District Energy

District heating, a technology that utilizes steam to heat cities and campuses, has been around for well over a century. Advances in technology now allow consumers to produce efficient, safe electricity as a by-product of the system's primary purpose, heating.

This advancement is possible due to the way that district heating works. Many steam plants produce steam at a pressure that is too powerful to use to heat buildings; in these cases, a pressure reducing valve (PRV) is used to drop the steam pressure to a desired level. That pressure drop results in a waste of valuable energy.

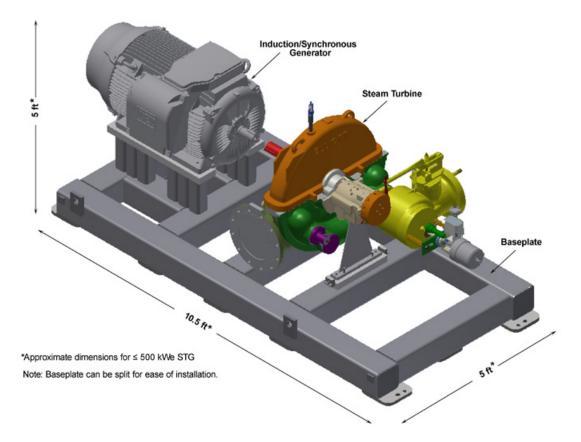
Elliott's state-of-the-art steam turbine generator (STG)



sets allow consumers to capture this wasted energy by placing the STG in parallel with an existing PRV. This makes it possible for the user to produce valuable on-site electricity. Elliott's STG extracts the excess energy from the steam in the form of work to produce electricity, instead of wasting it across a valve. The result not only saves the consumer money, but it also increases the system's efficiency.

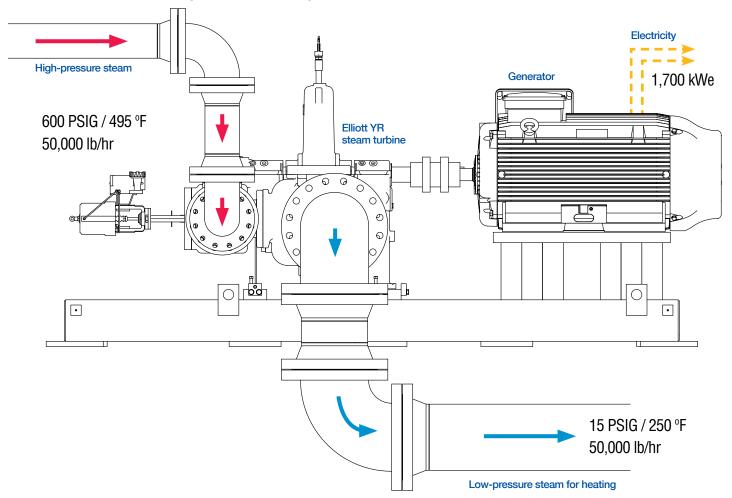
Reliable Power Supply

Elliott's STGs come fully packaged and ready for installation into your operation. With plug-and-play functionality and a design life of 20+ years, more than 35,000 Elliott steam turbines have been sold around the world. Standard scope of supply includes the turbine, generator, gearbox (if needed), control system, lubrication system (if needed), and the baseplate.



Power to Match Your Needs

Elliott works with each customer to select the right turbine generator for the job. Our extraordinarily reliable YR steam turbine product line is specifically designed to produce power for customers connected to district heating who are looking to replace a PRV. Tens of thousands of Elliott YR steam turbines are on the job around the world, driving generators, pumps, compressors, fans, blowers and other machinery. Our capabilities include the design and manufacture of STGs ranging from 100 kWe to 50,000 kWe. The diagram below illustrates the potential to deliver additional electricity to your facility by replacing a PRV with an STG while still maintaining the required heating capabilities.



The World Turns to Elliott

For more than 100 years, Elliott has been synonymous with innovative engineering, highly reliable products and unwavering commitment to customer satisfaction. At our engineering and manufacturing centers in Jeannette, Pennsylvania, and Sode-gaura Japan, we produce efficient and reliable steam turbines, power recovery expanders, and centrifugal and axial compressors. Elliott's global network of full-service repair centers, field service teams, and sales and support offices extends support throughout North and South America, Europe, the Middle East and Asia.



901 North Fourth Street Jeannette, PA 15644-1473 Phone: 724-527-2811 Fax: 724-600-8442 Email: info@elliott-turbo.com

www.elliott-turbo.com

