

A smarter and safer way to vent hydrogen

DeHydro is a catalytic system that prevents flammable hydrogen from being released into the atmosphere, offering a safe alternative to conventional venting or flaring.

It employs catalytic oxidation in which hydrogen reacts with oxygen over a catalyst bed, converting H₂ into water vapor (H₂O) without combustion or flame formation. The system operates using ambient air and does not require a dedicated oxygen supply.

DeHydro is available in both stationary and mobile configurations, allowing deployment in permanently installed systems as well as mobile or temporary applications. A typical use case is an electrolysis system where DeHydro ensures hydrogen production with zero emissions.

Technical specification

	Stationary	Mobile
Volume of H ₂	10 - 100 Nm ³ /h	60 Nm ³ /h
Volume of air	490 - 4,000 Nm ³ /h	1,500 Nm ³ /h
Operating pressure	Atmospheric	Atmospheric
Operating temperature	10 - 150°C	10 - 50°C
Outlet gas temperature	300 - 400°C	300°C
Outlet gas condition	Water vapour (1 - 4 vol%)	
Dimensions	4 x 3.5 x 4.9 m	2.4 x 1.2 x 2.8 m

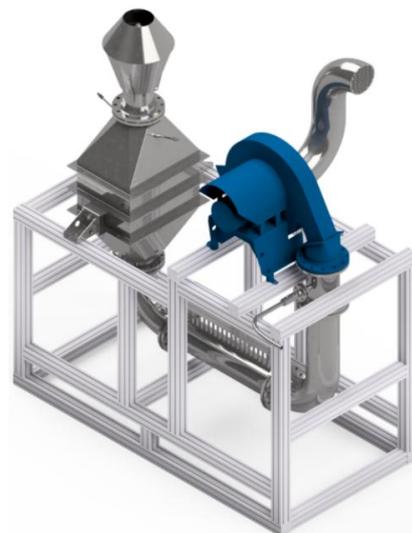
Key benefits

- ✓ Modular and scalable
- ✓ Plug-and-play integration
- ✓ Compact footprint
- ✓ Fully automated operation
- ✓ Low maintenance
- ✓ High system availability
- ✓ Suitable for indoor as well as outdoor
- ✓ Easily integrates in DeOxo systems

DeHydro units



Stationary DeHydro unit



Mobile DeHydro unit

ReiCat is a German technology company with over 40 years of experience in technical gas purification, technical gas recycling, and exhaust air treatment. More than 600 systems operate in 60 countries worldwide, supporting industry leaders in green hydrogen, carbon capture, and clean air technologies among others.

