Sioux NextGen™ Water Heaters

Advanced Technology Simple Operation



Sioux WHC1.7PG
• 1,700,000 BTU/Hr



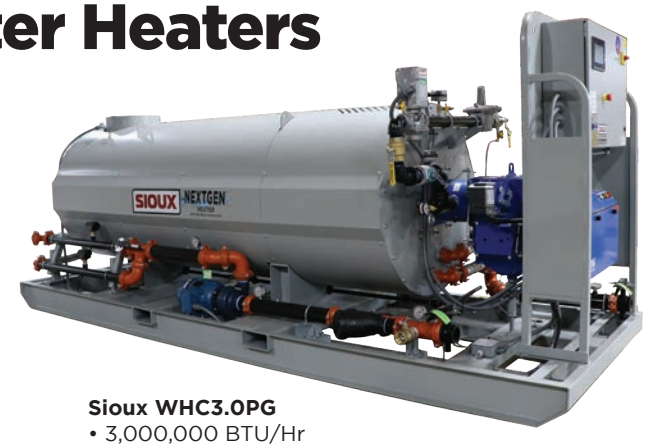
Sioux WHC1.0PC
• 1,000,000 BTU/Hr



Sioux WHC5.0PG
• 5,000,000 BTU/Hr

The Next Generation from the Leader in Industrial Water Heaters

Sioux water heaters are used worldwide in a variety of industrial applications. Sioux's NextGen™ water heaters come with advanced features to make the process of heating water safe, quick, and efficient. These horizontal heat exchanger units provide a continuous supply of hot water within minutes of startup with an efficient and simple design.



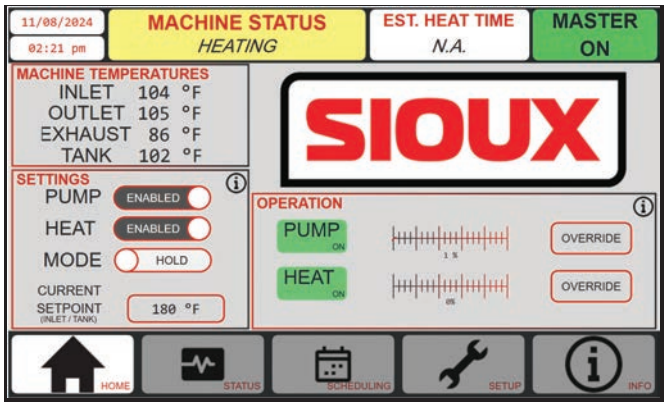
Sioux WHC3.0PG
• 3,000,000 BTU/Hr

Performance

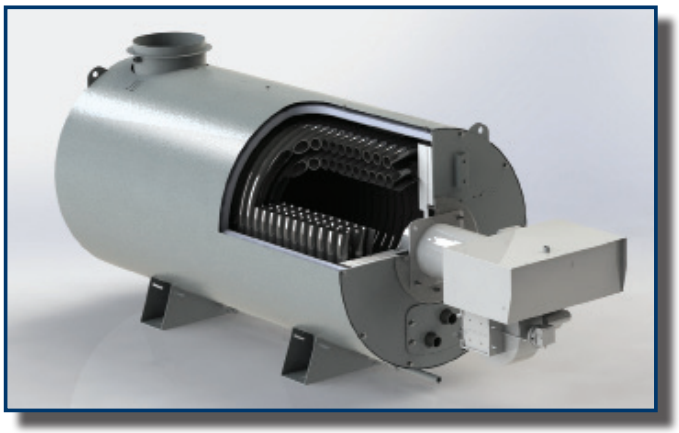
- BTU/Hr heat output ratings of 1 to 5 Million with 90%+ efficiency.
- Primary electricals are 230/1Ph/60Hz (WH1.0 & WH1.7 models only), 230V/3Ph/60Hz, 460/3Ph/60Hz, and 575/3Ph/60Hz.
- Available with Diesel, LP, Natural Gas or Combination burners.
- Variable Frequency Drive (VFD) standard on 1.7, 3.0, & 5.0 models allows the heater to achieve higher outlet temperature in a single pass and reduces electrical consumption during idle times.

