

Optional accessory for Tandem and Single μ -Reactors

Medium Pressure Flow controller; MP-3050FC

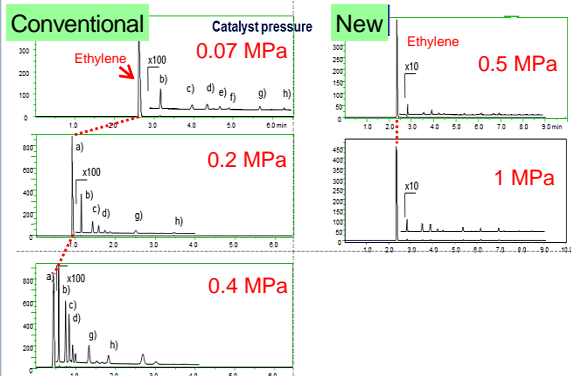
MAJOR FEATURES

- 1) New flow control system allows online GC analysis of products formed by catalytic reaction under 1 MPa.
- 2) Peak retention times on chromatogram are unaffected by pressure (see figure on right).
Employing deactivated restrictor tube and Open Split interface, retention times of peaks are independent of pressure.
- 3) Currently used GC, separation column, and detector can be used without modifications.
- 4) Easily upgradable from Tandem and Single μ -Reactors.

Online analysis of medium pressure catalytic reaction

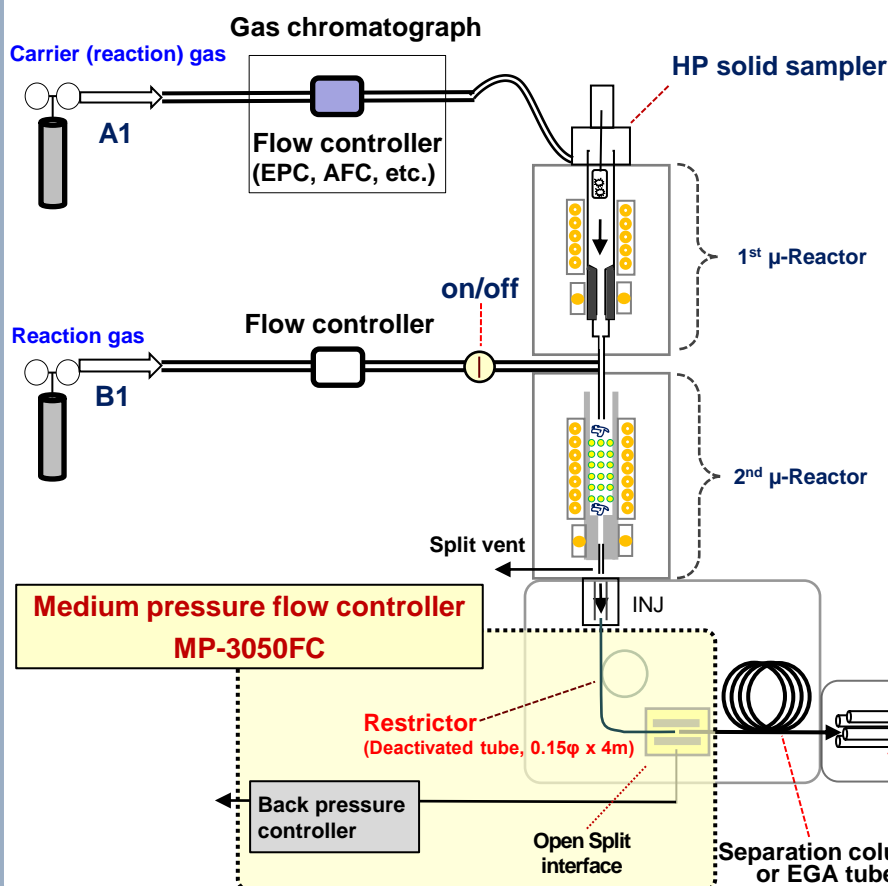
(Conversion from ethanol to ethylene)

Retention times greatly altered by pressure Retention times unaffected by pressure



Catalyst: H-ZSM-5 at 250°C, carrier gas: He (100 mL/min)
Split ratio: 1/100, sample: ethanol (1 μ L), detector: FID
Column: UA1-30M-2.0F, GC oven: 30 (4 min)-@20/min-230°C

Pneumatics of MP Tandem μ -Reactor system



Specifications

- Reactor pressure control: 0.3–0.98 MPa (Constant pressure control using GC's column head pressure controller)
- Column head pressure display: digital
- Supported gases: Helium, hydrogen, nitrogen, etc.
- Supported GC, GC/MS: System as recommended for μ -Reactors
- Standard accessories: Deactivated restrictor tube, Open Split interface, etc.
- Power: 100 / 240 VAC, 50W

User preparation

- Column nut for your GC injector, ferrule (id. 0.5 mm)

* Auto-Shot Sampler and Selective Sampler are not compatible with Medium-Pressure Flow Controller MP-3050FC.

Specifications subject to change.