

Instantaneous indirect **double-wall**
water heater

doublemax

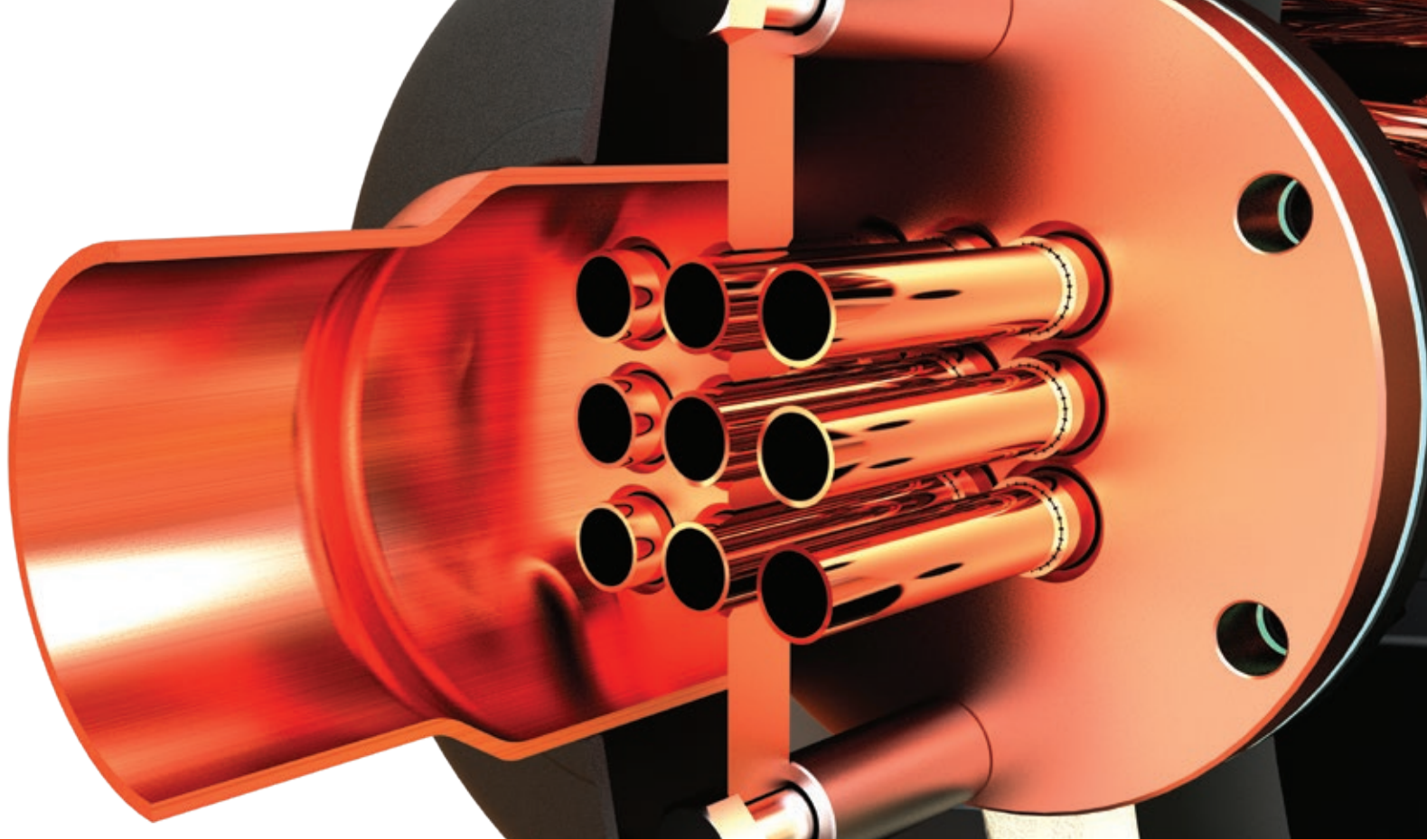


PERFORMANCE HAS NEVER BEEN SO SAFE

- Double-wall copper heat exchanger
- Instantaneous domestic hot water
- More than 30-year lifespan
- Unmatched energy transfer capabilities
- Minimizes energy consumption
- Compatible with all sources of thermal energy
- No maintenance – 10-year commercial warranty



Peak-performance
heating systems



No compromises

The Thermo 2000 DoubleMax indirect water heater is equipped with an innovative double-wall copper heat exchanger designed to reduce the risk of cross-contamination between the domestic water and the heat transfer liquid, which could be classified as toxic. It is an ingenious, extremely safe system that does not compromise on overall performance.

