

MT 6/10 GALLON SERIES

MODULAR BASE DIRECT STEAM TILTING KETTLES

INSTALLATION - OPERATION - MAINTENANCE



MODELS ON CABINET BASE

- MT6
- MT10
- MT6T6
- MT10T6
- MT10T10

MODEL WITH GAS BOILERS

- MT6G
- MT10G
- MT6T6G
- MT10T6G
- MT10T10G

MODEL WITH ELECTRIC BOILERS

- MT6E
- MT10E
- MT6T6E
- MT10T6E
- MT10T10E



MARKET FORGE



Telephone: (802) 658-6600 Fax: (802) 864-0183
www.marketforge.com

PN 14-0325 Rev F (11/17)

Your Service Agency's Address:

Model

Serial number

Kettle installed by

Installation checked by

IMPORTANT

WARNING: Improper installation, adjustment, alternation, service or maintenance can cause property damage, injury or death. Read the installation, operation and maintenance instructions thoroughly before installing or servicing this equipment.

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

The information contained in this manual is important for the proper installation, use, and maintenance of this kettle. Adherence to these procedures and instructions will result in satisfactory baking results and long, trouble free service. Please read this manual carefully and retain it for future reference.

ERRORS: Descriptive, typographic or pictorial errors are subject to correction. Specifications are subject to change without notice.

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Introduction

Market Forge MT6 and MT10 series tilting steam jacketed kettles are mounted on a modular stainless steel cabinet, a gas boiler or an electric boiler. Double wall construction around the lower half of the kettle forms a surrounding chamber inot which steam is introduced as a source of heat for cooking.

Steam input plumbing is equipped with a manual control valve. Condensate is removed through a steam trap connecting with the kettle drain plumbing assembly. A swing nozzle, hot-cold combination faucet provides a source of water for addition to the kettle for cooking and cleaning.

The 6 gallon kettle is mounted in a trunnion assembly to the modular base. The trunnion pivots include steam input and return connections for the kettle. Kettle tilting is accomplished manually by moving the handle fixed to the rim so as to rotate the kettle in a trunnion.

CABINET BASE MODELS:

- **MT6** - Single 6 gallon mounted on an 24" (457mm) wide x 28" (711mm) tall cabinet base equipped for direct connection to a remote steam source
- **MT10** - Single 10 gallon mounted on an 24" (457mm) wide x 28" (711mm) tall cabinet base equipped for direct connection to a remote steam source
- **MT6T6** - Two 6 gallon kettles mounted side by side on an 36" (914mm) wide x 28" (711mm) tall cabinet base equipped for direct connection to a remote steam source.
- **MT10T10** - Two 10 gallon kettles mounted side by side on an 36" (914mm) wide x 28" (711mm) tall cabinet base equipped for direct connection to a remote steam source.
- **MT10T6** - One 10 gallon and one 6 gallon kettle mounted side by side on an 36" (914mm) wide x 28" (711mm) tall cabinet base equipped for direct connection to a remote steam source.

GAS BOILER BASE MODELS:

- **MT6G** - Single 6 gallon mounted on an 24" (457mm) wide x 28" (711mm) tall gas boiler
- **MT10G** - Single 10 gallon mounted on an 24" (457mm) wide x 28" (711mm) tall gas boiler
- **MT6T6G** - Two 6 gallon kettles mounted side by side on an 36" (914mm) wide x 28" (711mm) tall gas boiler
- **MT10T10G** - Two 10 gallon kettles mounted side by side on an 36" (914mm) wide x 28" (711mm) tall gas boiler
- **MT10T6G** - One 10 gallon and one 6 gallon kettle mounted side by side on an 36" (914mm) wide x 28" (711mm) tall gas boiler

ELECTRIC BOILER BASE MODELS:

- **MT6E** - Single 6 gallon mounted on an 24" (457mm) wide x 28" (711mm) tall electric boiler
- **MT10E** - Single 10 gallon mounted on an 24" (457mm) wide x 28" (711mm) tall electric boiler
- **MT6T6E** - Two 6 gallon kettles mounted side by side on an 36" (914mm) wide x 28" (711mm) tall electric boiler
- **MT10T10E** - Two 10 gallon kettles mounted side by side on an 36" (914mm) wide x 28" (711mm) tall electric boiler
- **MT10T6E** - One 10 gallon and one 6 gallon kettle mounted side by side on an 36" (914mm) wide x 28" (711mm) tall electric boiler

SERVICE:

Modular kettles are durable cooking equipment requiring a minimum of service other then routine cleaning and preventive methods. Should repairs be required, a network of authorized service agencies is available to assist with prompt service. A current directory of authorized service agencies is available on our website, www.mfii.com.

The model and/or serial numbers must be referenced when corresponding with Market Forge. The data plate containing model and serial numbers pertaining to the equipment is located inside the cabinet door on the right vertical frame member.

Service Connections - Cabinet Base Models

MT-6 & MT-10

S*	Steam Supply - 1/2 (13mm) NPT for incoming steam at 15-50 PSI (1.0-3.5kg/cm ²).
D	Drain - Pipe full 2" (50mm) NPT to flush floor drain. DO NOT MAKE SOLID CONNECTION TO FLOOR DRAIN.
HW	Hot Water - 3/8" (10mm) NPT for hot water to faucet. Hot water line will have a maximum of 50 PSI (3.5kg/cw ²) and a minimum of 25 PSI (1.8 kg/cw ²) water pressure (Water may be filtered).
CW	Cold Water - 3/8" (10mm) NPT for cold water to faucet. Cold water line will have a maximum of 50 PSI (3.5kg/cw ²) and a minimum of 25 PSI (1.8 kg/cw ²) water pressure.
CR**	Condensate Return - 1/2 (13mm) NPT condensate return from kettle may be connected to condensate return line.

* Pressure reducing valve is required if incoming pressure exceeds 50 PSI (3.5kg/cm²).

** Optional at extra cost

NOTES:

PVC and CPVC pipe are not acceptable materials for drains.

WATER SUPPLY

Good quality water feed is the responsibility of the owner. Water quality must be within the following general guidelines.

TDS: 40-125 ppm	Chlorides: <25 ppm
Silica: <13 ppm	pH: 7.0 - 8.5
Chloramine: <0.2 ppm	Chlorine: <0.2 ppm
Hardness: 35-100 ppm	

The best defense against poor water quality is a water treatment system designed to meet your water quality conditions.

Appliance to be installed with backflow protection according to federal, state or local codes.

