

# HYDROGENATION IN CONTINUOUS FLOW

The new standard of lab-scale hydrogenation

## FEATURES

### On-demand hydrogen generation

- Hydrogen is generated in situ, by water electrolysis
- Patented technology
- No need of hydrogen cylinders

### High pressure capability

- All systems can be pressurized up to 100 bar

### Continuous flow technology

- Improved safety
- Improved mixing
- Fast and efficient heat transfer
- Large versatility of reactors and modules

### Disposable catalyst cartridges - CatCarts®

- A wide selection of heterogeneous catalysts
- Various sizes of catalyst loading - from catalyst screening to scale-up
- No catalyst filtration

### H-Cube® Mini Plus - Safe and easy hydrogenation

**Easy-to-use:** Straightforward design, aided with simplistic software and educational video tutorials.

**Powerful:** Reactions up to 100°C temperature and 100 bar pressure.

**Catalysts:** Compatible with 30 mm or 70 mm long CatCarts® and MicroCatCarts®.

**Versatile:** Homogeneous and heterogeneous reactions can be performed, with or without hydrogen.

**Fast:** Temperature, hydrogen pressure and flow rate can be changed quickly on the fly for rapid optimization.

**Scale:** Mg to g scale synthesis.



### H-Cube® Pro - Designed for advanced applications

**Modular:** Several modules can be connected and controlled by the H-Cube® Pro, and used for advanced flow synthesis.

**Powerful:** Reactions up to 150°C temperature and 100 bar pressure.

**Catalysts:** Compatible with 30 mm or 70 mm long CatCarts® and MicroCatCarts®.

**Versatile:** Homogeneous and heterogeneous reactions can be performed, with or without hydrogen.

**Fast:** Temperature, hydrogen pressure and flow rate can be changed quickly on the fly for rapid optimization.

**Scale:** Mg to g scale synthesis.





## H-Genie® - Phoenix Flow Reactor™ platform

**Complete platform:** Several modules can be used as part of the scale-up synthetic platform.

**Powerful:** Reactions up to 450°C temperature and 100 bar pressure.

**Catalysts:** Compatible with 30 mm or 70 mm long CatCarts®, MicroCatCarts®, MidiCarts™, and various sizes of metal-metal sealed cartridges.

**Versatile:** Homogeneous and heterogeneous reactions can be performed, with or without hydrogen.

**Fast:** Temperature, hydrogen pressure and flow rate can be changed quickly on the fly for rapid optimization.

**Scale:** Milligram to kilogram scale synthesis



## CatCarts®

- Disposable catalyst cartridge system
- 100+ types of CatCarts®
- Available pre-filled or can be loaded by the user
- Custom CatCarts are also available tailored to the user's needs
- Various sizes are available from milligram to kilogram scale synthesis

### Product range:

- CatCarts® (30 mm, 70 mm long CatCarts®) and MicroCatCarts®
- MidiCarts™
- Metal-metal sealed cartridges with fittings from 1/8" OD to 1" OD with 125 mm and 250 mm lengths for custom applications.



For more information, please visit  
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