STEAM GENERATORS THERMAL FLUID HEATERS ELECTRIC BOILERS SUPERHEATERS

VAPOR POWER INTERNATIONAL

VAPOR POWER

# **THE VAPOR POWER ADVANTAGE**



For two hundred years, steam power has fueled progress. Since 1903, Vapor Power International has been an industry leading innovator in the boiler and steam generation industry. With over a century of experience generating steam and heat for the most demanding applications, Vapor Power has a deep knowledge of steam requirements, which is engineered in our heritage. Vapor Power's products are durable, reliable and deliver the robust performance customers expect.

Every day, Vapor Power equipment is used for industrial, commercial, marine, and military steam and heating applications in thousands of installations worldwide. Our skid-mounted equipment packages are significantly more compact than other designs, making installations smoother and easier. All Vapor Power equipment packages are pre-tested at our site; our built-in safeguards and designs assure maximum operational safety.

Our customers expect Vapor Power boilers, steam generators and thermal fluid heaters to last generations, and they do. Extensive quality measures are integrated into the design and manufacturing process, so our customers can reap years of value. After-market retrofit upgrade kits ensure top-grade performance decade after decade with the latest in controls technology. Boilers made by Vapor Power International are simply the best in the industry.

Our technical proficiency is rivaled only by our customer-centric approach, admittedly unique in the boiler manufacturing industry. We work with you to customize and upgrade controls to deliver a system tailored for your specific needs. With corporate headquarters and manufacturing operations in Franklin Park, Illinois, and our worldwide sales and service support network, we're here to provide customized solutions for your specific steam generation, thermal fluid heater, and hot water needs, no matter where they live.



Forced circulation watertube steam generators with capacities from 75 BHP to 600 BHP and design pressures from 15 to 530 PSIG.



**STEAM** GENERATORS





ELECTRIC BOILERS

Resistance element type steam and hot water boilers with sizes from 30 kW to 4320 kW, steam pressures from 15 to 3200 PSIG, hot water pressures from 30 to 415 PSIG, voltage between 208 and 600 Volts.



**Electric** 

High capacity electrode steam boilers with sizes from 3000 kW to 34,000 kW, design pressures from 100 to 500 PSIG, and voltage between 4160 and 14,400 Volts. Hot water boilers with similar capacities are also available.



Gas and oil fired steam superheaters with models from 400,000 to 7,700,000 BTU/ HR, design pressures from 15 to 3200 PSIG, and design temperatures up to 1250° F. Electric steam superheaters with capacities from 7.5 kW to 600 kW, design pressures from 15 to 2500 PSIG, design temperatures up to 1200° F, and voltages between 208 and 600 Volts.



ELECTRIC BOILERS

#### **Circulatic**<sup>®</sup>

Once through watertube steam generators with models from 18 BHP to 220 BHP and design pressures from 15 to 3200 PSIG.

## Hi-R-Temp<sup>®</sup>

Forced circulation coil type thermal fluid (hot oil) heaters with output from 400,000 to 20,000,000 BTU/HR and temperatures up to 750° F.

# **APPLICATIONS**

- Asphalt & Liquid Terminals
- Brewery & Distillation
- Chemical Processing
- Corrugated & Paper Manufacturing •
- Food Processing
- Healthcare
- Marine Barges and Ocean Vessels
- Oil & Gas Processing
- Power Plant
- Process Steam & Heat
- Waste Water Treatment
- Valve Testing

## **PRODUCT ADVANTAGES**



#### **Rapid Start**

Since our coils only require a small volume of water, our units achieve rated output in approximately five minutes from a cold start, saving at least an hour in labor and fuel expenses per start over firetube boilers.

### **High Turndown Ratios**

Featuring full modulation, our Modulatic, Circulatic, and Hi-R-Temp have high turndown ratios (maximum output to minimum output) of up to 10:1, and our Electrode products offer a 100:1 turndown ratio. These units allow a wide range of loads to be handled without excessive on-off cycling at low load conditions to increase energy efficiency, reduce maintenance costs and improve reliability.

