PRODUCT DATASHEET

Ex-Proof Automated Pilot Plant (1 to 50 L)

Skid-mounted automated pilot plants for polymerisation, alkoxylation and hydrogenation

Product page





Close-up: reactor head, dosing and Ex instruments

OVERVIEW

The Tech Inc. Ex-Proof Automated Pilot Plant (1 to 50 L) is one size up from the laboratory reactor: a skid-mounted plant with a 1 to 50 L reactor, feed dosing, heating and cooling, condensers, receivers and a control system that runs recipes and logs every variable. Components for hazardous areas carry Ex certification, so the plant can run flammable solvents and gases in the pilot hall.

TYPICAL DESIGN DATA

Reactor volume	About 1 to 50 L
Pressure	To about 100 bar
Temperature	About -20 to 250 °C
Codes and standards	Reactor to ASME VIII; piping to ASME B31.3; Ex equipment certified to IEC 60079 / ATEX for the zone
Materials	316L, Alloy C-276 or Hastelloy-type alloys
Area classification	Ex components for Zone 1 or Zone 2, IIA to IIC as required
Control	PLC with recipes, interlocks and data export

MODELS AND CAPACITIES

- **TI-XPP-1** – about 1 L
- **TI-XPP-10** – about 10 L
- **TI-XPP-25** – about 25 L
- **TI-XPP-50** – about 50 L

Indicative reactor volume.

ORDERING CODE

Example **TI-XPP-25-H-C**: **25** reactor volume, L; **H** process: P polymerisation, A alkoxylation, H hydrogenation, M multi-purpose; **C** material: 6 316L, C C-276.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual. **Options:** second reactor for parallel batches; online analysers; bursting disc and catch tank; remote monitoring; commissioning and training on site.

KEY ADVANTAGES

- **Automated** – recipes and data logging
- **Accurate dosing** – by weight and mass flow
- **Hazardous-area ready** – Ex-certified components
- **Skid-mounted** – moves into the pilot hall ready to connect

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Designed and built by Tech Inc. · **Part of the Davey Group since 1990**

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