

EUREKA project SmartValve.



EUREKA Status Awarded

„Eugen Seitz AG together with partners from Norway has been officially accepted as a participant in EUREKA project E!4975 SmartValve gaining an internationally-recognised quality label of technological innovation“ - 5th May 2009



Project Outline

- Hydrogen will in the course of this century be one of the cornerstones in a sustainable energy system
- Hydrogen as energy carrier will pose great technological challenges in the form of production, storage and energy distribution
- Raufoss Fuel Systems AS and Eugen Seitz AG currently develop and supply complete systems for the automotive industry for the use of natural gas and hydrogen as fuel
- A rapidly growing market is envisaged for private cars based on fuel cell technology with hydrogen as energy carrier in the near future
- Challenges relating to the distribution of hydrogen from high-pressure storage to fuel cells in cars must be solved
- Current valve technology must above all undergo considerable developments, as the existing solutions do not fulfil the automotive requirements for price, weight, functionality, pressure in relation to storage capacity (mileage) etc.

Research Challenges

- The application of plastic composites and/or light metals in high-pressure valves
- Integrating several valve functions in the same product to achieve a greater degree of safety
- Developing new principles for pressure reduction and gas flow out of the cylinder
- Finding new systems to achieve complete and reliable sealing mechanisms for hydrogen under high pressure in a vehicle
- Developing a new, robust and reasonable valve
- Verification methods and testing methodology

	EUREKA A Network for Market Oriented R&D	Project No. E!4975		 Raufoss FUEL SYSTEMS
	The Research Council of Norway Project No. 187989/140	 TECHNISCHE UNIVERSITÄT ILMENAU		