#### **Compact Size & Weight**

Smaller footprints mean more floor space, reduced installation costs for new construction and less demo/rebuild tasks for retrofit and replacement jobs. Our Circulatic, Modulatic, Hi-R-Temp, Superheaters and Electric products all boast compact sizes and weights to benefit your bottom line. For example, our Circulatic and Modulatic steam generators have a 40-60% smaller footprint and can be disassembled and reassembled onsite without any field welding.

#### **Burner Placement**

Vapor Power's burners are located to create optimum access, making it is easier to observe the flame and work on our burners.

## **High Quality Steam**

Vapor Power products provide the highest quality steam with levels of up to 99.5%+ dry steam to achieve your desired results on a consistent basis. Our Electric boilers accomplish this with vertical pressure vessels, and our Electrode boilers achieve 99.95% purity using heat transfer that takes place directly in the water in the steam chamber.

### **Comprehensive Product Range**

Vapor Power's six distinctive product lines provide steam generator, thermal fluid heater, hot water and superheated steam solutions, to meet every industry need and application. Our standard size Circulatic and Modulatic watertube steam generators are available from 18 BHP to 600 BHP and pressures up to 3,200 PSIG. Our Hi-R-Temp thermal fluid heaters offer 400,000 to 20,000,000 BTU/HR and temperatures up to 750° F. Electric resistance element boilers provide a wide range of steam generation from 30 kW to 4320 kW (102 to 14,688 PPH) and pressures from 15–2500 PSIG. Electrode high capacity boilers provide solutions for a variety of other applications, with 3000 kW to 34,000 kW (10,000 to 113,000 PPH) and pressures from 100-500 PSIG.

We also offer a complete range of fuel fired and electric Superheaters, with capabilities up to 7,500,000 BTU/HR, temperatures to 1250° F and pressures to 3,200 PSIG. We provide complete custom skid packages for steam generators, electric boilers and thermal fluid heaters to meet specific site needs and installation requirements. Customized combination steam generator/superheater packages are also available. With our expertise and the variety of products we offer, you are assured of finding the best solution for your application.

## **Coil Desian**

We feature a robust coil design with greater wall thickness and multiple coils (vs. other manufacturers' thinner, monotube coil units) in our Modulatic, Circulatic and Hi-R-Temp products. When there is a damaged monotube coil, the coil has to be completely replaced. In our multiple coil design only the damaged coil needs to be replaced, saving on coil replacement costs and downtime.

#### **Reduced Downtime**

Vapor Power Electrode boilers contain virtually no moving parts, resulting in significantly reduced maintenance and downtime is a thing of the past. Other electrode boiler designs contain a hydraulically operated shield positioning system that is prone to packing leaks or internal mechanical shields that create a failure risk.



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# **UPGRADE KITS**

- Air-cooled Pump
- Combustion Coil Upgrade Kit
- Control Panels

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- Temperature Controls
- Feedwater and Drum Level Controls
- Flame Safeguard Controls
- Temperature Controls
- Linkageless Controls

As one of the industry's leading manufacturers of boilers, packaged steam generators and thermal fluid heaters, Vapor Power International has everything you need to keep your boilers operating in top condition. That includes complete retrofit upgrade kits to outfit your boilers with the latest in controls and components.

We offer kits for Circulatic<sup>®</sup> and Modulatic<sup>®</sup> steam generators, Hi-R-Temp<sup>®</sup> thermal fluid heaters, and Superheaters. Like our boilers, our retrofit upgrade kits are developed using the most advanced production and technology to ensure the superior quality of our products.

#### **Commissioning & Training**

Vapor Power can provide complete commissioning, as well as hands-on or classroom training about the complete operation of your equipment.

#### **Troubleshooting & Diagnostics**

Vapor Power offers remote access and monitoring of your equipment.

#### **Parts & Service**

Vapor Power stands behind its products with original OEM parts, no matter the age of the equipment. We also offer direct factory training and service on-site. Local Representative:

Apogee Engineering Houston, Texas

Office: 713-627-9173 sales@apogee-engineering.com www.apogee-engineering.com