Advanced PLC Control

- Intuitive touchscreen interface.
- Online connectivity with **Sioux Sentinel™** or **Sentinel Pro™** to monitor and operate from remote locations.
- Automatic scale monitoring and notification.
- Burner and thermocouple monitoring (including fault codes) and maintenance alerts.
- Set an operation schedule and desired tank temperature.
- Integrate operation and monitoring of Sioux Tank Skid package.



Intuitive Touch Screen Control for the NextGen™



Sioux's NextGen™ water heaters utilize an efficient 3-pass heat exchanger

Safety

- Standard safety devices include emergency stop switch; exhaust temperature limit switch; inner and outer coil flow switches; and temperature limits.

Industrial Construction

- Powder coated heavy-duty skid with 4-way forklift access.
- Optimized skid dimensions and weight.
- High flow cast iron pump for long life.
- Groove fittings for easy maintenance of common service items.
- Vacuum gauges for y-strainer will indicate when clean out is required.
- Condensation outlet fitting drains condensate to a single point on the skid edge.

Flexibility

- Carbon or stainless steel heat exchangers.
- Available Lo/Hi/Lo and Modulating burners to achieve higher tank temperatures.
- Alternate voltages available.
- Custom options available.

Certification & Standards

- Built to ASME Code Section IV and registered with the National Board of Boiler and Pressure Vessel Inspectors.
- Canadian Registration Number (CRN).
- Electrical panel meets UL-508a and CSA C22.2 #14.
- Third-party certified to one or more of the following standards - UL726/CSA B140.7:22 (Diesel) or UL795/ULC/ORD-C795 (Gas).
- Meets the National Electric Code (NEC), the Canadian Electric Code (CEC), and complies with OSHA Regulation 1910.303(a)
- ISO 9001 Quality management standards.

Sioux Sentinel & Sentinel Pro™

Sioux Sentinel is included with all NextGen water heaters to provide real-time monitoring and connectivity to Sioux units on the same local network as computer, tablet, or phone.

Sioux Sentinel Pro™ is a subscription based application available for all NextGen water heaters that provides real-time monitoring and remote connectivity to Sioux units via a phone, tablet, or computer from off-site via the web.

Sioux Sentinel Pro™ is a subscription service that provides these upgrades:

- Monitor, operate, and set schedule water heater remotely from any web browser with an internet connection (unit & device do not have to be on the same local network).
- Sioux can remotely troubleshoot the unit to reduce downtime.
- 1 Year and Lifetime Subscriptions available.

Water Heaters with Carbon Steel Heat Exchanger



Sioux WHC1.7PG
• 1,700,000 BTU/Hr

Utilizing decades of customer application experience with industrial water heaters, Sioux developed the NextGen™ series. These innovative water heaters with carbon steel heat exchanger have advanced features to meet the need for efficient hot water with ease of use, monitoring, and maintenance. Sioux carbon steel water heaters provide hot water for a variety of applications.

Applications

- Ready Mix Concrete
- Precast Concrete
- Process and Fluid Heating
- Industrial Manufacturing
- Frac Tank Heating

Water Heaters with Stainless Steel Heat Exchanger

For applications that cannot utilize the standard carbon steel models, Sioux offers water heaters with stainless-steel heat exchanger and non-ferrous, wetted parts.



Sioux WHS3.0PG
• 3,000,000 BTU/Hr

Applications

- CIP or COP Cleaning in Processing Facilities
- Food & Beverage Manufacturing
- Pharmaceutical Manufacturing
- DEF Production
- Specialized Process and Fluid Heating

