reliable under all conditions and at temperatures ranging between -60 and +60° C.

One of the major challenges is to find materials that can resist the effect of hydrogen which can make them brittle. Special austenitic stainless steels meet this requirement and have the high strength required for this application.

Image courtesy of Adam Opel GmbH, Germany.

