

THERMAL FLUID STEAM GENERATORS

Thermal fluid steam generators are a perfect solution for customers that need steam for their facility but don't want to spend the capital for a large-scale boiler operation.

When using an Enerquip hot oil heater in conjunction with an industrial steam generator and a High-Pressure Condensate Receiver (HPR), the overall efficiency of the system is unmatched in comparison to any other solution.



STEAM GENERATOR APPLICATIONS

These are just a few examples of the diverse applications of steam generators across different industries.

- Warming of asphalt slurry in railcars or storage tanks.
- Power generation in plants.
- Industrial processes like heating, sterilization, and power in various sectors.
- Heating systems in buildings and facilities.
- Cleaning and sterilization in medical, food, and manufacturing industries.
- Humidification in controlled environments.
- Enhanced oil recovery in the oil and gas industry.
- Steam turbines for mechanical power generation.
- Waste management processes like waste incineration.
- Textile manufacturing for dyeing, drying, and finishing fabrics.



PRODUCT OPTIONS

- **Sizes:** Up to 48" diameter (or larger depending on weight)
- **Style:** U-Tube, single-pass or multi-pass configurations
- **Materials:** Carbon steel, 304L SS, 316L SS, Duplex, AL6XN, Hastelloy, and more (sanitary SS equipment is manufactured in our carbon-free facility in Medford, WI)
- **Types:** ASME, TEMA (Class B, C or R), PED, CRN



ADVANTAGES OF STEAM GENERATORS OVER BOILERS

Weighing your options between an industrial steam generator and a boiler for your facility? Keep in mind that thermal fluid steam generators have significant advantages over boilers, some of which include:

Higher Safety: Thermal fluid steam generators operate at lower pressures compared to boilers, reducing the risk of explosions and other safety hazards associated with high-pressure steam boilers.

Improved Efficiency: Thermal fluid steam generators typically have higher thermal efficiency compared to traditional boilers. They use a closed-loop system where the thermal fluid is heated and circulated, resulting in better heat transfer and reduced energy losses.

More Precise Temperature Control: Thermal fluid steam generators provide precise temperature control, allowing for consistent and accurate heating. This is especially important in applications where maintaining a specific temperature is critical, such as in certain industrial processes.

Compact Design: Thermal fluid steam generators are often more compact and require less space compared to boilers. This can be advantageous in installations where space is limited.

Versatility: Thermal fluid steam generators can use a variety of heat sources, including natural gas, diesel, biomass, and waste heat recovery. This versatility allows for more flexibility in choosing the most suitable and cost-effective fuel source for a specific application.

Reduced Maintenance: Thermal fluid steam generators typically have simpler designs and fewer components compared to boilers, resulting in lower maintenance requirements and costs. They do not require water treatment or blowdown systems, reducing maintenance efforts further.

Faster Start-up and Shutdown: Thermal fluid steam generators have faster start-up and shutdown times compared to boilers. This allows for quicker response to changes in heat demand and improved operational efficiency.

Want more? Enerquip also designs and builds hot oil heaters, tank heating coils, condensers, and more. Learn for yourself why Enerquip's quality and service is unmatched in the industry. Call us, today!