WH-Series Models

SIOUX MODEL NUMBER	HEAT OUTPUT MM BTU/Hr	Fuel Type	Standard Electrical	Standard Pump	Standard Burner	GPM		Temp Rise	
		NG/LP Diesel Combo	Volts/ Phase/ Hertz	On-Off VFD	On-Off Lo/Hi/Lo Modulating	Min	Max	@ Min GPM	@ Max GPM
MODELS DO NOT INCLUDE WATER TANK									
WH*1.0PG	1.0	NG/LP	460/3/60	On-Off	On-Off	35	90	57°F	22°F
WH*1.0PD	1.0	Diesel	460/3/60	On-Off	Lo/Hi/Lo	35	90	57°F	22°F
WH*1.0PC	1.0	Combo	460/3/60	On-Off	On-Off	35	90	57°F	22°F
WH*1.7PG	1.7	NG/LP	460/3/60	VFD	On-Off	40	105	85°F	32°F
WH*1.7PD	1.7	Diesel	460/3/60	VFD	Lo/Hi/Lo	40	105	85°F	32°F
WH*1.7PC	1.7	Combo	460/3/60	VFD	On-Off	40	105	85°F	32°F
WH*3.0PG	3.0	NG/LP	460/3/60	VFD	Modulating	65	180	92°F	33°F
WH*3.0PD	3.0	Diesel	460/3/60	VFD	Modulating	65	180	92°F	33°F
WH*3.0PC	3.0	Combo	460/3/60	VFD	Modulating	65	180	92°F	33°F
WH*5.0PG	5.0	NG/LP	460/3/60	VFD	Modulating	125	325	80°F	31°F
WH*5.0PD	5.0	Diesel	460/3/60	VFD	Modulating	125	325	80°F	31°F
WH*5.0PC	5.0	Combo	460/3/60	VFD	Modulating	125	325	80°F	31°F

* WHC-Carbon Steel WHS-Stainless Steel



Sioux WHC3.0PG
• 3,000,000 BTU/Hr

Water Heaters with Tank Included

If you need an integrated water tank, Sioux offers NextGen™ water heaters with a 360 or 1,000 gallon water tank. These **TURN-KEY PACKAGE** water heaters come ready to use. Connect the inlet and outlet water, plus utilities, and you are ready to make hot water.

WH-T Features

- 360 gallon tank capacity
- Liquid level sensors and make-up water solenoid valve
- Liquid level sight gauge
- Thermometer
- 1/2” inlet port and 115-volt GFI receptacle to easily incorporate the chemical metering pump for Sioux Clean water treatment
- Single stage centrifugal discharge pump with 5 HP motor

WH-HWP Features

- 1,000 gallon tank capacity
- Liquid level sensors and make-up water solenoid valve
- Liquid level sight gauge
- Thermometer
- 1/2” inlet port and 115-volt GFI receptacle to easily incorporate the chemical metering pump for Sioux Clean water treatment
- Single stage centrifugal discharge pump with 7.5 HP motor
- Inspection port
- Additional ports to connect additional equipment such as a chiller or discharge pump
- Optional insulation package available