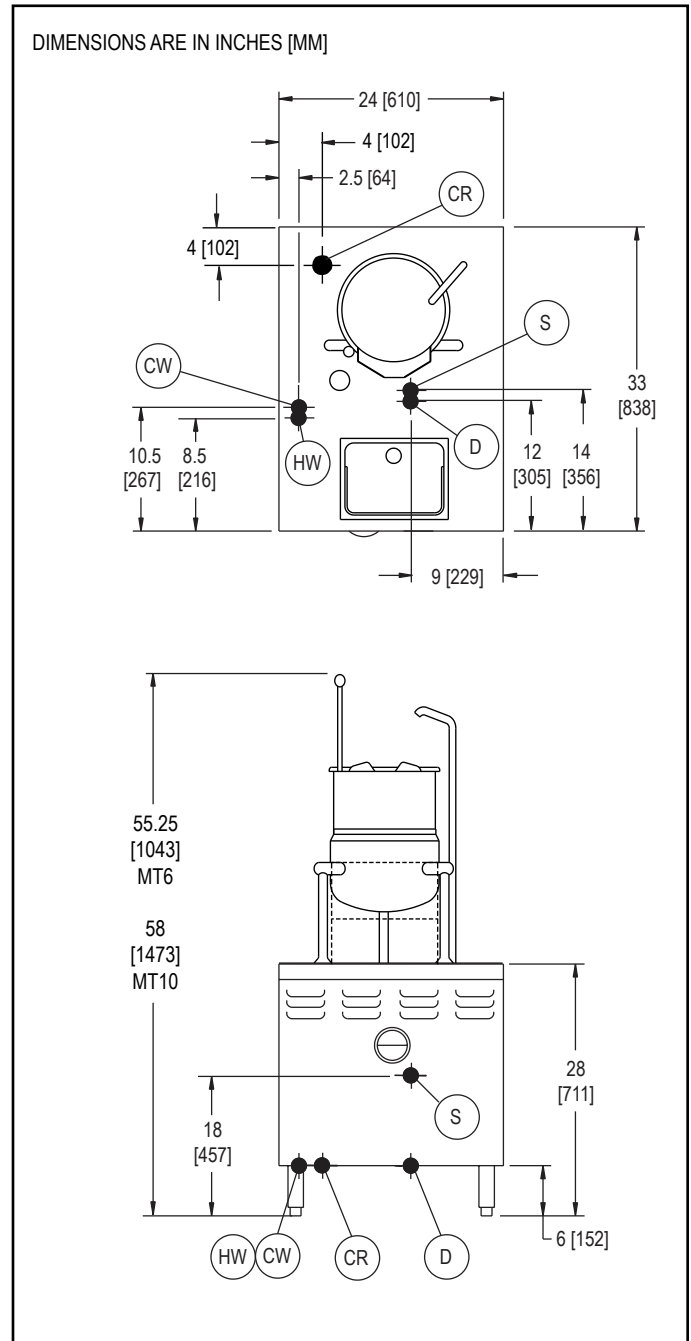


Figure 1

Service Connections - Cabinet Base Models

MT6T6

S*	Steam Supply - 1/2 (13mm) NPT for incoming steam at 15-50 PSI (1.0-3.5kg/cm ²).
HW	Hot Water - 3/8" (10mm) NPT for hot water to faucet. Hot water line will have a maximum of 50 PSI (3.5kg/cm ²) and a minimum of 25 PSI (1.8 kg/cm ²) water pressure (Water may be filtered).
CW	Cold Water - 3/8" (10mm) NPT for cold water to faucet. Cold water line will have a maximum of 50 PSI (3.5kg/cm ²) and a minimum of 25 PSI (1.8 kg/cm ²) water pressure.
CR**	Condensate Return - 1/2 (13mm) NPT condensate return from kettle may be connected to condensate return line.

* Pressure reducing valve is required if incoming pressure exceeds 50 PSI (3.5kg/cm²).

** Optional at extra cost

NOTES:

PVC and CPVC pipe are not acceptable materials for drains.

WATER SUPPLY

Good quality water feed is the responsibility of the owner. Water quality must be within the following general guidelines.

TDS: 40-125 ppm Chlorides: <25 ppm
 Silica: <13 ppm pH: 7.0 - 8.5
 Chloramine: <0.2 ppm Chlorine: <0.2 ppm
 Hardness: 35-100 ppm

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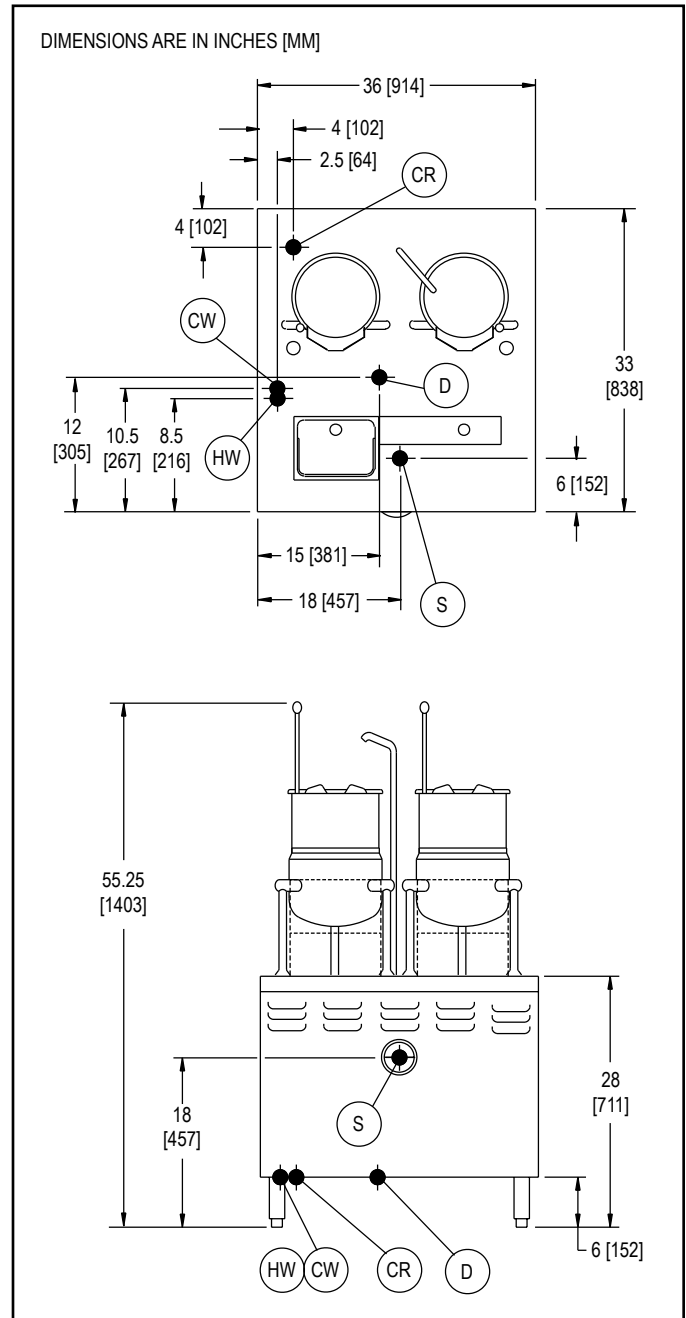


Figure 2

Service Connections - Cabinet Base Models

MT10T6

S*	Steam Supply - 1/2 (13mm) NPT for incoming steam at 15-50 PSI (1.0-3.5kg/cm ²).
HW	Hot Water - 3/8" (10mm) NPT for hot water to faucet. Hot water line will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure (Water may be filtered).
CW	Cold Water - 3/8" (10mm) NPT for cold water to faucet. Cold water line will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
CR**	Condensate Return - 1/2 (13mm) NPT condensate return from kettle may be connected to condensate return line.

* Pressure reducing valve is required if incoming pressure exceeds 50 PSI (3.5kg/cm²).

** Optional at extra cost

NOTES:

PVC and CPVC pipe are not acceptable materials for drains.

WATER SUPPLY

Good quality water feed is the responsibility of the owner. Water quality must be within the following general guidelines.

TDS: 40-125 ppm Chlorides: <25 ppm
 Silica: <13 ppm pH: 7.0 - 8.5
 Chloramine: <0.2 ppm Chlorine: <0.2 ppm
 Hardness: 35-100 ppm

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Appliance to be installed with backflow protection according to federal, state or local codes.

