



Luleh va Machinsazi Iran (L.M.I)



# M90

- Newest heating product of M.I.3 Series
- Cast-iron heating system MI3, Model M90
- Five years guarantee and constant after-sales services
- Prize holder of National Iranian Standard

# M.I.3



## Cast-iron heating system MI3, Model M90

- Providing hot water up to temperature under boiling point
- Five years guarantee
- Constant after-sales services
- Identical with the newest heating products of Europe
- Efficiency more than 90%
- Economized energy consumption
- Cast-iron sections with high energy absorption
- Light-weighted and dainty
- Special design for all components
- Shapely appearance
- Gas/gasoline fuelled
- With a distributing duct to dispense water among all sections
- With a flanged pipe for running outlet and inlet water
- Equipped with a backside flue (between outlet and inlet)
- Output heat capacity from 77400 Kcal/h to 217000 Kcal/h
- Control panel with following features:
  1. Possibility of adding an electronic programmable control center
  2. Gauges for pressure and temperature
  3. Thermostat for adjusting boiler heat
  4. Safety limit thermostat
  5. Positioning button (for connecting, disconnecting and manual test of the burner)
  6. Alert indicator for limit thermostat

### ■ A New Product of M.I.3 Series:

M.I.3 cast iron boiler central heating system model M90, suitable for gas or liquid fuel is available in 10 sizes with capacities from 77,400 to 217,000 Kcal/h and the best heating output.

Luleh va Machin Sazi Iran (LMI) is known as the first manufacturer of cast-iron boilers for central heating systems in Iran, aided by over 50 years of working experience in this field of industry, and prime holder of National Standard certificate as manufacturer of central heating systems, first winner of IMS certificate and producer of modern European central heating appliances.

The LMI has developed its newest and the fourth type of cast-iron boiler for heating system under code of MI3 model M90, which is as efficient as the modern European types. This system has been designed with high efficiency and low noise working quality, (output over %90). The boiler has most convenient capacity of meeting medium heat requirements in household, industrial and other premises.

### Some features of the M.I.3 M90 Model are as follows:

#### ■ Combustion chamber

The new designed boiler provides facility of cooling the gas of combustion chamber, by exhausting the combustion products through 3 passes devised within the body of the boiler. This provides a desired working situation of the boiler, with a quality combustion, diminished noise, and maximum work output.

#### ■ Carbon Accumulation Chamber

A small chamber has been worked out at the end section of the boiler for accumulating the smoke and gases created by combustion. This chamber is totally isolated in order to prevent air pollution of the site.

#### ■ Front Section and its insulator

In the front section of the boiler there is a small insulated chamber which functions to hold the burner plate while diminishing energy waste.

The plate can be opened alternately in two different directions, upon need and order, and is completely isolated—in the closed position—for avoiding infiltration of the heat and burning gases into the site, wherein the central heating system is installed. Meanwhile the burner plate has been made suitable for the boiler with a view hatch for overseeing the burner working.

#### ■ Smoke chamber hatch and heat insulation

These parts are used in order to divert combustion gases from pass one to pass two and diminish energy loss.

#### ■ Control Panel

The control panel is a perfect complex for regulating the operation of the boiler with a high output. The unit includes:

A button for deciding on or off position of the burner and manual test of the burner. An alert indicating light for the limit thermostat, pressure and thermometer (thermo manometer), which displays pressure and temperature of the water in the boiler. Limit thermostat guarding security of the control system. Thermostat for regulating temperature of the water.

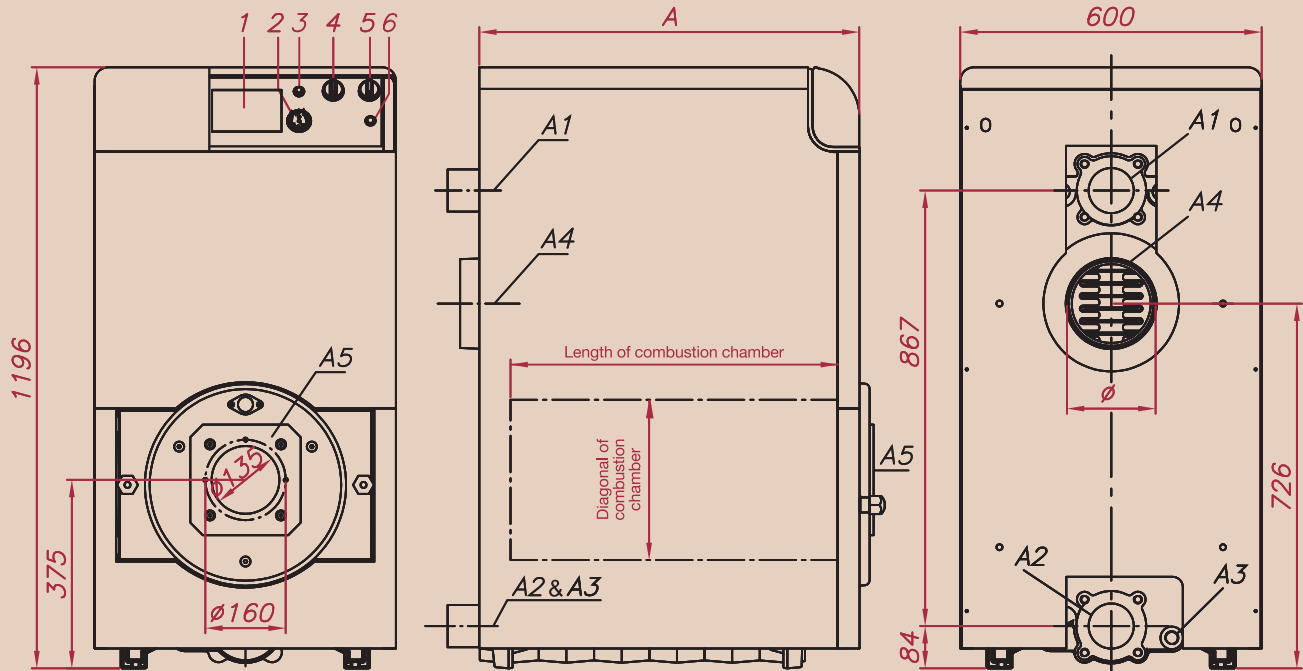
The control panel, while securing safety of the boiler, eliminates any need for elementary controlling circuits and adds to the shapeliness of the system.

