Napoleon Manufacturing: The Hottest Furnaces Around



On Monday, we featured a breakdown of who Napoleon Manufacturing is and how their identity influences their products. Today, we're going to be diving into what exactly those products are and why they are so exciting, starting with their furnace lines. Canada is a pretty cold country, so these furnaces are designed to stand up to even the coldest conditions. Starting with Ultimate 9700 Series on down through the 9200 Series, Napoleon's furnaces are all design driven heating machines made in North America for North American winters.

The Ultimate in Heating

Napoleon's Ultimate 9700 Series is their flagship furnace line. One look at the units, and you can understand why. Ultimate 9700 furnaces are packed with cutting-edge technology and exclusive design elements, making them a truly unique heating solution that can stand toe-to-toe with the most powerful, efficient equipment on the market today and come out on top.

The Heat Exchanger

The heart of any furnace is the heat exchanger, and Napoleon's Ultimate 9700 Series has a lot of heart. The heat exchangers are constructed from an alloy containing grade 409 stainless steel and titanium for the perfect blend of durability and heat transfer efficiency. The primary heat exchanger utilizes a tubular triple-pass design for vastly increased surface area and maximal heat transfer. A controlled wrinkle-bend is also applied to the heat exchangers to eliminate weak spots.

Napoleon's exclusive Vortex turbulator uses disruption to increase the time that it takes for flue gases to pass through the heat exchangers for, you guessed it, superior heat transfer efficiency. A stainless steel recovery coil (the secondary heat exchanger) is equipped with fins to extract what little heat manages to escape the triple-pass primary exchanger. The sum of these parts is a heat exchanger system that keeps consumers comfortable with 97% efficiency and is backed by a limited lifetime warranty.

The Ignition System

Napoleon knows a thing or two about flames and it shows in the design of their ignition systems.

Their expertise is on full display thanks to the exclusive SureView burner system, which provides an at-a-glance way for contractors to diagnose issues—and it serves as a spectacular visual hook to homeowners! The aluminized multi-port burners produce flawless flame cones shaped to get the most out of the Ultimate 9700's state of the art heat exchangers.

A two-stage gas valve provides consistent comfort through changing conditions. Your customers will enjoy pitch-perfect heating under any circumstances. To ensure that the equipment you're installing meets the rigorous standards of quality and craftsmanship that Napoleon is known for, every unit is factory-fired before shipment. Not every batch. Not a representative sample. Every unit. Peace of mind has never come this easily.

The Blower

When you've got the best heat exchanger on the planet and an ignition system lightyears ahead of the competition, what do you do for the blower? You call on Genteq and their 30 years of experience designing fan motors and you ask for their most efficient model: The Eon.

The Eon is a variable-speed ECM motor that consumes 80% less electricity than traditional PSC motors. For those keeping score, the Ultimate 9700 is now reducing two unique utility bills every month. It employs a sealed design with permanently lubricated ball bearings. Equipped with Soft Start & Soft Stop technology, the Eon eliminates sudden drafts and reduces startup and shutdown noise. Operational noise is minimized as well since the Eon is dynamically balanced. Pairing a two-stage gas valve with a variable speed blower is a time-tested method of ensuring even heating in any application.

The Cabinet

How do you protect the most advanced heating equipment on the planet? You take a durable steel cabinet and you bake on a powder-coat of scratch-resistant, corrosion-resistant paint.

How do you improve the furnace cabinet, which has seen precious little design innovation in decades? First, you acoustically insulate the blower compartment to prevent sound leakage. Second, you thermally insulate the heat exchanger compartment to improve heat retention and reduce the required clearance to combustibles to a svelte zero inches. Next, you make it shortest on the planet with a height 32-%". That goes nicely with the whole zero clearance thing, makes for a furnace that can be installed anywhere, y'know?

Not satisfied, you add UV and LED lights inside the cabinet for air purification and ease of maintenance. Finally, you develop SILENTCORE technology and apply it, making the Ultimate 9700 Series the only furnace line on the planet with four sides of sound-dampening insulation. For those keeping score at home, the combination of a dynamically balanced, acoustically insulated ECM blower and a SILENTCORE cabinet results in a furnace that's a bit louder than a soft whisper.

The Rest

The Ultimate 9700 is replete with connection options, which make life easier for contractors, and allow the furnace to be installed in more spaces and more applications than you can imagine. There are multiple connection options for venting (direct, single pipe, or concentric), air intake, gas, electricity, and even drainage.

On the subject of condensate, these furnaces include an internal condensate trap and transparent

condensate collector. Ultimate 9700 furnaces also feature an accessible, self-diagnosing integrated furnace control with contacts for humidification, ventilation, and air purification.

The 9600, 9500, & 9200 Series

The Ultimate 9700 Series may be Napoleon's premier furnace, but that doesn't mean that they skimped on their other lines. Quite the contrary, it's actually easier to list the few things that differ between the 9700 and Napoleon's other offerings. So with that in mind, here is a breakdown of what's different!

9600 Series vs. Ultimate 9700 Series

- 96% AFUE
- The primary heat exchanger is made from aluminized steel instead of a stainless steel/titanium alloy.
- There are no LED or UV lights inside of the cabinet.
- Instead of a variable-speed ECM Eon fan motor, these models have an Endura Pro ECM motor.
- The cabinet only has three sides of sound insulation.
- 10-year unit replacement heat exchanger warranty instead of 15-year.
- Flexfit Installation Options: 9600 Series furnaces are multi-position; they can be installed in upflow, downflow, horizontal left, or horizontal right applications without a conversion kit. Ultimate 9700 Series furnaces are upflow only.

9500 Series vs. 9600 Series

- 95% AFUE
- The 9500 Series utilizes a single-stage gas valve.
- No SureView window for viewing the blower system.
- For the blower, you have the option of an Endura Pro ECM motor or a PSC motor.
- The blower compartment is not acoustically insulated.

9200 Series* vs. 9500 Series

• 92.1% AFUE

As you can see, Napoleon did an excellent job balancing the features of their different product lines to ensure that every household has a high-efficiency heating option that fits their budget and application perfectly. You might not see a SureView window or cabinet lighting on every Napoleon furnace, but they all feature two advanced heat exchangers and a wealth of quality-of-life improvements for the installer.

The Bottom Line

On Monday, we promised that Napoleon's products were about quality above all else. The list of features above acquits that claims nicely. Napoleon furnaces are matching the power and efficiency of established players while pushing the industry forward with design-driven decision-making. Their furnaces are just designed to appeal to homeowners, though they definitely will, but also to make life easier for contractor's during installation and throughout the life of the unit. If you want to get in on the ground floor of Napoleon in Chicagoland, contact Bill O'Brien to set up a discussion about becoming a dealer or stop by our Napoleon page, click "Become a Napoleon Dealer," and fill out the form!

Don't forget to stop by the blog tomorrow for a breakdown of Napoleon's AC condensers and CondoPacks!

*Napoleon 9200 Series Furnaces are a non-stock item, but we are glad to special order them for your projects!

Ultimate 9700 Series Brochure | 9600 Series Brochure | 9500 Series Brochure | 9200 Series Brochure