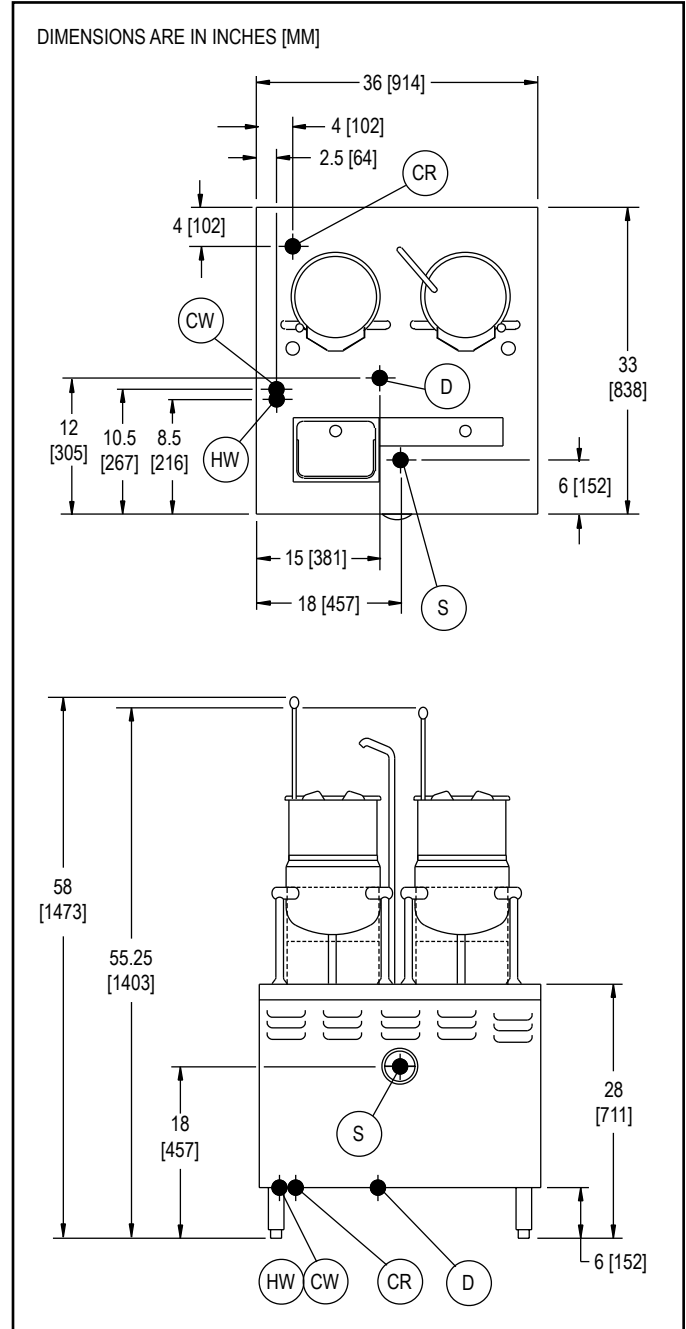


Figure 3

Service Connections - Cabinet Base Models

MT10T10

S*	Steam Supply - 1/2 (13mm) NPT for incoming steam at 15-50 PSI (1.0-3.5kg/cm ²).
HW	Hot Water - 3/8" (10mm) NPT for hot water to faucet. Hot water line will have a maximum of 50 PSI (3.5kg/cw ²) and a minimum of 25 PSI (1.8 kg/cw ²) water pressure (Water may be filtered).
CW	Cold Water - 3/8" (10mm) NPT for cold water to faucet. Cold water line will have a maximum of 50 PSI (3.5kg/cw ²) and a minimum of 25 PSI (1.8 kg/cw ²) water pressure.
CR**	Condensate Return - 1/2 (13mm) NPT condensate return from kettle may be connected to condensate return line.

* Pressure reducing valve is required if incoming pressure exceeds 50 PSI (3.5kg/cm²).

** Optional at extra cost

NOTES:

PVC and CPVC pipe are not acceptable materials for drains.

WATER SUPPLY

Good quality water feed is the responsibility of the owner. Water quality must be within the following general guidelines.

TDS: 40-125 ppm Chlorides: <25 ppm
 Silica: <13 ppm pH: 7.0 - 8.5
 Chloramine: <0.2 ppm Chlorine: <0.2 ppm
 Hardness: 35-100 ppm

The best defense against poor water quality is a water treatment system designed to meet your water quality conditions.

Appliance to be installed with backflow protection according to federal, state or local codes.

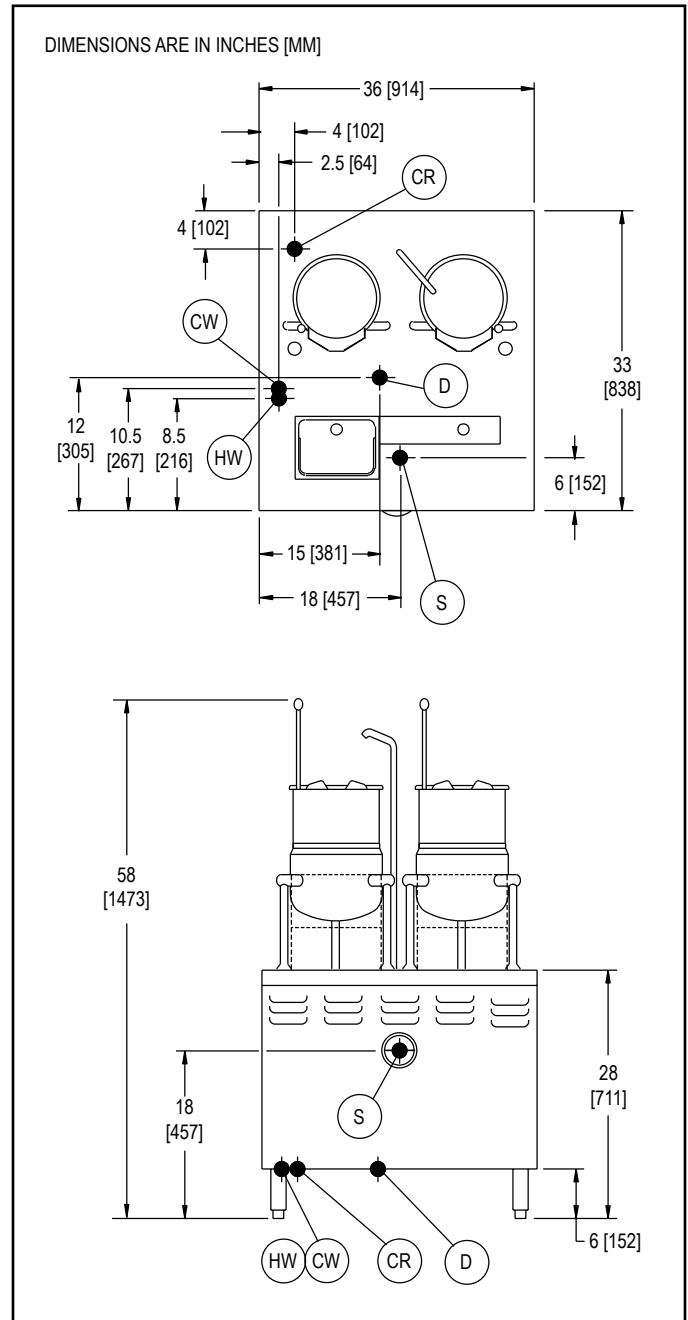


Figure 4

Service Connections - Gas Boiler Models

MT-6G & MT-10G

G	Gas Connection - 3/4" (19mm) NPT female
CW1	Cold Water - 3/8" (10mm) NPT for cold water to boiler. Cold water lines will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure
CW2	Cold Water - 3/8" (10mm) NPT for cold water to condenser and kettle fill faucet. Cold water lines will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
HW	Hot Water - 3/8" (10mm) NPT female for hot water to kettle fill faucet. Hot water line will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
D	Drain — Pipe full 2" (50mm) N.P.T. female to flush floor drain. Do not make solid connection to floor drain
EC	Electrical Connection - 120 Volts AC, 60 Hz, single phase, and a 9 foot Power Cord/NEMA 5-15.
ST	Steam Take-Off — 3/4" (19mm) N.P.T. female for incoming steam from Market Forge boiler

OPERATION WILL BE BY

Gas fired, A.S.M.E. constructed and National Board Registered, 15 PSI (1 kg/cm²) steam boiler rated at 200,000 BTU

Notes: If equipment is installed where elevation exceeds 2,000 feet (609.6 meters) above sea level, specify installation altitude so that proper gas orifices can be provided.

The only available space to supply utilities to the gas boiler is the 6" (152mm) space between the floor and the cabinet.

Allow 3" (76mm) space from side wall and 6" (152mm) from rear wall if adjoining walls are combustible.

PVC & CPVC PIPE ARE NOT ACCEPTABLE MATERIALS FOR DRAINS.

CAUTION: REMOTE KETTLE OPERATION If this boiler is feeding a remote kettle that will be more than 5 feet (1.5 meters) away, consult factory before ordering.

WATER SUPPLY

Good quality water feed is the responsibility of the owner. Water quality must be within the following general guidelines.

