

Are you wasting valuable energy?

If you use steam in the plant's process (heating, drying, cooking, etc.), and are reducing the steam pressure generated at the boiler to a pressure suitable for your process, there is an enormous potential to utilize the energy and generate valuable free power for the plant .

Is your trash a potential source of free power?

Many plant processes generate trash which can be used as a source of fuel. By using this trash as fuel you eliminate the need for disposal. But, more importantly, this fuel can be used to generate steam which in turn can be used to generate electricity using a steam turbine generator package.

Turbine Power Systems

Profitably Recovering Wasted Energy



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Enresco profitably transforms wasted energy into zero emissions on-site power

Micro Steam Turbine: Plug and play 275kW

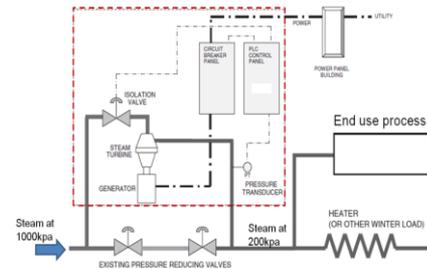


Performance

Under many conditions, the Microsteam® Turbine will pay for itself in two to three years. As an example, if the steam load is 6,136 kg/h and the pressure is reduced from 1000 kpa to 200 kpa, the Microsteam® Turbine will generate 275 kWe. The amount of additional steam utilized to produce the power is 1.8 kg/kWe.

For service of 8,000 hours per year, with an average electricity cost of \$0.15/kWh and a steam cost of \$0.015/kg, the net savings would be calculated as follows:

$$\text{NET SAVINGS} = (275 \times .15 - 275 \times 1.8 \times .015) \times 8,000 = \$264,000 \text{ per year.}$$



How much will you save?

Enresco will survey your steam usage and conditions and, based upon your electricity and steam bills, provide a free estimate of your annual savings from installing a Microsteam® Turbine.

How It Works

The operating principle is simple energy otherwise dissipated by reducing the steam pressure in a valve is converted to power by the Microsteam® Turbine.

Turbine System Advantages

High Turbine Efficiency: Greater than 80%

Reliable and Resistant to Corrosion and Erosion: Titanium alloy construction

Compact Power Package: 34" W x 42" L x 78" H. access through standard doors

Simple Installation: Controls and electrical are pre-cabled and factory assembled

Simple operation: Single button start-up and shutdown

User Friendly Control Panel: Separable from steam equipment

Steam Turbine Gen-sets: Tailored 0.4-29MW

A small induction unit is used in lieu of an energy wasting pressure reducing station helping reduce a hospital's total energy costs. 400 KW Induction Unit.



A small condensing unit is fuelled by scrap wood helping a crate manufacturer reduce its total energy costs. 1 MW Synchronous Unit.



What a steel manufacturer thought was an 8 mw topping turbine opportunity turned out to be 22 MW after a thorough engineering review of the manufacturer's process.



Renewable Power Project fuelled with Healthy Forest Initiative, 3MW Synchronous unit.

