What does a Viessmann boiler cost?

It depends on when you measure, before it is installed or after its been installed and running.

For the homeowner, Viessmann is the best investment in the marketplace for many reasons. You pay more up front to get a lot back in return over time. Generally, an investment is just that way. The more invested the more returned.

For the heating professional, they get the ability to sell and install the best heating equipment in the world that gets installed without incident or callback.

The boiler is the heart of the heating system. It must pump heat to the building's radiators or baseboard all through a cold winter. It is an important asset to your home and your comfort. Yet most boiler decisions are made on lowest first cost.

To understand the differences with Viessmann, you should understand the marketplace from where it came. Western Europe, and Germany in particular, is an area with a lot of people, no naturally occurring fuel supplies, populations that stay in the same house for generations and homes that are heated by hot water heating (boilers). The governments have all stepped in and forced real energy policies and innovation. The US is different. Fuel is relatively cheap and perceived to be plentiful, there is no real government energy policy, people move regularly and only 7% of homes use hot water heat.

The boiler market in the US is a completely static (some would say dying) market. The same numbers of boilers have been sold for the last ten years (300,000 units +/- 10%). In a market like this, the only option for manufacturers is to drop price by reducing cost. The result in the US is smaller and smaller boilers using the same sectional boiler designs from the 30's and 40's.

The American boiler market today is a lot like the American auto industry was right after the fuel embargo of 1973. In heavy price competition with each other, the best they could come up with was the Chrysler K Car and the Chevy Chevette. These designs were lowest first cost but would fail or were worthless before 100,000 miles were reached. The Europeans, and later the Japanese, cam along and offered equipment that was more money up front but would turn 2 or 3 hundred thousand miles and still have resale value. The automobile could be transportation and a good investment. This offshore competition forced the Americans to redesign their product and today they can boast automobiles as good as anyone.

So what goes into the Viessmann boilers and why? Viessmann is a world leader in heating technology. Their annual volume is approximately 6 times larger than the largest US boiler manufacturer. Because of their size and success, they can afford to research and develop products that few others could. They have over 1700 international patents. They have been rated as the best boiler manufacturer by an independent survey of German heating contractors for the last 12 years. Their unique (and patented) Bi-Ferral heat exchanger design is considered the perfect boiler design for a variety of reasons.

Here are some of the features of the Viessmann Vitola boiler, and the reasons why its design is considered superior.

Fact: It takes 2 to 8 minutes to get combustion efficiency.
When any combustion appliance fires, gas or oil, the surfaces in the boiler and chimney are cooler and need to be heated. Think of your automobile on a cold day. Viessmann says, "Let's reduce these bad periods of combustion by reducing cycling." To do this they added water content inside the boiler so that there could be a long "on" time and a long "off" time. Viessmann has 17 to 38 gallons of water versus 7 to 12 for traditionals. Would you want to start and start your lawn mower every 4 to 6 minutes? Of course not. Why let the boiler fire like that? Viessmann systems are designed to burn clean with good "on" periods, then keep a long "off" period through unequaled insulation.

Fact: Dirty equipment robs efficiency
Heating equipment, particularly fired by oil, is very efficient when it is first installed. With each firing of the burner, unburned hydrocarbons and soot settle inside the boiler chamber, robbing efficiency. A thumbnail's thickness of soot can drop heat transfer by 3%. Viessmann's Vitola Bi-Ferral fires into a stainless steel cylinder made from 316 Titanium stainless steel that burns off any unburned soot from the previous cycle. This self-cleaning combustion chamber means you stay efficient year after year. If you have to clean the boiler for any reason, a swing door exposes every square inch of heat exchanger. No boiler, anywhere, is easier to clean. As if you ever had to clean it!

Fact: Cycling on and off increases equipment stress and bad combustion periods
The trend by some boilermakers, because of the shrinking boiler market, is to make smaller and smaller boilers. This small mass concept is long on marketing and short-sighted on numerous fronts. Think of the material stress to go from hot to cool in a small heat exchanger. How about heating up the boiler in a minute and then letting it cool just as fast? We did this before in the auto industry. Remember the 2.0 and 2.2 liter engines in those same Chevettes? They couldn't handle the material stress and burned up. Nowadays, manufacturers have larger 4 and 6 cylinder engines that give great mileage and can last longer.

Fact: Changing water temperatures according to outside conditions is best
A hot water heating system needs full boiler power, with the hottest water only on the coldest day of the year. At every other point of weather, you could be comfortable with cooler water. Traditional boilers will create condensation if the return water is approximately 116 degrees F. Condensation can shorten the boiler life and mix with soot to rob efficiency inside the boiler. The Vitola Bi-Ferral is the only boiler that can accept cooler water running through it continuously. Viessmann is the only manufacturer that includes a brain inside its basic boiler, factory installed, that knows how cold it is outside. This makes you more comfortable and saves fuel.

Fact: The heating system should be a system
In this country a variety of components are brought together to make a heating system. Different manufacturers will make the boiler, burner, pumps, controls, valves. The question is... how do you get the right parts and pieces to work together, how do you get installed correctly in the first place? How can you get it fixed in the future if something goes wrong?

Viessmann provides its product as a system so that the equipment gets installed correctly and works at its published efficiencies. Some of the system features are:

Boiler Stand: The boiler comes on a special base that (1) gets the burner up off the floor and so it won't suck in dust and dirt (2) has leveling legs to keep it plumb and level and give a neat system appearance. Would cement blocks work? Yes. Is it the Viessmann approach? No.

Pre-fired and adjusted Oil burner - Every burner for Viessmann equipment has been actually test fired, with recorded results, into the right Viessmann boiler. That means that there is no guesswork by the heating technician to get it adjusted correctly. No other manufacturer does this. Could they ignore it? Yes. Does it cost additional money? Yes. Is it worth is to you and Viessmann. Yes.

Snap-Together Controls - The weakest link in the heating chain is getting the control wiring to work in concert. Viessmann developed their patented snap-together control wiring system so that (1) the system gets wired right the first time and (2) if troubleshooting is ever required, it is the easiest possible. Could Viessmann just ship parts and pieces and hope they got wired right? Yes. Is it Viessmann's approach? No.

Secondary oil filter and two-line system - Viessmann provides a secondary oil filter with a clear dome that is installed at the burner. This gives higher level of filtration for steady and higher efficiencies. They also include a brilliant two pipe oil adapter that filters more oil before it's burned and preheats the oil to the burner. They also include an oil delay valve so that draft is established before oil is ever allowed into the boiler's chamber. All these things help for clean burn. Do they cost more? Yes. Is it worth it in fuel savings and reduced maintenance? Yes. Does anyone else offer these extras? No.

Fact: The heat belongs in the building, not in the boiler room

The American system of rating boilers rewards poor insulation on the boilers. This test gives high marks to the lowest net stack temperature. To get the net stack temperature, you must take the temperature of the flu gas that is going up the chimney and subtract the room temperature of the boiler room. If you can get the boiler room hot , you get a higher rating! Obviously, the heat in the basement doesn't do you any good up in the family room so it is really wasted energy. Viessmann builds their equipment to a world standard, not a rating system developed by the boiler manufacturers themselves and puts almost 3" of insulation on every boiler. Most boilers have about 3/4" of insulation that is just enough to keep from burning your hand. It's wasteful and it's also why you can look at any traditional boiler after it has been in the field for a few years, you will find the front jacket discolored and almost melted.