TDS: 40-125 ppm	Chlorides: <25 ppm
Silica: <13 ppm	pH: 7.0 - 8.5
Chloramine: <0.2 ppm	Chlorine: <0.2 ppm
Hardness: 35-100 ppm	

The best defense against poor water quality is a water treatment system designed to meet your water quality conditions.

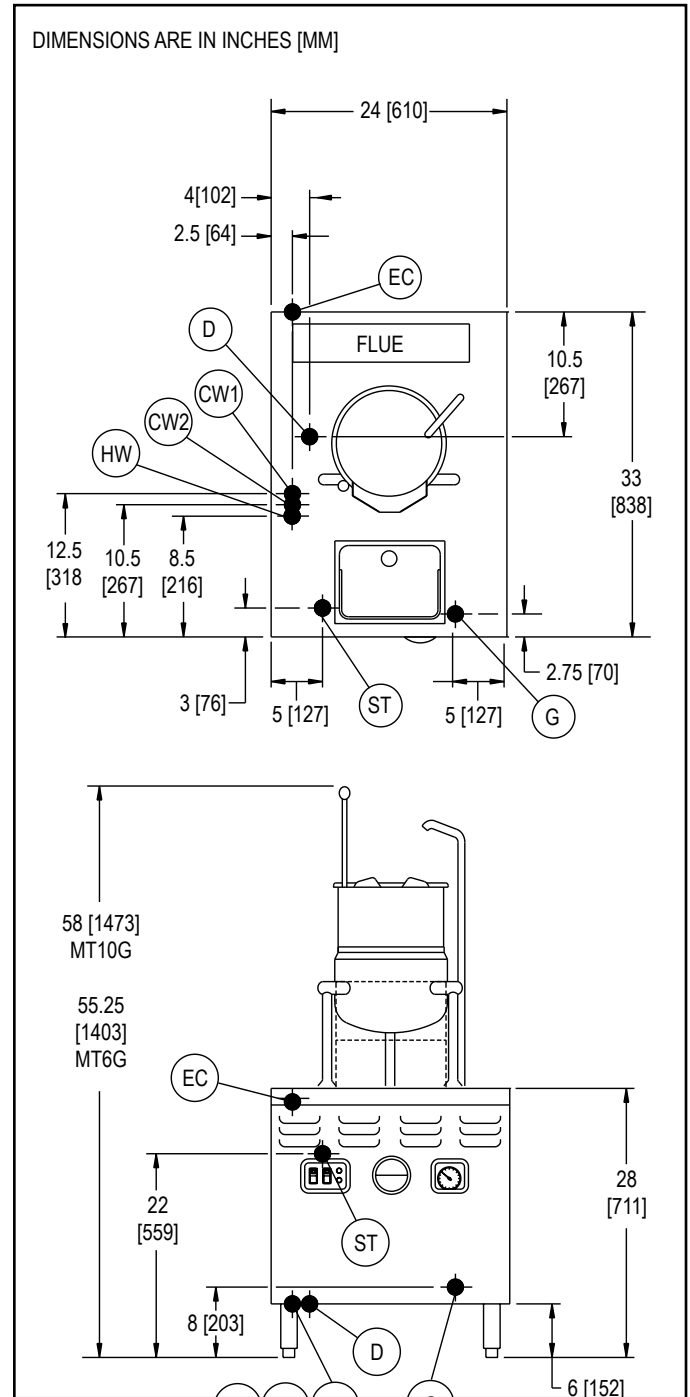


Figure 5

Service Connections - Gas Boiler Models

MT6T6G

G	Gas Connection - 3/4" (19mm) N.P.T. female for 200,000 BTU boiler.
G1	Gas Connection - 1" (25mm) N.P.T. female for 300,000 BTU boiler.
CW1	Cold Water - 3/8" (10mm) NPT for cold water to boiler. Cold water lines will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
CW2	Cold Water - 3/8" (10mm) NPT for cold water to condenser and kettle fill faucet. Cold water lines will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
HW	Hot Water - 3/8" (10mm) NPT female for hot water to kettle fill faucet. Hot water line will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
D	Drain - Pipe full 2" (50mm) NPT to flush floor drain capable of receiving water flowing at a maximum rate of 5 gallons (19 liters) per minute. DO NOT MAKE SOLID CONNECTION TO FLOOR DRAIN. DO NOT INSTALL ELBOWS IN DRAIN LINE.
EC	Electrical Connection - 120 Volts AC, 60 Hz, single phase, and a 9 foot Power Cord/NEMA 5-15.
ST	Steam Take-off - Connection for operations of adjacent steam powered equipment. Requires steam take-off kit (optional at extra cost).

Notes: If equipment is installed where elevation exceeds 2,000 feet (609.6 meters) above sea level, specify installation altitude so that proper gas orifices can be provided.

The only available space to supply utilities to the gas boiler is the 6" (152mm) space between the floor and the cabinet.

Allow 3" (76mm) space from side wall and 6" (152mm) from rear wall if adjoining walls are combustible.

PVC & CPVC PIPE ARE NOT ACCEPTABLE MATERIALS FOR DRAINS.

CAUTION: REMOTE KETTLE OPERATION If this boiler is feeding a remote kettle that will be more than 5 feet (1.5 meters) away, consult factory before ordering.

WATER SUPPLY

Good quality water feed is the responsibility of the owner. Water quality must be within the following general guidelines.

TDS: 40-125 ppm	Chlorides: <25 ppm
Silica: <13 ppm	pH: 7.0 - 8.5
Chloramine: <0.2 ppm	Chlorine: <0.2 ppm
Hardness: 35-100 ppm	

The best defense against poor water quality is a water treatment system designed to meet your water quality conditions.

