



# OPTVOL

**LEAK DETECTION SYSTEM**  
FOR TESTING FUEL CELLS

# OPTVOL LEAK TESTING TECHNOLOGY

VES is a world leader in providing leak testing solutions, with a 74% reduction in footprint, 92% reduction in energy consumption and requiring 44% less helium per cycle, when compared to traditional hard vacuum tracer gas systems.

VES' OptVol leak detection system allows for easily interchangeable tooling for different fuel cell variants and a lightweight design for ease of movement between production lines, as production demands change.

Completing a formal analysis comparing OptVol Technology™ with traditional hard vacuum tracer gas systems recorded significant improvements across all data points.

- 74% reduction in footprint
- 85% reduction in weight
- 10% improvement in test cycle times
- 92% reduction in power consumption
- 44% reduction in helium consumption

The ultimate **all-in-one** fuel cell leak testing solution.



# SOLVING THE FUEL CELL LEAK TEST WITH OPTVOL

OptVol has been designed for fuel cell manufacturers looking for a more efficient and innovative way of leak testing fuel cells, for an affordable solution with provable return on investment.

- OptVol costs less at the point of purchase and has much lower running costs than typical leak test system setups
- OptVol has fewer serviceable items and needs fewer spare parts than other helium leak test machines, VES offers full support infrastructure in USA, Mexico, Europe, and Asia
- OptVol's lead times are lower than industry expected lead times
- OptVol is a smaller, agile version of existing, highly reliable VES leak test systems
- OptVol has a flexible tooling bay for multiple product variations
- OptVol has a lower carbon footprint than typical leak test system setups
- OptVol helps manufacturers meet current legislations for the type-approval, supporting the transition towards clean mobility



“We’re always committed to providing energy-saving sustainable solutions for our customers and we’re proud of our OptVol Technology; it complements our current systems. This leak test system runs smoother and takes up very little space and has much lower running costs than typical setups.”

**Luke Sansby**  
CEO, VES

# WHO ARE VES?

Vacuum Engineering Services are a specialist company offering leak test solutions to a variety of industries worldwide.

Formed in 1994, we offer unrivalled expertise in helium leak testing. We use our design and manufacturing expertise to provide bespoke leak detection systems that can be found across the world and are actively supported by our worldwide aftersales network.

Our leak test machines are used for guaranteeing leak tightness to very high levels and are used across the automotive, HVAC, fire safety, and nuclear industries. These machines are utilised on production lines in operation 24/7, where reliable results are vital.

# WHO USES VES?



**DENSO**



Who Are VES?

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