



PILOT & DEMONSTRATION PLANTS

OUR KEY COMPETENCIES

- Dedicated System Engineering
- Chemical Reactor and Heat Exchanger Design
- Balance of Plant and Component Selection
- Mechanical Design Engineering
- Quality Controlled Manufacturing and Assembly
- Turn Key Delivery and Installation
- Testing Assistance

PILOT & DEMONSTRATION PLANTS

HyGear designs and builds plants for verification and demonstration of new processes or components like catalysts and adsorbents. These systems are usually dedicated to individual needs and range from small laboratory set ups to turn key demonstration plants, close or equal to real scale. All systems are designed to enable representative data acquisition.

OUR CUSTOMIZED SOLUTIONS

HyGear offers solutions for every development stage in the chemical, oil and gas industries. From verification of new technologies in the early research phase to full scale demonstration tests in the implementation phase.

We are not limiting ourselves to the chemical process verification. Using our extensive know how, we have also supplied our customers with rigs built specifically for testing mechanical integrity, shock, impact and vibration testing, salination and corrosion testing, as well as noise and EMC measurements.

OUR WORKFORCE

With HyGear, you also benefit from our workforce's unique skills in chemical engineering services. We can assist you in developing well founded test plans leading to statistically significant data. Further, our laboratory and analysis team can perform tests impartially and our engineers can interpret the data in an unprejudiced manner, providing credible data with a wealth of insights.

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ENGINEERING FOR SUSTAINABLE GROWTH

With the growing global need for energy efficiency and sustainability, industries are improving chemical processes, optimizing supply chains and searching for new and sustainable fuels. HyGear is a Dutch company with unique competencies in miniaturization of chemical processes and gas streams.

We are devoted to delivering systems that are ready-to-use in renewable energy applications or chemical processes. HyGear develops, builds and tests compact, standardized hydrogen generators, as well as biogas upgrading systems, gas to liquid solutions and fuel cells.

TANGIBLE BENEFITS

Our expertise also spans a broad range of chemical engineering services. From dedicated assistance in process development up to designing and building turnkey pilot and demonstration plants for customers in the oil, gas and chemical industries.

HyGear's range of systems and services delivers its customers tangible benefits in costs, security and practical usability. We offer industries the opportunity to reduce their time to market while at the same time helping them to take a well-tested step to full-scale production.