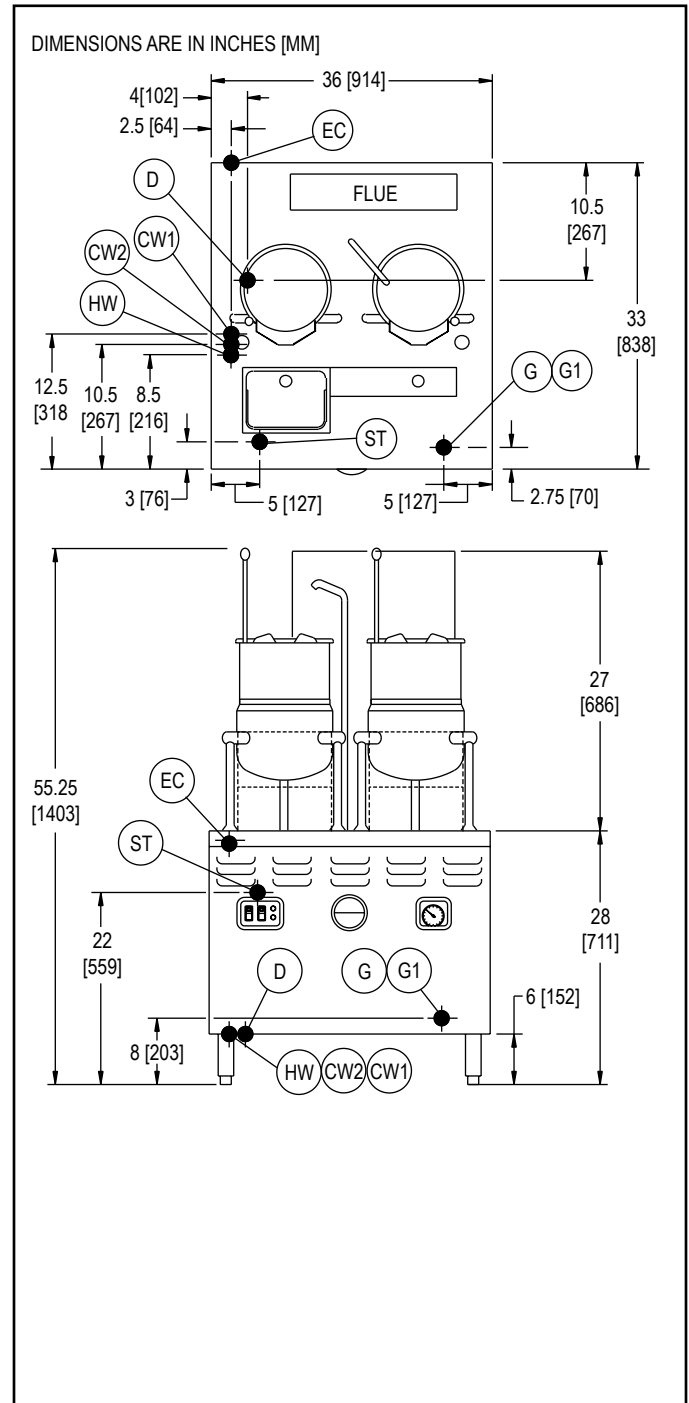


Figure 6

Service Connections - Gas Boiler Models

MT10T6G

G	Gas Connection - 3/4" (19mm) N.P.T. female for 200,000 BTU boiler.
G1	Gas Connection - 1" (25mm) N.P.T. female for 300,000 BTU boiler.
CW1	Cold Water - 3/8" (10mm) NPT for cold water to boiler. Cold water lines will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
CW2	Cold Water - 3/8" (10mm) NPT for cold water to condenser and kettle fill faucet. Cold water lines will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
HW	Hot Water - 3/8" (10mm) NPT female for hot water to kettle fill faucet. Hot water line will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
D	Drain - Pipe full 2" (50mm) NPT to flush floor drain capable of receiving water flowing at a maximum rate of 5 gallons (19 liters) per minute. DO NOT MAKE SOLID CONNECTION TO FLOOR DRAIN. DO NOT INSTALL ELBOWS IN DRAIN LINE.
EC	Electrical Connection - 120 Volts AC, 60 Hz, single phase, and a 9 foot Power Cord/NEMA 5-15.
ST	Steam Take-off - Connection for operations of adjacent steam powered equipment. Requires steam take-off kit (optional at extra cost).

Notes: If equipment is installed where elevation exceeds 2,000 feet (609.6 meters) above sea level, specify installation altitude so that proper gas orifices can be provided.

The only available space to supply utilities to the gas boiler is the 6" (152mm) space between the floor and the cabinet.

Allow 3" (76mm) space from side wall and 6" (152mm) from rear wall if adjoining walls are combustible.

PVC & CPVC PIPE ARE NOT ACCEPTABLE MATERIALS FOR DRAINS.

CAUTION: REMOTE KETTLE OPERATION If this boiler is feeding a remote kettle that will be more than 5 feet (1.5 meters) away, consult factory before ordering.

WATER SUPPLY

Good quality water feed is the responsibility of the owner. Water quality must be within the following general guidelines.

TDS: 40-125 ppm	Chlorides: <25 ppm
Silica: <13 ppm	pH: 7.0 - 8.5
Chloramine: <0.2 ppm	Chlorine: <0.2 ppm
Hardness: 35-100 ppm	

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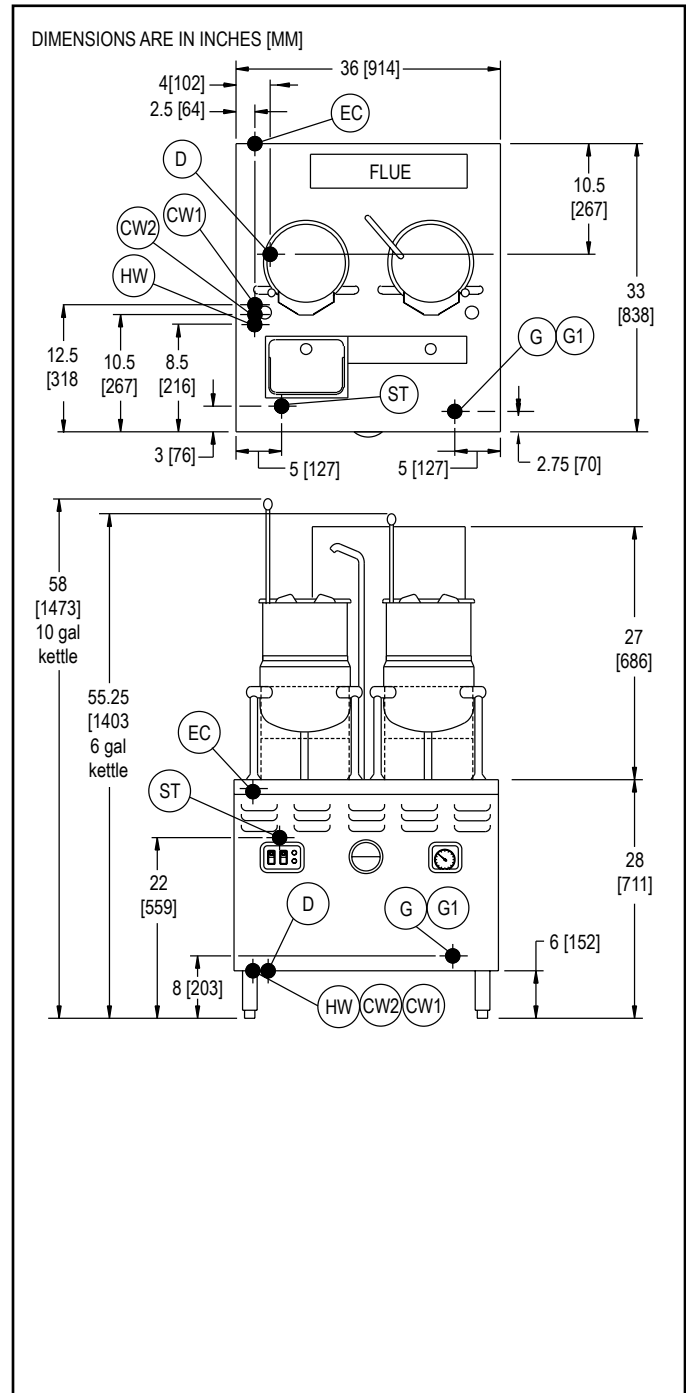


Figure 7

Service Connections - Gas Boiler Models

MT10T10G

G	Gas Connection - 3/4" (19mm) N.P.T. female for 200,000 BTU boiler.
G1	Gas Connection - 1" (25mm) N.P.T. female for 300,000 BTU boiler.
CW1	Cold Water - 3/8" (10mm) NPT for cold water to boiler. Cold water lines will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
CW2	Cold Water - 3/8" (10mm) NPT for cold water to condenser and kettle fill faucet. Cold water lines will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
HW	Hot Water - 3/8" (10mm) NPT female for hot water to kettle fill faucet. Hot water line will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
D	Drain - Pipe full 2" (50mm) NPT to flush floor drain capable of receiving water flowing at a maximum rate of 5 gallons (19 liters) per minute. DO NOT MAKE SOLID CONNECTION TO FLOOR DRAIN. DO NOT INSTALL ELBOWS IN DRAIN LINE.
EC	Electrical Connection - 120 Volts AC, 60 Hz, single phase, and a 9 foot Power Cord/NEMA 5-15.
ST	Steam Take-off - Connection for operations of adjacent steam powered equipment. Requires steam take-off kit (optional at extra cost).

Notes: If equipment is installed where elevation exceeds 2,000 feet (609.6 meters) above sea level, specify installation altitude so that proper gas orifices can be provided.

The only available space to supply utilities to the gas boiler is the 6" (152mm) space between the floor and the cabinet.

Allow 3" (76mm) space from side wall and 6" (152mm) from rear wall if adjoining walls are combustible.

PVC & CPVC PIPE ARE NOT ACCEPTABLE MATERIALS FOR DRAINS.

CAUTION: REMOTE KETTLE OPERATION If this boiler is feeding a remote kettle that will be more than 5 feet (1.5 meters) away, consult factory before ordering.

WATER SUPPLY

Good quality water feed is the responsibility of the owner. Water quality must be within the following general guidelines.