#### ■ Method of supplying the product to customer

Model “M90” of the MI3 series are supplied in 4 packages:

1. The covers.
2. Control panel.
3. Appliances necessary for assembling the boiler.
4. Components consisting the disassembled body of the boiler (which can alternatively be supplied in assembled form, upon the user’s order). This way of supplying guarantees an easy installation of the boiler, as well as facile transportation and handling. An assemblage instruction accompanies the boiler which eases the task for any user.

## Dimensional Specification



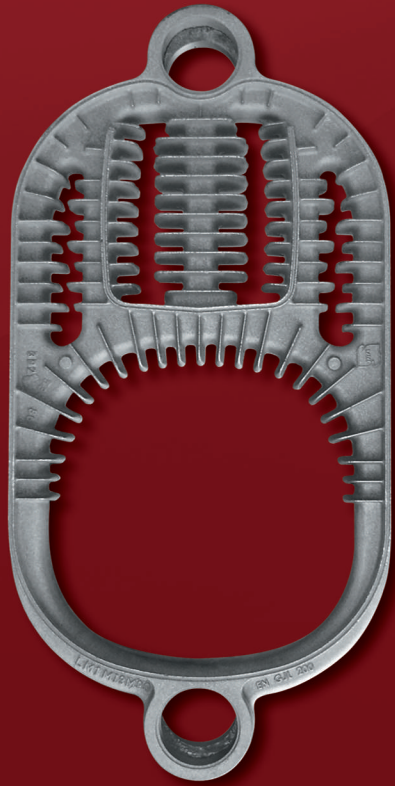
Dimensions are in mm

- 1- Place of installing the electronic control panel
- 2- Pressure gauge-thermometer 120°C 6 bar
- 3- Limit thermostat 100°C
- 4- Adjustable thermostat (0-90°C)
- 5- On and off position button
- 6- Alert indicating light

- A1. Central heating flow outlet (3" pipe)
- A2. Central heating return inlet (3" pipe)
- A3. Emergency release duct
- A4. Place of installing flue
- A5. Place of installing burner

Unit Model	Inlet Capacity			Outlet Capacity			No of Sections	Volume Of water In boiler lit	Work Pressure bar	A Length Of Boiler mm	Dia. Of Flue $\phi$ mm	Fall of Pressure In Combustion chamber $\Delta p$ mbar	Capacity of comb lit	Fall of water pressure For		Weight Kg
	Max Kcal/h	Kw	Min Kw	Max Kcal/h	Kw	Min Kw								$\Delta t$ 10°C	$\Delta t$ 20°C	
M90-05	84900	98.8	80	77400	90	73	5	49	4	647	180	0.4	63	2.8	-	400
M90-06	100700	117.1	95	92900	108	87	6	57	4	757	180	0.4	77	3.4	-	465
M90-07	117700	136.9	110	108350	126	101	7	65	4	867	180	0.4	91	4.8	0.5	530
M90-08	134600	156.5	125	123850	144	115	8	73	4	977	200	0.4	104	6.5	0.8	595
M90-09	151350	176.0	140	139300	162	129	9	81	4	1087	200	0.4	118	8.5	1.8	660
M90-10	168200	195.6	155	154800	180	143	10	89	4	1197	200	0.4	132	11	2.2	725
M90-11	185100	215.2	170	170300	198	157	11	97	4	1307	200	0.4	146	13	2.6	790
M90-12	201850	234.7	185	185760	216	171	12	105	4	1417	200	0.4	160	16	3.2	855
M90-13	218700	254.3	200	201240	234	185	13	113	4	1527	200	0.4	174	19	4	920
M90-14	235550	273.9	215	216720	252	199	14	121	4	1637	200	0.4	187	23	4.5	985





M.I. 3

[www.lmico.net](http://www.lmico.net)



**Luleh va Machinsazi Iran (L.M.I) Co.**

Head office & factory: Km 10 Saveh Road - Iran

Sale phone: +98 21 55245011 & 55247404 Fax: +98 21 55246196

Phone: +98 21 55245052-6 Fax : +98 21 55242968

Email: [luleh@lmico.net](mailto:luleh@lmico.net) & [Sales@lmico.net](mailto:Sales@lmico.net)

