

GEORGETOWN BREWING CO.

Brewery

THE CHALLENGE

[Georgetown Brewing Co.](#) sold their first keg in February of 2003 to one of Seattle's favorite watering holes, the Latona Pub. Today they are the largest independent brewery in Washington state, with distribution operations in Washington, Oregon, Idaho, California and Japan – and the largest draft-only brewery in the U.S. as of May 2017.

Today they crank out 120 barrels per hour from 37,000 sq. ft. of brewery space and 4,700 sq. ft. of cooler space. Their most popular brew, Manny's Pale Ale, makes up 70 percent of their production. Manny's is sold in over 900 bars and restaurants in the Seattle area alone, with an estimated 17.1 pints consumed per minute! Georgetown also sells growlers and bottled brews under the brands Bodhizafa IPA, Lucille IPA and Roger's Pilsner – plus the occasional hand-bottled specialty beers.

Rapid success and growth led the Brewery to search for an energy-saving solution that would add boiler capacity during the performance of periodic cleaning of their brewing equipment. Initially, the intent was to purchase a replacement boiler. But the prohibitive cost of this approach wasn't as easy to swallow as their beer.

They contacted ENERVEX's local manufacturer's rep at Mechanical Sales, who presented a cost-saving alternative that would use heat recovery from a single steam boiler to divert hot flue gases through the heat exchanger during the cleaning process.

JOB PROFILE

Location:

- Seattle, WA

Completion:

- 2012

Owner:

- Georgetown Brewing Co.

Contractor:

- [Hermanson Corporation](#)

ENERVEX Rep:

- [Mechanical Sales Inc.](#)

THE SOLUTION

The alternative was to install an [ENERVEX VHX](#) Economizer and Heat Exchanger to the existing boiler stack. When used to recover waste heat in a boiler as pre-warmed water, these waste heat recovery systems can often reduce a building owner's fuel requirements by five to 10 percent and pay for themselves in less than two years.

The ENERVEX [VHX Single Row Economizer](#) allows hot flue gases to bypass the system and move through the heat exchanger during the cleaning process when there is no





ENERVEX's TDF-620 Power Venter inline fan



EBC30 Controllers are used for the Mechanical Draft System and VHX

demand. Without constant usage, the existing boiler gains additional capacity and energy savings – without the need for a boiler upgrade.

An [IPVB Inline Power Venter](#), along with an [EBC 35 Modulating Pressure Controller and CO monitor](#), were also installed to monitor and maintain constant mechanical draft and pressure throughout the system. The solution carries a two-year factory warranty and 10-year warranty against corrosion perforation.

THE RESULT

The heat recovery solution led to a significant reduction in Georgetown's initial investment and acceleration of the payback period.

“The high cost of a new boiler seemed inevitable. ENERVEX and their rep came in with an economical heat recovery solution that allowed us to extend our investment in existing boiler equipment and keep the initial cost to just \$5,000, with ultra-short payback.”

The maximum heat recovery rate is 99,780 Btus per hour with 261,073 maximum heat energy saved. When monitored in the initial months of operation, this translated to an annual savings of 2,600+ Therms and \$2,098, with payback in less than two-and-a-half years.

Furthermore, an energy savings audit was conducted, after which [Puget Sound Energy](#) awarded a \$25,000 energy grant to Georgetown Brewing Co. for their increased boiler efficiency. The grant virtually offset equipment and installation costs, bringing the total installation costs down to \$5,000. The investment makes great sense even without a grant, as very few boiler upgrades can produce such rapid savings.



The IPVB Power Venter and Economizer

- Annual savings of 2,600+ Therms
- 2.5 Year Payback

ENERVEX products installed:

- [VHX Single-Row Economizer](#)
- [IPVB Power Venter](#)
- [EBC 35 Modulating Pressure Control and CO Monitor](#)