TDS: 40-125 ppm	Chlorides: <25 ppm
Silica: <13 ppm	pH: 7.0 - 8.5
Chloramine: <0.2 ppm	Chlorine: <0.2 ppm
Hardness: 35-100 ppm	

The best defense against poor water quality is a water treatment system designed to meet your water quality conditions.

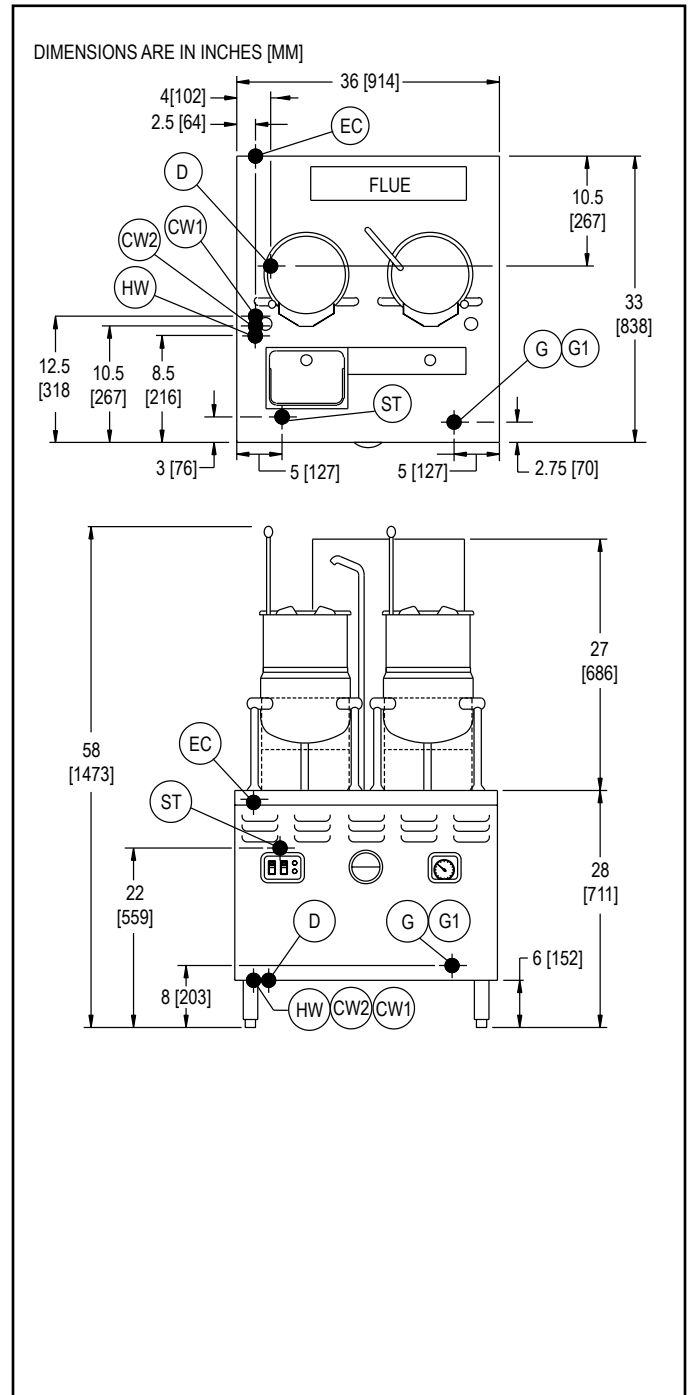


Figure 8

Service Connections - Electric Boiler Models

MT-6E & MT-10E

Volts	Phase	24kW	36kW	42kW	48kW
208 (197-219)	3	66	100	117	-
240 (220-240)	3	58	87	-	116
480 (360-500)	3	29	44	-	58

Details of other electrical systems available upon request.

SERVICE CONNECTIONS

EP	Power Supply - Use wire suitable for at least 90°C. Nominal amp per line wire.
CW1	Cold Water - 3/8" (10mm) NPT for cold water to boiler. Cold water lines will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure
CW2	Cold Water - 3/8" (10mm) NPT for cold water to condenser and kettle fill faucet. Cold water lines will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
HW	Hot Water - 3/8" (10mm) NPT female for hot water to kettle fill faucet. Hot water line will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
D	Drain - Pipe full 2" (50mm) NPT to flush floor drain capable of receiving water flowing at a maximum rate of 5 gallons (19 liters) per minute. DO NOT MAKE SOLID CONNECTION TO FLOOR DRAIN.
ST	Steam Take-off - Connection for operation of adjacent steam powered equipment.

The only available space to supply utilities to the electric boiler is the 6" (152mm) space between the floor and the cabinet.

PVC & CPVC PIPE ARE NOT ACCEPTABLE MATERIALS FOR DRAINS.

WARNING: DO NOT UNDER ANY CIRCUMSTANCE CONNECT THE EXHAUST DRAIN LINE DIRECTLY TO A SEWER LINE.

CAUTION: REMOTE KETTLE OPERATION If this boiler is feeding a remote kettle that will be more than 5 feet (1.5 meters) away, consult factory before ordering.

WATER SUPPLY

Good quality water feed is the responsibility of the owner. Water quality must be within the following general guidelines.

TDS: 40-125 ppm	Chlorides: <25 ppm
Silica: <13 ppm	pH: 7.0 - 8.5
Chloramine: <0.2 ppm	Chlorine: <0.2 ppm
Hardness: 35-100 ppm	

The best defense against poor water quality is a water treatment system designed to meet your water quality conditions.

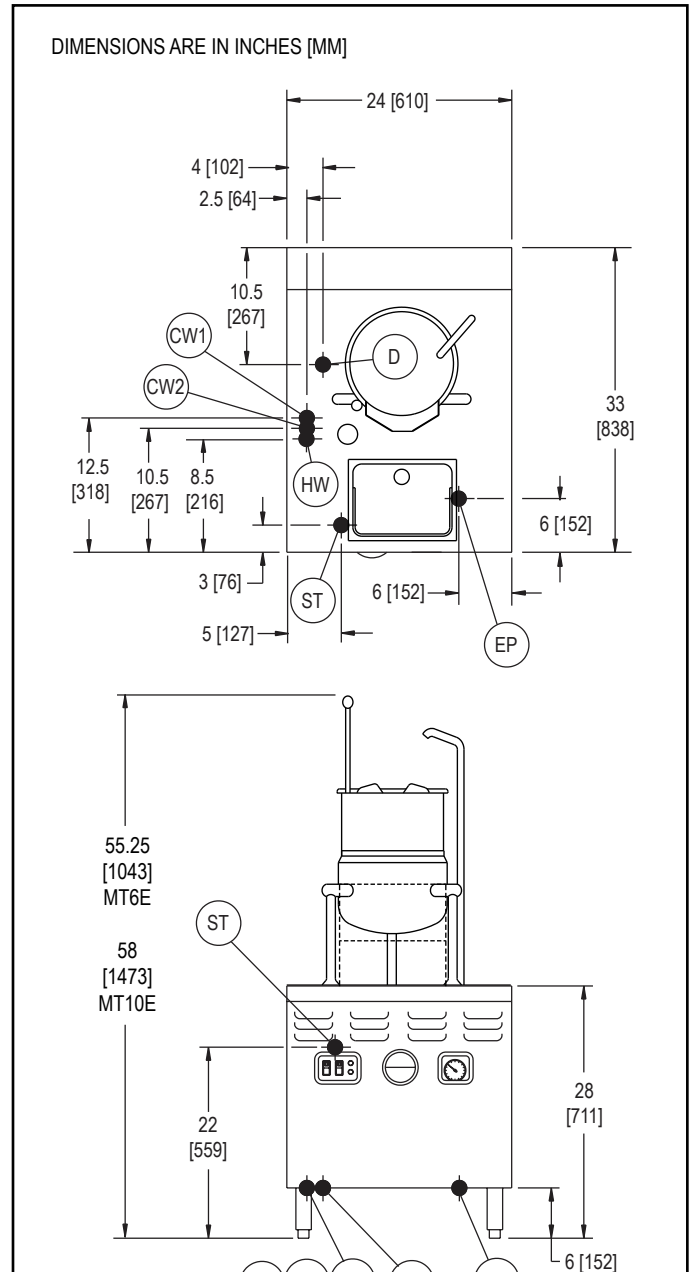


Figure 9

Service Connections - Electric Boiler Models

MT6T6E

Volts	Phase	24kW	36kW	42kW	48kW
208 (197-219)	3	66	100	117	-
240 (220-240)	3	58	87	-	116
480 (360-500)	3	29	44	-	58

Details of other electrical systems available upon request.

