

SUMMER 2013

Valhalla

EXPERIENCE VIKING HEAVEN

VIKING 62: PALM BEACH STYLE

**CRUISE CONTROL:
VIKING 75 MOTOR YACHT**

**FLAGSHIP UPDATE:
VIKING 92 CONVERTIBLE**

**NEW LAUNCH:
VIKING 52 CONVERTIBLE**

**SPORTING LIFE:
VIKING 42 S SERIES**

KEY WEST TRAVEL LOG

**POWER TO SPARE:
VIKING'S TRI-GENERATION PLANT**



GOING GREEN

Power to go the distance

Building high-performance luxury convertible sportfishing yachts is the mission at the Viking Yacht Company and we do this by incorporating our near 50 years of industry experience with a sharp focus on both past and emerging trends. Many years ago, the largest Viking was a 40 footer. Today, our smallest yacht is 42 feet and a new flagship 92 Convertible is well underway with a launch date in late summer 2014. A major component of the company's success is deeply rooted in the physical plant itself, a collection of five buildings consolidated in a 52 acre spread on the Bass River that provide 810,000 square feet of manufacturing space.

While the Viking product line has expanded and improved over the years, so too has the infrastructure to help us

achieve our position as the world's leading manufacturer of convertible yachts. Over the past 10 years, for example, not only has the plant been expanded to build larger vessels, but we also have devoted significant investments in making the plant a more efficient workplace that provides ongoing green initiatives. Just as we aim to build a better boat every day, many of these improvements to the plant also spawn other tangible and long term benefits.

In 2005, Viking began an aggressive program of resin infusion, a manufacturing process that utilizes closed mold construction, which eliminates the escape of VOCs (volatile organic compounds) and HAPs (hazardous air pollutants) into the workplace. This provides a cleaner environment, and helps us to build a better constructed and performing boat. Each

new hull is built with the resin infusion process as are all water and fuel tanks and hundreds of other large and small parts that go into the manufacture of Viking yachts. In the old days visitors to the plant often commented on the sweet smell of styrene that is used in the laminating resins of fiberglass construction. Today, the absence of styrene scent is perhaps the most noticeable aspect of a plant tour.

In 2008 we designed and built our own waste water treatment plant to handle the comfort needs of an expanding work force. The waste water treatment plant allowed us to eliminate the daily and costly expense for a "honey wagon," that was needed to truck out the daily effluent. Switching over to the treatment plant also meant we no longer needed to use the septic field on our property, which enhanced the surrounding



property. Finally, the treated waste water is now used throughout the plant's lavatories in the toilets and urinals.

Electrical energy to run the machinery throughout the plant, along with heat and air conditioning have long been astronomical expenses. A few years ago, we experimented with a windmill to ascertain if this alternative energy source could be beneficial to our needs. Unfortunately, the results were less than stellar and we abandoned the project. More recently, however, we were successful in trimming some of our electrical needs for Building 5

and 5A with a solar project. We installed 798 panels on the roofs covering 17,000 square feet to produce 250,000 KWH, enough to power both buildings and more for a year. In addition, the solar panels helped reduce our CO2 emissions by 3,000 tons annually.

But the real game changer came into play when after decades of using fuel oil to heat the plant, a natural gas pipeline was tunneled in from Route 9, which fronts the Viking property line. As the gas flowed into the plant for heating needs so did the ideas to take it to the next level. Always

on the forefront of improving our working environment while exploring means to control overhead we began designing our own ambitious tri-generation power plant utilizing micro-turbines. A micro-turbine, similar to those that power a jet engine can use a fuel source such as natural gas and transform it into heat and electrical energy.

Once the decision to move ahead was established, we designed and constructed a building near our infamous Viking water tower to house six Capstone C65 micro-turbines. Each unit can develop 65 kilowatts for a total of 390 kilowatts. Producing electrical power and heat from the micro-turbines are the basis for a co-generation power plant. But the Viking mindset always looks forward, which led us to further install a series of absorption chillers. The chillers use exhaust heat from the micro-turbines to make chilled water for air conditioning. Thus, our co-generation game plan instantly became a tri-generation project resulting in the production of our own heat, cooling and electrical energy.

When online, the micro-turbines reduce the factory's overall heating, cooling and electrical energy expenses by 25 percent, which slices our electricity bills by 40 percent or more. The micro-turbines can generate up to 50 percent of our current usage, which helps insulate us from the volatile electricity market. And of course the use of natural gas helps to further control greenhouse emissions. Better yet, the major capital investment will pay for itself in relatively short order, probably five years or less.

We are very fond of Bill Healey's popular phrase of building a better boat every day and our new tri-generation plant is one more way we are doing it. 🚢