

Coil Reactors

For homogeneous reactions

Change coils in seconds with our patented reactor design

Asynt Flow **Coil Reactors** provide flexible, high-performance solutions for flow chemistry from milligram to kilogram scale. The grooved aluminium mandrel design delivers rapid heat transfer and excellent temperature uniformity while allowing users to rapidly exchange or rewind coils.

The coil reactors are specially designed to allow you to rapidly switch between different sizes and materials for different reactions. Choose smaller volume coil reactors for fast, exothermic or small-scale reactions, and larger volume coil reactors for scale up experiments or longer residence times.



AsyntFlow



- **Excellent uniform temperature control:** tubing sits in a machined aluminium mandrel, creating consistent thermal contact around the coil.
- **Flexible volumes:** Smaller volumes for faster reactions and optimisation to larger volumes for longer residence times and scale up applications.
- **Flexible materials:** PTFE and PFA for broad chemical compatibility and visibility, stainless steel 316L and Hastelloy C-276 for higher pressure, higher temperature and more demanding chemistry.
- **User serviceability:** Tubing can be rewound and replaced, reducing downtime and avoiding the cost of replacing complete reactor assemblies.
- **Applications:** Ideal for homogeneous flow chemistry, heat transfer, residence-time studies, scale-up, pre-heating and pre-mixing before downstream reactors.

Providing excellent thermal performance, flexibility and ease of use for both research and scale-up flow chemistry applications.



Control Your Coil Reactor

Precise temperature control

Expand your flow chemistry reactor system

ColdCoil

Flexible standalone cooling and heating module for coil reactors

A versatile standalone temperature controlled coil reactor module that, when connected to a suitable external circulator, is designed to maintain stable temperatures between $-80\text{ }^{\circ}\text{C}$ and $150\text{ }^{\circ}\text{C}$ for extended periods. Ideal for truly continuous low temperature flow chemistry experiments.



HotCoil

Flexible standalone heating module for coil reactors

The Asynt Hotcoil is a versatile standalone heated reactor module that is compatible with all our coil reactors and has a temperature range of ambient to $260\text{ }^{\circ}\text{C}$ ($300\text{ }^{\circ}\text{C}$ option available). Temperatures can be set either remotely (RS232, LAN) or using the 'push-to-set' control.



Contact us to discuss how these systems would benefit your flow chemistry

