

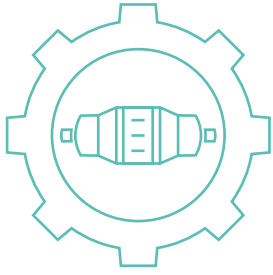
CATAGEN

green emissions testing

Why Partner with CATAGEN?

REFORMER CATALYST AGEING

CATAGEN help our partners with accelerated reformer catalyst ageing using a synthetic recirculating gas e-reactor, The OMEGA. Our unique OMEGA technology can replicate inlet reformer conditions, including gas compositions, flow rates and temperatures.



TESTING ADAPTABILITY

Accommodating flow rates from:

5g/s – 40g/s

The Versatile OMEGA - Synthetic Gas Reactor from CATAGEN is designed to be adaptable to your specific testing needs.

It is capable of a wide range of gas compositions, accommodating varying flow rates from 5 g/s – 40 g/s, and operates within temperature ranges from 400°C to 900°C+ for catalyst testing.

WHAT MAKES OUR OMEGA REACTOR SO UNIQUE?

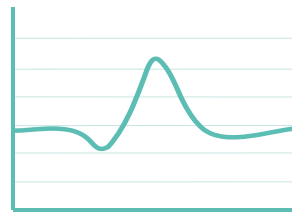
The OMEGA technology produces repeatable and representatively aged catalysts with world leading data, enabling informed confident decisions on your reformer catalysts.

Moreover, our reactor is modularly constructed, allowing us to extend testing capabilities and accommodate catalyst samples of various sizes. Additionally, our onsite desulphurisation units ensure gas purity by reducing sulphur content in natural gas to the parts per billion range, minimizing the risk of contamination during testing.

PURE MEASUREMENT OF PERFORMANCE

At CATAGEN, we pride ourselves on delivering industry-leading reproducibility, with test-to-test variability consistently maintained below 2%.

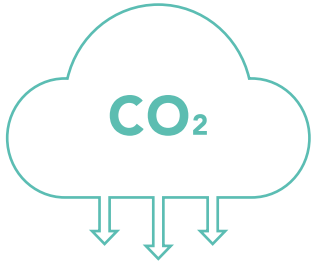
Our state-of-the-art technology relies on electrically powered furnaces, precise flow control, and meticulous temperature and gas composition control using mass flow controllers.



Test-to-test variability consistently below:

2%

This ensures not only the accuracy of measurements but also the utmost precision in replicating testing conditions, meeting the highest standards of performance testing.



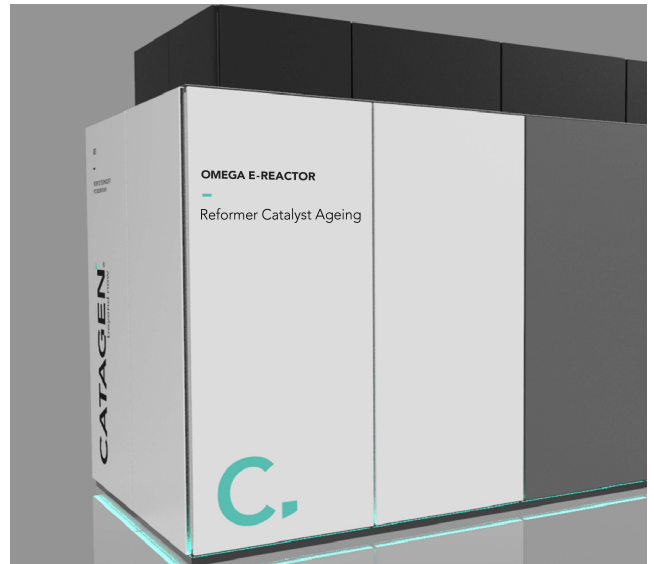
CO₂ EMISSIONS

CATAGEN's purpose is to clean and decarbonise the air. With CATAGEN, you can reduce your CO₂ emissions by up to an impressive 75% compared to alternative catalyst testing methods.

The technology we employ enables us to achieve high recirculation rates, significantly minimising CO₂ and other emissions produced during the testing process, and thus contributing to a more sustainable and eco-friendly approach. Our facility is also powered by renewable energy, further reducing our CO₂ impact.

Reduce emissions by up to:

—
75%



COST SAVINGS

CATAGEN specialises in cost-effective testing solutions, providing savings of up to 40% on your testing programmes.

Our technology achieves remarkable results with recirculation rates of up to 75%, optimising gas mixture and reducing gas usage costs.

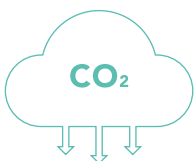


Savings of up to:

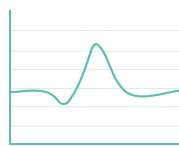
40%

With the escalating costs of gas and the extended useful life of reformer catalysts, our approach significantly lowers the overall expenses and time associated with durability testing for SOFC's and reformer catalysts.

At CATAGEN, we have conducted over 2,000 hours of reformer catalyst ageing using our OMEGA recirculating gas e-reactor, ensuring continuous 24/7 testing for precise performance data.



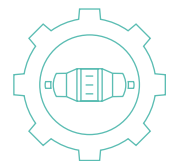
CO₂ EMISSIONS SAVING



PURE MEASUREMENT OF PERFORMANCE



COST SAVINGS



TESTING ADAPTABILITY



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