

Series “EMS” Stir-mantle is another popular line of Rigid mantles for round bottom flask and Short Path Distillation.

The Stir-Mantle adds magnetic stirring capability (100-1850 rpm) to heating mantles for spherical flasks. Heating and stirring are independently controlled.

The system comes with a variable speed control that connects to the motor with inline connector, power cords for mantle and PTFE coated stir-bar.

Note: Temperature controls are sold separately. Actual speed depends on magnet size.

WARNING: chemical spillage, overheating, overloading and general misuse will greatly reduce service life!

Series “TEM” Stir-mantles are the same as the EMS series but does not include the motor control. This option allows the end user to select advanced controls that combine stirring and temperature control.



Catalog Number	Voltage	Flask Capacity (ml)	Max. Flask Diameter (mm)	Watts
100D EMS110M	115	2,000	170	500
100D EMS114	115	5,000	220	600
100D EMS116	115	12,000	293	1300
100D EMS118	115	22,000	347	2@770

Catalog Number	Voltage	Flask Capacity (ml)	Max. Flask Diameter (mm)	Watts
100D TEM110M	115	2,000	170	500
100D TEM114	115	5,000	220	600
100D TEM116	115	12,000	293	1300
100D TEM118	115	22,000	347	2@770

See page 4 and 5 controls

Series “O” Heating and Insulation for keeping vapor temperatures at desired levels in Short Path Distillation setups.

This mantle helps prevent vapor condensation in the upper half of a flask during distillation of high-boiling materials. The tops are designed for use with Series EMS and TEM mantles. They protect the flask, the solutions and the laboratory from drafts, which would disturb the reflux ration during fractionation from flying glass or flask implosions in high vacuum distillations from falling objects; and from thermal strain between top and lower half of flask during high-temperature operations. With a glass-fabric construction and laced-side opening, the elliptical hole accommodates 1-, 2- and 3-neck flasks.

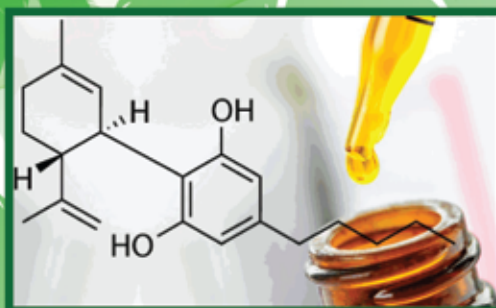
NOTE: Temperature controls are sold separately.

WARNING: chemical spillage, overheating, overloading and general misuse will greatly reduce service life!

Contact customer service for custom configurations.



Catalog Number	Voltage	Flask Capacity (ml)	Max. Flask Diameter (mm)	Watts
100A INS1103	N/A	2,000	170	N/A
100A INS1143	N/A	5,000	220	N/A
100A INS1163	N/A	12,000	293	N/A
100A INS1183	N/A	22,000	347	N/A
100A MO1103	115	2,000	170	200
100A MO1143	115	5,000	220	300
100A MO1163	115	12,000	293	590
100A MO1183	115	22,000	347	650



Vapor Monitor

This instrument is small in size and can be used to monitor vapor temperature or other processes. The input sensor is a type “J” thermocouple and display reads Celsius. This unit comes with a 6’ attached power cord and grid support bracket, which is ideal for fume hood mounting to maximize bench space.

Control Features:

- Red LED Light
- Setpoint Input
- Alarms: High or Low
- Audible alarm
- Thermocouple break alarm/notification
- Order Thermocouple Separately



Catalog Number	Voltage	Description	Range
108 TOW-MA1	120	Monitor with Type “J” Input	0-999 °C
108 TJ1/4-4	N/A	Thermocouple 1/4” x 4” Probe Length	

Temperature/Motor Control Combination: 15 Amp Load

This instrument combines our temperature control technology with our motor drive in a compact desktop design. The input for the control is universal for common thermocouple types: J, K & T. The unit comes with a grid support bracket, which is ideal for fume hood mounting to maximize bench space.

