Synthesis Workstation

OptiMax – Synthesize, Optimize, Characterize

Products and Processes – Right on Time

Powerful & Easy Handling

The OptiMax™ workstation is compact, mobile, flexible, and quickly installed. The high performance heating and cooling system eliminates the need for bulky cryostats or cumbersome oil and ice baths in the range from –40 °C to 180 °C. A large window provides visibility into the illuminated reactor ensuring that changes in the reactor are visible.

One-Touch Control

Controlling the OptiMax is simple and intuitive. At the touch of a button, experiment parameters can be altered quickly. The graphical display of the touchscreen presents all experiment information in real time. A sequence of consecutive tasks can be programmed and run completely unattended, monitored by the safety system.

Unlimited Flexibility

Depending on the nature of the study, the appropriate configuration can be chosen from a wide range of reactors and stirrers. Handling and cleaning are easy. Reactor stands and cover holders make sure your equipment is always securely stored and within reach. Configuring is a breeze and assisted by self-recognition of probes and devices.

Quality Information

During the course of an experiment the OptiMax workstation collects a wealth of information. All data and events are recorded automatically, making the experiment consistently traceable and reproducible. In order to allow comprehensive data interpretation, the data can be imported into the powerful PC software iControl™ or MS-Excel®.

OptiMax™ – Your Synthesis Workstation

The current business environment in the chemical and pharmaceutical industry is challenging and requires chemists in chemical and process development to use more productive tools and to make the right decisions faster.

OptiMax improves the workflows in organic synthesis and process development labs significantly. It delivers new chemical compounds for application testing in a timely manner, helps characterize the process, reduces failures, and ensures sustainability of workflows and data in the lab of tomorrow.

METTLER TOLEDO

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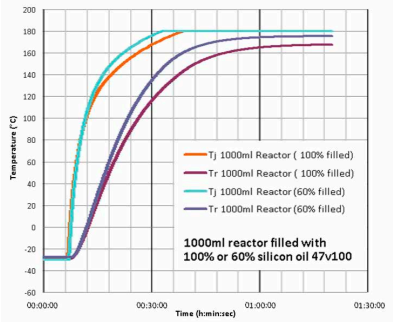
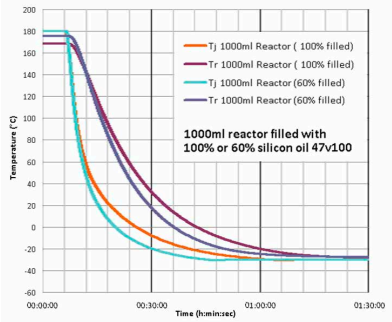
OptiMax – Specifications

Heating and Cooling	Solid state heating-cooling system Heating: Electric Cooling: Peltier	Cooling performance 0 °C 35 W Sample: 1 L of silicon oil 47v20 20 °C 65 W Peltier cooling: tap water 15 °C 40 °C 95 W
Temperature Range	–40 °C to 180 °C (jacket temperature)	
Temperature Modes	Jacket (Tj) or reaction mass (Tr) control, distillation and crystallization (constant or ramp)	
T-measurement	Tr, Taux: Pt100 class A	Tj, Tc: Pt100 class B
Heating and Cooling Performance	Heating 	Cooling 
Reactors	Single-piece reactor	Two-piece reactor
	Working volume 250 mL nominal 400 mL 500 mL 700 mL 1000 mL 1150 mL	Working volume 250 mL nominal 370 mL 500 mL 830 mL 1000 mL 1310 mL
Covers	250 mL, 500 mL, and 1000 mL – with 7 ports	250 mL, 500 mL, and 1000 mL – with 7 ports
Stirrer Drive	Eccentric overhead stirrer with variable shaft length	
Stirrer	Pitch-blade (glass, Alloy C-22) Anchor (glass, Alloy C-22) Half-moon (PTFE for single-piece)	
Stirring Speed	30 rpm to 1200 rpm (± 5 rpm)	
Reactor Window	50 mm x 110 mm	
Reactor Lights	12 LED (6 front lights, 6 back lights)	
Graphical Touchscreen	For operation, data and trend curve display Direct control and programmable TFT screen size: 7", resolution: 800 x 480 pixels	
Data Logging	Automatic logging of all data and events	
Connectivity and Data Transfer	CAN: Interface for peripherals USB: Data export to PC with memory stick Ethernet: Standard communication interface for direct connection to PC	
Supported Languages	English, German, French, Spanish, Japanese, Chinese	
Dimensions (WxDxH)	388 mm x 414 mm x 539 mm 388 mm x 414 mm x 780 mm, with stirrer	
Weight	35 kg	
Power Supply	100 V to 240 V AC, 50 Hz to 60 Hz, 1300 VA	

METTLER TOLEDO Group
Automated Reactors and In Situ Analysis
Local contact: www.mt.com/contacts

www.mt.com/OptiMax
For more information

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