TWO STAGE OPERATING CONTROL
OUTDOOR RESET WITH SENSOR
DOMESTIC HOT WATER PRIORITIZATION
GASKETLESS HEAT EXCHANGER
7 MODELS: 45,000 – 260,000 BTU/HR
BUILT-IN PERFORMANCE LOOP
The Right Investment

If you're looking for a heating system for your new home, replacing an old boiler, or thinking about converting from expensive electric heat, Lochinvar’s Solution boiler is the right heating investment for you. You rarely think about heating your home, that is unless you can’t get warm enough, or your monthly heating bill just surpassed your house payment. A reliable and efficient heating system is the key to keeping your family comfortable when the weather turns cold. That’s why Lochinvar developed the Solution. This gas-fired boiler stands above any other boiler in its class in terms of comfort, quality, efficiency, flexibility and dependability.

Built For Dependability

Every Lochinvar boiler is made in the USA. Built to commercial grade standards, the Solution boiler is better designed and better built. And every Solution boiler is quality checked throughout the manufacturing process, giving you a boiler built for dependability. When you select Solution, you get home heating that is economical, reliable, flexible, safe and dependable and made here at home in the heartland of the USA. And we back it all up with our exclusive 20-year Limited Warranty.

Cost Savings High Efficiency

Often times old boilers operate as low as 50% efficiency. This means that 1/2 of your fuel dollars are wasted up the chimney. A Solution boiler, with an annual fuel utilization efficiency (AFUE) of up to 84%, can reduce your heating bills by over 30%. This means that the Solution boiler can actually pay for itself in just a few short years with the money the old system is wasting. If you are currently spending $2,000 each year to heat your home with your old inefficient boiler, your fuel savings could be as much as $800 per year by switching to the 84% efficient Solution boiler. Lochinvar’s Solution boiler makes heating your home with gas a smart investment that you’ll appreciate for years.

Also available

**KNIGHT Heating Boilers**

Need higher efficiency? KNIGHT Heating Boilers are available in sizes from 55,000 to 399,000 Btu/hr and rated up to 98% efficiency in low temperature applications.
Intermittent Spark Ignition
The system safely shuts down on loss of pilot flame in less than one second.

Two-Stage Gas Valve
The two-stage gas valve enables the boiler to start on low fire and continue on to high fire.

Combustible Floor Base
Design certified for combustible floor installations. (Do not install directly on carpeting.)

Unique Heat Exchanger Design
You will enjoy years of reliable performance because the Solution is constructed with cast iron headers and a gasketless copper-tube heat exchanger. The combination of a copper heat exchanger with cast iron headers has the unique ability to absorb and transfer heat quickly and efficiently while providing unmatched durability.

Lo/Hi/Lo Temperature Control
Since full boiler capacity is only needed 20% of the heating season the lo/hi/lo temperature control increases overall system efficiency by only turning the boiler on high fire when extra capacity is needed.

Domestic Hot Water Prioritization and Outdoor Temperature Reset
Allows the water temperature produced to vary with the demand of the outdoor conditions and provides domestic hot water production when paired with an indirect storage tank.

Installation Flexibility
Lochinvar designed the Solution to make installations a snap in any home with all piping and venting connections made conveniently from the top of the unit. The Solution is also pre-piped with a pumped performance loop for easy hookup. Lightweight and compact, the Solution’s flexibility allows the contractor to spend less time installing your new boiler, which results in savings to you.
## Solution Boiler Dimensions and Specifications

### Standard Features
- ASME Copper Finned Tube Heat Exchanger
- Gasketless Heat Exchanger Design
- Built-In Performance Loop
- Vertical Water Connections
- 24 Volt Control System
- Self-Diagnostic Ignition Control
- Terminal Strip
- Intermittent Electronic Ignition
- Two Stage Solid State Temperature Control
- Outdoor Reset w/ Outdoor Sensor
- Domestic Hot Water Prioritization
- Two Stage Gas Valve w/ Built In Manual Shut-Off
- 160 PSI Working Pressure
- Pump Relay
- Automatic Reset High Limit
- ASME Pressure Relief Valve
- Temperature & Pressure Gauge
- Automatic Vent Damper
- Built-In Draft Diverter
- Stainless Steel Burners
- Loch-Heat Ceramic Tile Combustion Chamber
- CSA Design Certified for Installation on Combustible Floors
- CSA Design Certified for Alcove Installation
- 20 Year Limited Warranty on the Heat Exchanger (see warranty for details)
- 2 Year Parts Warranty

### Optional Equipment
- Adjustable High Limit w/ Manual Reset
- Flow Switch
- Low Water Cut-Off
- Stack Frame
- Pump Delay w/ Freeze Protection
- MP2 Sequencer
- PVC/CPVC Venting Kit (CB 45-135)
- O2 Barrier Waterways

### Firing Control Systems
- **M9**
  - Two Stage, Intermittent Spark Ignition (Standard)
- **M7**
  - California Code (CB 215-260 only)

### Solution Heating Boiler Dimensions and Specifications

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<tr>
<th>Model Number</th>
<th>Input MBH</th>
<th>AFUE %</th>
<th>Heating Capacity MBH</th>
<th>Net AHRI Rating MBH</th>
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<th>B</th>
<th>C</th>
<th>D</th>
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**Notes:** Change ‘N’ to ‘L’ to denote L.P. gas models

1.15 Net ratings based on piping and pick-up allowance of 1.15

### Optional Equipment
- Adjustable High Limit w/ Manual Reset
- Flow Switch
- Low Water Cut-Off
- Stack Frame
- Pump Delay w/ Freeze Protection
- MP2 Sequencer
- PVC/CPVC Venting Kit (CB 45-135)
- O2 Barrier Waterways

### Firing Control Systems
- **M9**
  - Two Stage, Intermittent Spark Ignition (Standard)
- **M7**
  - California Code (CB 215-260 only)

### FOR EASE IN ORDERING BY MODEL NUMBER

**CB** **N** **045** **M9**

This model is a 45,000 Btu/hr, natural gas Solution boiler. It has M9 firing controls.

*Lochinvar should be consulted before selecting a boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.*