SERVICE CONNECTIONS

EP	Power Supply - Use wire suitable for at least 90°C. Nominal amp per line wire.
CW1	Cold Water - 3/8" (10mm) NPT for cold water to boiler. Cold water lines will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure
CW2	Cold Water - 3/8" (10mm) NPT for cold water to condenser and kettle fill faucet. Cold water lines will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
HW	Hot Water - 3/8" (10mm) NPT female for hot water to kettle fill faucet. Hot water line will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
D	Drain - Pipe full 2" (50mm) NPT to flush floor drain capable of receiving water flowing at a maximum rate of 5 gallons (19 liters) per minute. DO NOT MAKE SOLID CONNECTION TO FLOOR DRAIN.
ST	Steam Take-off - Connection for operation of adjacent steam powered equipment.

The only available space to supply utilities to the electric boiler is the 6" (152mm) space between the floor and the cabinet.

PVC & CPVC PIPE ARE NOT ACCEPTABLE MATERIALS FOR DRAINS.

WARNING: DO NOT UNDER ANY CIRCUMSTANCE CONNECT THE EXHAUST DRAIN LINE DIRECTLY TO A SEWER LINE.

CAUTION: REMOTE KETTLE OPERATION If this boiler is feeding a remote kettle that will be more than 5 feet (1.5 meters) away, consult factory before ordering.

WATER SUPPLY

Good quality water feed is the responsibility of the owner. Water quality must be within the following general guidelines.

TDS: 40-125 ppm	Chlorides: <25 ppm
Silica: <13 ppm	pH: 7.0 - 8.5
Chloramine: <0.2 ppm	Chlorine: <0.2 ppm
Hardness: 35-100 ppm	

The best defense against poor water quality is a water treatment system designed to meet your water quality conditions.

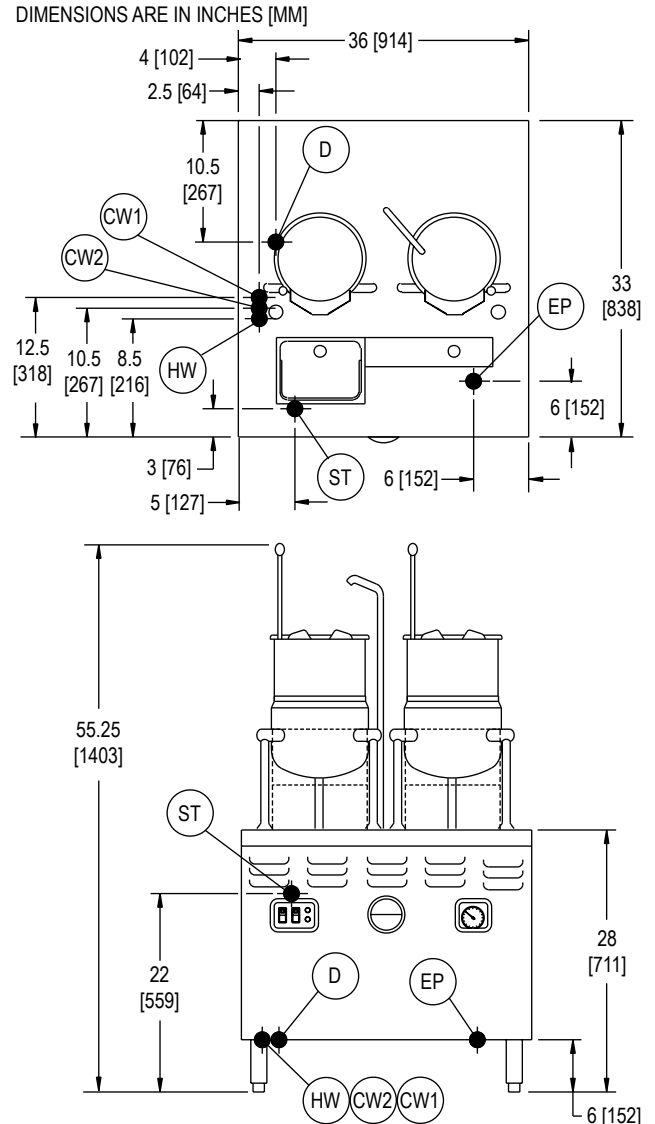


Figure 10

Service Connections - Electric Boiler Models

MT10T6E

Volts	Phase	24kW	36kW	42kW	48kW
208 (197-219)	3	66	100	117	-
240 (220-240)	3	58	87	-	116
480 (360-500)	3	29	44	-	58

Details of other electrical systems available upon request.

SERVICE CONNECTIONS

EP	Power Supply - Use wire suitable for at least 90°C. Nominal amp per line wire.
CW1	Cold Water - 3/8" (10mm) NPT for cold water to boiler. Cold water lines will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure
CW2	Cold Water - 3/8" (10mm) NPT for cold water to condenser and kettle fill faucet. Cold water lines will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
HW	Hot Water - 3/8" (10mm) NPT female for hot water to kettle fill faucet. Hot water line will have a maximum of 50 PSI (3.5kg/cw2) and a minimum of 25 PSI (1.8 kg/cw2) water pressure.
D	Drain - Pipe full 2" (50mm) NPT to flush floor drain capable of receiving water flowing at a maximum rate of 5 gallons (19 liters) per minute. DO NOT MAKE SOLID CONNECTION TO FLOOR DRAIN.
ST	Steam Take-off - Connection for operation of adjacent steam powered equipment.

The only available space to supply utilities to the electric boiler is the 6" (152mm) space between the floor and the cabinet.

PVC & CPVC PIPE ARE NOT ACCEPTABLE MATERIALS FOR DRAINS.

WARNING: DO NOT UNDER ANY CIRCUMSTANCE CONNECT THE EXHAUST DRAIN LINE DIRECTLY TO A SEWER LINE.

CAUTION: REMOTE KETTLE OPERATION If this boiler is feeding a remote kettle that will be more than 5 feet (1.5 meters) away, consult factory before ordering.

WATER SUPPLY

Good quality water feed is the responsibility of the owner. Water quality must be within the following general guidelines.

TDS: 40-125 ppm	Chlorides: <25 ppm
Silica: <13 ppm	pH: 7.0 - 8.5
Chloramine: <0.2 ppm	Chlorine: <0.2 ppm
Hardness: 35-100 ppm	

The best defense against poor water quality is a water treatment system designed to meet your water quality conditions.

