High Temperature Polymerization Plant



# **2-Stage Melt Polymerization**



 2 jacketed 10 I high temperature reactors with 6 and 30 bar, 350 °C

• 3 Thermostats for reactors and partial condenser

 Vacuum system with in total 11 redundant liquid N<sub>2</sub> cooling traps

Fully automated with industrial control system



## Smart solution for small plants

#### **Technical data**

Dimension plant (W x D x H)	2770 x 1390 x 1910/2460 mm (incl. switching cabinet)
Weight plant	1470 kg
Electrical supply	3P ~ 400 V / 50 Hz / 63 A
Ambient conditions	10 to 35°C
Pressure conditions	- 1 to 30 bar / vacuum 0,1 mbar, PED Category III
Temperature conditions	- 10 to 350°C
Reactor type	2x reactors of stainless steel, 10 L 6 bas, 10 L semi conical, 30 bar, reactor lift
Receiver tanks (to fuse)	tank (5 l) with heating sleeve
Thermostat	9 kW / 50-330°C (receiver reactor) / 9 kW / 50-350°C (main reactor) / 30-200°C (dephlegmator)
Torque measurment	175 Nm



(inside)

Vacuum system





Cooling traps

Main reactor

### 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: <u>info@miniplant.de</u> Internet: www.miniplant.de