

Combined Fluidized and Fixed Bed Reactor



- 2 reactors tubular/fluidized bed with multi-zone furnace
 - 12 Dosing of gas / 2 dosing of liquid
 - Gas-phase chromatograph (GC) / evaporator
 - Fully automated with industrial control system

Technical data

Dimension plant (W x D x H)	2250 x 1000 x 1950 mm
Weight plant	750 kg
Electrical supply	3P ~ 220 V / 60 Hz / 36 A
Ambient conditions	10 to 40 °C
Reactor (Stainless steel)	PS = 40 bar at TS = 700 °C / PS = 100 bar at TS = 400 °C
Reactor (Quartz glass)	PS = 0,5 bar / TS = 1000 °C
Mediums	butane, hydrogen, methane, carbon dioxide, oxygen, propane, air, carbon ethane, spare gas, nitrogen and LPG DM-water + hydrocarbon
Other	2x 7-zone tube furnace, GC
Cooler	2.2 kW
Automation	24/7 Control with step based recipe system



Liquid gas tank



Gas inlet



Quartz fluidized bed reactor



Liquid dosing with HPLC pumps

AP-Miniplant turn-key research plants are used for:

- Absorption, Adsorption, Extraction
- Reactive distillation. Distillation, Rectification, Evaporator, Humidification
- Precipitation, Stirred Reactor, Dryer, Mixer, Filter
- Polymerization Reactor, Polycondensation, Gas Phase Polymerization
- Catalyst Test System, Fixed Bed Reactor, High Temperature Furnace
- Training Plant, Container Unit, Gas, Liquid and Solid Dosing



AP-Miniplant GmbH & Co. KG

Hirtenrasen 64
D-37318 Lindewerra

Phone: +49 (0) 36087 976-0
Fax: +49 (0) 36087 976-22

Email: info@miniplant.de
Internet: www.miniplant.de