MAXIMUM PROTECTION

The coil heat exchanger consists of two tubes inserted into one another in which there are a multitude of vented leak ports. Any potential leaks will be observable at the unit's connections, enabling you to perform preventative maintenance.

MAXIMUM PERFORMANCE

Copper's thermal conductivity is 17 times greater than that of stainless steel. DoubleMax's double-wall copper heat exchanger exploits the full potential of this conductivity. In addition, the large number of copper tubes inside the tank provides an increased exchange surface, which maximizes the system's heat exchange capacity.

Ingenious!

The DoubleMax indirect water heater works on the principle of using heat transfer liquid to indirectly heat potable water at the precise time when it is needed.

In addition, there is no stored stagnant water.

1 POTABLE WATER

When domestic hot water is required, potable water circulates from the bottom of the water heater to the top inside of copper coils that are submerged in a heat-transfer-liquid reservoir. While it is circulating upwards, the potable water captures the thermal energy transmitted through the double-wall copper coils. This ensures that the potable water never comes into contact with the heat transfer liquid.



2 HEAT TRANSFER LIQUID

The heat transfer liquid enters the top of the tank through an **injector**, which creates turbulence around the coils and increases the effect of convection. As it descends into the tank, thermal energy is transferred from the heat transfer liquid to the copper coils inside the indirect water heater.

3 COUNTERFLOW

Liquid counterflow increases the efficiency of heat transfer and minimizes fluctuations in temperature.

4 HEAT SOURCE

When it reaches the bottom of the tank, a second injector recovers the heat transfer liquid and transports it to the energy source to be re-heated until the demand for domestic hot water is satisfied.

**From 40 °F to 140 °F
in less than 7 seconds**

Incredibly efficient! The patented DoubleMax system can increase the water temperature by 100 °F in less than 7 seconds. A thermostatic mixing valve is recommended to calibrate the final operational temperature of your hot water system.



Domestic hot water and heating application

Use of additional connections is shown.

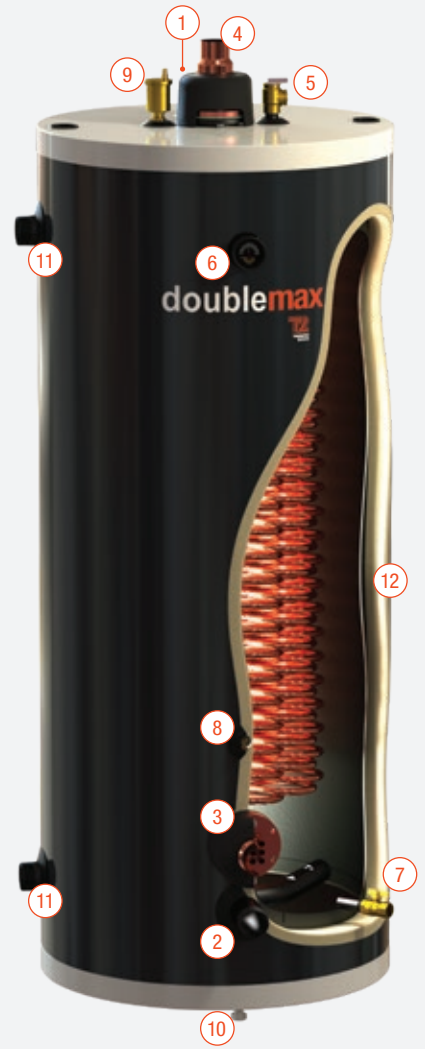
With its additional connections, the DoubleMax indirect water heater optimizes the boiler's performance by serving as a buffer tank and hydraulic separator in addition to producing domestic water.





Standard features

- 1 Heating supply
- 2 Heating return
- 3 Domestic cold water
- 4 Domestic hot water
- 5 Pressure relief valve
- 6 Temperature and pressure indicator
- 7 Drain valve
- 8 Immersion well
- 9 Automatic air vent
- 10 Adjustable legs
- 11 Additional connections
- 12 2" HFC-free polyurethane insulation



Domestic hot water and heating application
Heating supplied directly from the boiler is shown.