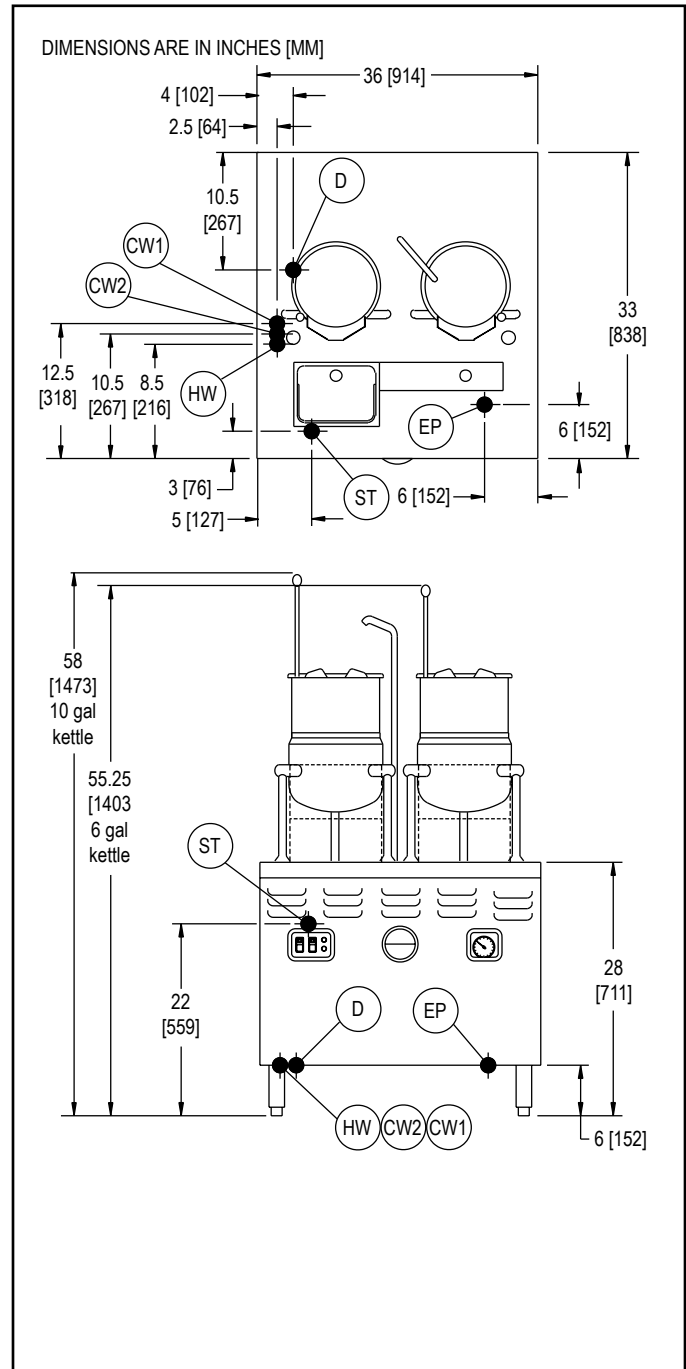


Figure 11

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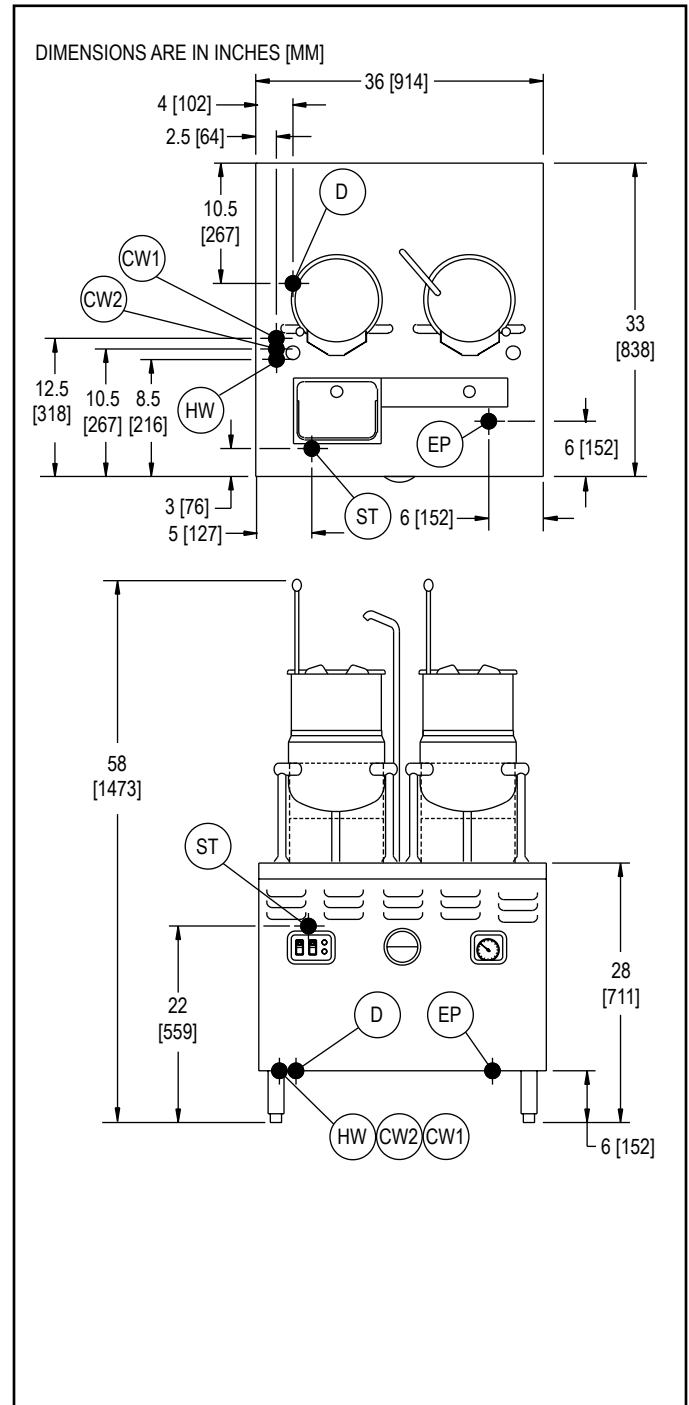


Figure 12

Operating & Cleaning Instructions

OPERATE KETTLE AS FOLLOWS:

1. Check pressure gauge of steam supply to ensure steam input is at approximately 15 PSI (1.0kg/cm²) to a maximum of 50 PSI (3.5 kg/cm²). For direct connected steam, turn on external steam supply valve.
2. Load kettle with food to be cooked.
3. Add water for cooking by turning swing nozzle over kettle and using combination faucet.
4. Turn steam valve to full counterclockwise position to allow steam to flow into jacket. Wait until food reaches desired temperature.
5. Adjust subsequent cooking temperature by turning steam control valve. Turn clockwise to reduce heat (steam flow) and counterclockwise to increase heat (steam flow).
6. Close steam control valve and remove food from kettles as soon as cooking is complete to prevent over-cooking.

NOTE: Before tilting kettle, ensure that a.) Swing nozzle is rotated clear of kettle. b.) Kettle is not full. If kettle is full ladle out 2 gallons of contents by hand.

In the event that the kettle fails to operate correctly, the difficulty should first be isolated to either the kettle itself or the steam supply which heats the kettle. While mechanical problems are obvious faults of the kettle, any deficiencies in volume and pressure of the steam should be traced to the steam generator and the cause determined. Steam input requirements are listed below. This list recommends delivered boiler horsepower for kettle size and steam flow.

MODEL	BHP	STEAM FLOW
MT6	1/3 BHP	15-30 PSI
MT10	1/2 BHP	15-30 PSI
MT6T6	1/3 BHP	15-30 PSI
MT10T6	1/2 BHP	15-30 PSI
MT10T10	1/2 BHP	15-30 PSI

PREVENTIVE MAINTENANCE:

The most important preventive maintenance operation on the steam jacketed kettle is the cleaning procedure. Cleaning should be faithfully completed at the end of each day, including cabinet doors, counter-top, fixtures, kettle lid, etc, should be washed and rinsed to remove all food spills.

CLEANING PROCEDURE AS FOLLOWS:

1. Fill kettle with water and mild detergent immediately after removing food from the kettle.
2. Remove food soil using a nylon brush. (NOTE: Never scrape the inside of the kettle with metal tools, steel scouring pads or abrasive cleaners. Scratches will result which ruin the general appearance of the kettle and make it harder to clean and maintain in a sanitary condition).
3. Loosen food which is stuck to the kettle by allowing it to soak. Also, a small amount of steam may help.
4. Place clean-Up pan under kettle being washed by inserting clean-up pan drain extension into counter-top drain opening. (NEW Style - Attach splash guard to clean-Up pan). Tilt kettle to pour out wash water.
5. Rinse kettle with hot water.
6. Thoroughly wash and rinse kettle exterior and cabinet exterior.
7. Thoroughly dry unit.

Weekly Cleaning

In addition to the daily cleaning it is necessary to clean the air intakes on a weekly basis. Air intakes provide necessary cooling air to the internal components. They are generally located on the rear and sides of the equipment.