Control Features:

- Shows process and setpoint temperature
- Thermocouple break alarm/notification
- Speed control by turning knob in percent
- Includes two NEMA 5-15R receptacles each rated 900 watts on back panel
- Order thermocouple separately
- Use with EMS or TEM motor driven mantles



Catalog Number	Voltage	Description	Thermocouple Type	Recommended Liter Size	Watts
104A HS112	120	Temperature/Motor Control for Motor Drive Stir-Mantles	Universal Input	2 or 5	1800

Temperature/Motor Control Combination: 20 Amp Load

This instrument combines our temperature control technology with our motor drive in a compact desktop design. The input for the control is universal for common thermocouple types: J, K & T.

Control Features:

- Shows process and setpoint temperature
- Thermocouple break alarm/notification
- Speed control by turning knob in percent
- Includes three NEMA 5-15R receptacles each rated 800 watts on the back panel
- Capable of handling loads for 12 and 22 liter systems
- Order thermocouple separately
- Use with EMS or TEM motor driven mantles
- Detachable 6' line cord and NEMA 5-20P plug end



Catalog Number	Voltage	Description	Thermocouple Type	Recommended Liter Size	Watts
104A HS112-3	120	Temperature/Motor Control for Motor Drive Stir-Mantles	Universal Input	12 or 22	2400

Spill Proof Protection

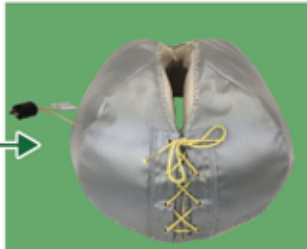
Our new Silicone covers can help prevent mantle damage from chemical spillage and improve operating safety. These can be used only with our EMS and TEM series.



Catalog Number	Size	Description
100D S102	2 Liter	Silicone Spill Guard
100D S105	5 Liter	Silicone Spill Guard
100D S112	12 Liter	Silicone Spill Guard
100D S122	22 Liter	Silicone Spill Guard

WARNING: Chemical spillage, overheating, overloading and general misuse will greatly reduce service life of heating mantles!

100A MO1183
2,000 ml Heated Top



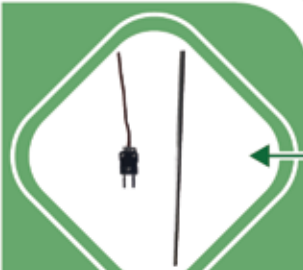
100D SI02
2 L Silicone Spill Guard



100D TEM110M
2,000 ml Stir Mantle



108A TJ1/4-4
4" Type J Thermocouple



108A TOW-MA1
Vapor Monitor



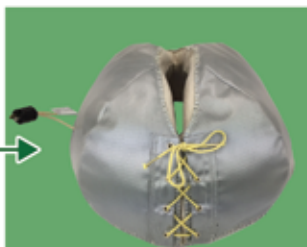
108A TJ1/4-12
12" Type J Thermocouple



104A HS112
Temperature/Motor
Control



100A MO1143
5,000 ml Heated Top



100D SI05
5 L Silicone Spill Guard



100D TEM114
5,000 ml Stir Mantle



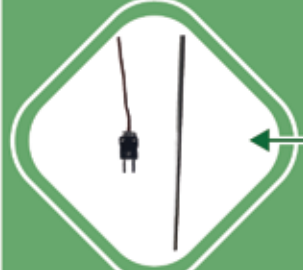
108A TJ1/4-4
4" Type J Thermocouple



108A TOW-MA1
Vapor Monitor



108A TJ1/4-12
12" Type J Thermocouple



104A HS112
Temperature/Motor
Control



100A MO1163
12,000 ml Heated Top



100D SI22
12 L Silicone Spill Guard



100D TEM116
12,000 ml Stir Mantle



108A TJ1/4-4
4" Type J Thermocouple



108A TOW-MA1
Vapor Monitor



108A TJ1/4-18
18" Type J Thermocouple



104A HS112-3
Temperature/Motor
Control



100A MO1183
22,000 ml Insulated Top



100D SI22
22 L Silicone Spill Guard



100D TEM118
22,000 ml Stir Mantle



108A TJ1/4-4
4" Type J Thermocouple



108A TOW-MA1
Vapor Monitor



108A TJ1/4-18
18" Type J Thermocouple



104A HS112-3
Temperature/Motor
Control