Extraordinary advantages

MORE THAN 30 YEARS

When the DoubleMax instantaneous indirect water heater is properly installed, its lifespan is more than 30 years. Incredibly durable, the DoubleMax is also covered by a **15-year residential warranty** and a **10-year commercial warranty**, both of which are some of the best in the industry.

NO CORROSION. NO MAINTENANCE.

Unlike traditional tanks and water heaters, the DoubleMax uses copper coils to circulate the potable water instead of having it accumulate in the tank. Copper is a proven material that naturally resists corrosion and thermal stress.

In addition, the closed-circuit heat transfer liquid principle helps to quickly purge the system of any corrosion-causing dissolved oxygen. There is no sacrificial anode. **No replacement** is required. **No inspection** of the inner lining is required. The system requires minimal maintenance.

UNPARALLELED ENERGY-TRANSFER CAPACITY

Using a large amount of copper helps maximize the exchange surface, thus resulting in maximum energy transfer capacity. This enables a large quantity of domestic hot water to be produced without requiring large storage tanks in commercial applications. Reducing the volume of stored water minimizes heat loss when the system is on standby and generates **substantial energy savings and space savings of up to 75%**.

Reduces the risk of cross-contamination

DoubleMax's ingenious double-wall design drastically reduces the risk of potable water being contaminated by the heating water.

- | | |
|-------------------------|-----------------------|
| 1 Domestic water | 4 Heat transfer fluid |
| 2 360° visual detection | 5 Double-wall tube |
| 3 Vented leak ports | |

ENERGY COSTS REDUCED BY UP TO 30%

Unlike traditional hot water heaters, the DoubleMax instantaneous indirect water heater maintains its effectiveness over time by **preventing scale to accumulate** in the exchanger. This reduction of scale from the exchanger's walls is made possible by the water turbulence and the expansion-contraction of the copper pipes—two phenomenon DoubleMax leverages.

Potable water circulates through the copper coils in a state of turbulence, which improves convection exchange while generating friction on the walls, thus preventing scale accumulation. In addition, fluctuating water temperatures make the copper coil expand and contract, reducing scale build-up on the copper. The combined effect of reducing the volume of stored water and maintaining optimal efficiency helps reduce energy costs by up to 30% in some cases.

EXCEPTIONAL-QUALITY INSTANTANEOUS DOMESTIC HOT WATER

Unlike traditional hot-water heaters, the DoubleMax instantaneously produces domestic hot water. It provides superior-quality potable hot water while preventing the proliferation of bacteria, such as *Legionella*.

NO RESIDUE

Over time, a traditional hot water heater generates residues that accumulate in the bottom of the tank. The residues are in direct contact with the stagnant domestic hot water and affect its quality. They form an unwanted insulator that prevents the heat from destroying bacteria, such as *Legionella*.

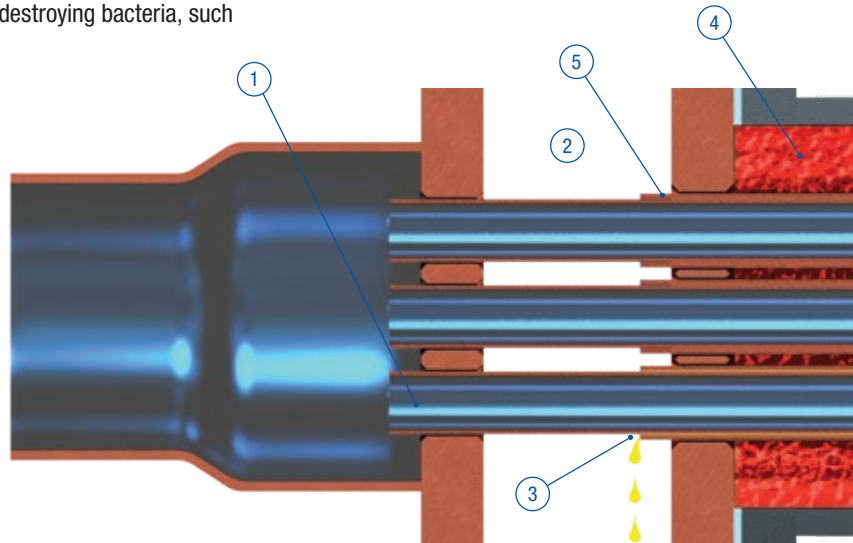
COMPATIBLE WITH ALL SOURCES OF THERMAL ENERGY

The instantaneous indirect water heater meets your needs as it is compatible with all sources of thermal energy, such as gas, oil, electricity, wood and solar energy.