Sioux WHC1.0PG-T
• 1,000,000 BTU/Hr
with 360 gallon tank



Sioux WHC1.0PG-HWP
• 1,000,000 BTU/Hr
with 1,000 gallon tank

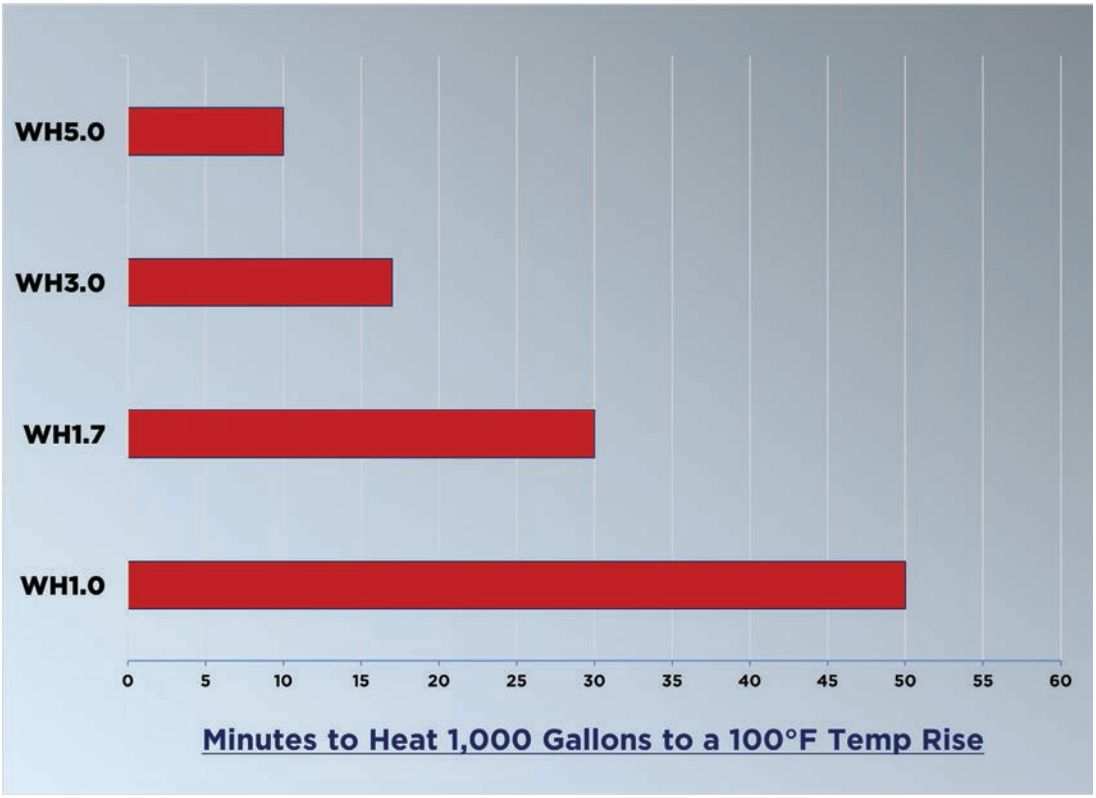
WH-Series Tank Models

SIOUX MODEL NUMBER	HEAT OUTPUT MM BTU/Hr	TANK SIZE	Fuel Type	Standard Electrical	Standard Pump	Standard Burner
			NG/LP Diesel Combo	Volts/ Phase/ Hertz	On-Off VFD	On-Off Lo/Hi/Lo Modulating
WH*1.0PG-T	1.0	360 gallons	NG/LP	460/3/60	On-Off	On-Off
WH*1.0PD-T	1.0	360 gallons	Diesel	460/3/60	On-Off	Lo/Hi/Lo
WH*1.0PC-T	1.0	360 gallons	Combo	460/3/60	On-Off	On-Off
WH*1.7PG-T	1.7	360 gallons	NG/LP	460/3/60	VFD	On-Off
WH*1.7PD-T	1.7	360 gallons	Diesel	460/3/60	VFD	Lo/Hi/Lo
WH*1.7PC-T	1.7	360 gallons	Combo	460/3/60	VFD	On-Off
WH*1.0PG-HWP	1.0	1,000 gallons	NG/LP	460/3/60	On-Off	On-Off
WH*1.0PD-HWP	1.0	1,000 gallons	Diesel	460/3/60	On-Off	Lo/Hi/Lo
WH*1.0PC-HWP	1.0	1,000 gallons	Combo	460/3/60	On-Off	On-Off

* WHC-Carbon Steel WHS-Stainless Steel

For full water heater performance see WH-Series Models on page 5

WATER HEATING TIMES



Sioux Tank Skid Packages

Sioux manufactures water tanks in either 1,000 or 2,500 gallons for use with water heaters. Standard tank packages include a carbon steel tank with powder paint finish, 10HP or 15HP motor and single stage centrifugal discharge pump, a NEMA 4 water-tight electrical enclosure with On/Off switch. Standard electrical connection is 230 or 460V/3Ph/60Hz.

Each tank package also includes an inlet water y-strainer, liquid level switch to maintain proper water level, a 2" make-up water solenoid valve, and ports on the tank for inlet and outlet water connections to a water heater or chiller. The entire package is mounted on a forklift accessible skid for proper placement in your facility. Optional features include an additional 3, 5, or 7.5HP motor and pump and spray foam insulation of a 1" nominal thickness.



Sioux TCS1000-1005F

Water Heater Accessories

Sioux can provide all the accessories needed for a complete heater install and everything needed to keep it running at peak efficiency for years to come.

- **Water Tanks**
- **Pumping Stations**
- **Mixing Valves**
- **Exhaust & Venting Components including Dampers**
- **Plumbing - Pumps, Regulators, & Valves**
- **Sioux Clean™ Water Treatment**

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