THERMO 2000: 40 YEARS OF PERFORMANCE AND INNOVATION

The DoubleMax water heater is the result of more than 40 years of recognized expertise in both residential and commercial sectors. We have earned a solid reputation after installing thousands of systems throughout North America, which is your guarantee of quality and total peace of mind.



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PERFORMANCE

Domestic hot water production per hour in US gallons*

POWER	BTU/H	KW	DoubleMax 50-4						DoubleMax 80-5						DoubleMax 120-9					
			110 °F		140 °F		160 °F		110 °F		140 °F		160 °F		110 °F		140 °F		160 °F	
			1st hour	Continuous	1st hour	Continuous	1st hour	Continuous	1st hour	Continuous	1st hour	Continuous	1st hour	Continuous	1st hour	Continuous	1st hour	Continuous	1st hour	Continuous
50 000	15		136	86	80	60	69	60	166	86	92	60	74	60	205	86	108	60	80	60
100 000	29		222	172	140	120	129	120	252	172	152	120	134	120	291	172	168	120	140	120
150 000	44		308	258	201	181	189	181	338	258	213	181	194	181	377	258	228	181	201	181
200 000	59		394	344	261	241	-	-	424	344	273	241	254	241	463	344	289	241	261	241
250 000	73		480	430	321	301	-	-	510	430	333	301	-	-	549	430	349	301	321	301
300 000	88		566	516	381	361	-	-	596	516	393	361	-	-	635	516	409	361	381	361
350 000	103		652	602	-	-	-	-	682	602	454	422	-	-	721	602	469	422	442	422
400 000	117		738	688	-	-	-	-	768	688	-	-	-	-	807	688	530	482	502	482
450 000	132		-	-	-	-	-	-	855	775	-	-	-	-	894	775	590	542	-	-
500 000	147		-	-	-	-	-	-	941	861	-	-	-	-	980	861	650	602	-	-
550 000	161		-	-	-	-	-	-	-	-	-	-	-	-	1066	947	710	663	-	-
600 000	176		-	-	-	-	-	-	-	-	-	-	-	-	1152	1033	770	723	-	-
650 000	191		-	-	-	-	-	-	-	-	-	-	-	-	1238	1119	831	783	-	-
700 000	205		-	-	-	-	-	-	-	-	-	-	-	-	1324	1205	-	-	-	-
750 000	220		-	-	-	-	-	-	-	-	-	-	-	-	1410	1291	-	-	-	-
800 000	234		-	-	-	-	-	-	-	-	-	-	-	-	1496	1377	-	-	-	-
850 000	249		-	-	-	-	-	-	-	-	-	-	-	-	1582	1463	-	-	-	-
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*40 °F domestic cold water supply and 180 °F boiler water temperature.

SPECIFICATIONS

Model	Tank volume	Exchange surface	Max DHW flow*	Domestic water connections	Heating water connections	Height	Diameter	Weight
DoubleMax 50-4	50 US gallons	24.7 sq. ft.	12 gpm	1 1/2" Sweat F	1 1/4" NPTM	59 1/4"	22"	260 lbs.
DoubleMax 80-5	80 US gallons	30.9 sq. ft.	15 gpm	1 1/2" Sweat F	1 1/2" NPTM	73 3/4"	24"	355 lbs.
DoubleMax 120-9	119 US gallons	55.6 sq. ft.	27 gpm	2" Sweat F	2" NPTM	76 1/4"	28"	530 lbs.

*These values must be reduced for high temperature and continuous flow applications.

- Standby loss < 1/2 °F per hour
- Heat transfer efficiency: 99%
- Output temperature up to 200 °F
- Maximum operating pressure of 150 psi

15-YEAR RESIDENTIAL WARRANTY
ON THE RESEVOIR AND COPPER COILS

10-YEAR COMMERCIAL WARRANTY
ON THE RESEVOIR AND COPPER COILS

2-YEAR WARRANTY
ON MECHANICAL PARTS



Peak-performance heating systems

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