

# **Sioux® Steam-Flo® Steam Generators**



**Model SF-20 Oil-Fired,  
Leg Mount**

- **370 - 1,725 Lbs. (168-782 Kg) per hour  
of Saturated Steam Vapor in Minutes**
- **Continuous, Unlimited Steam**
- **Simple Operation**
- **Easy Maintenance**
- **Built to Last**



# Steam-Flo® Steam Generators

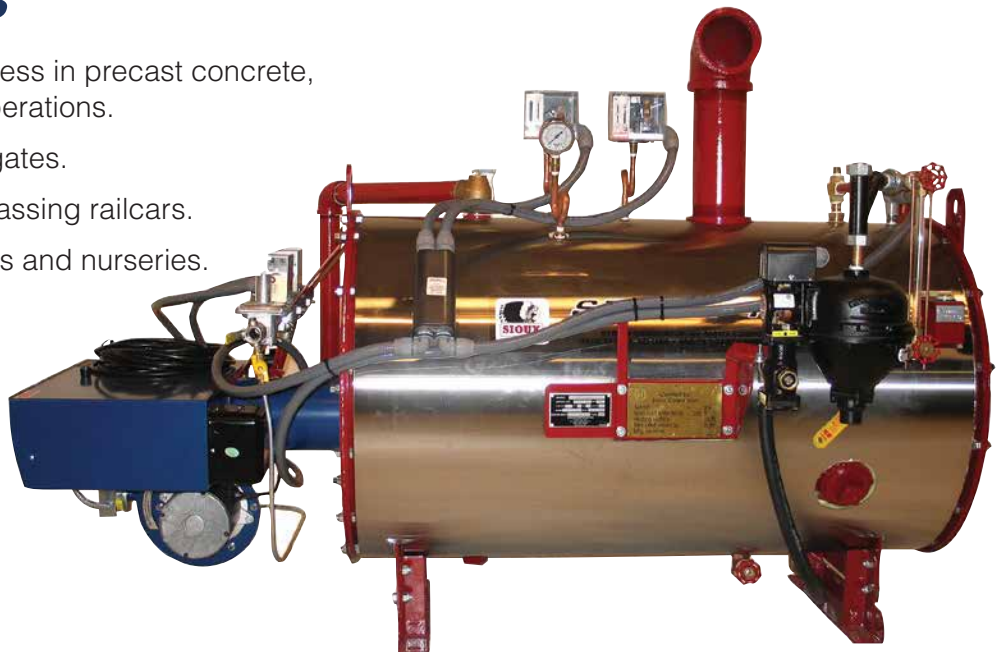
Sioux has been the number one manufacturer of portable Steam-Flo® steam generators since 1939. A wide variety of models are in operation worldwide. The Sioux Steam-Flo® line provides low pressure steam for a variety of applications. The Steam-Flo® vessel is constructed from 1/4" (6.4 mm) boiler plate steel, and will give years of service with minimal maintenance. A low water sensor switch and an automatic water feeder maintain water level and provide low-water shutdown.

- Registered with National Board of Boiler and Pressure Vessel Inspectors.
- Meets requirements of CSD-1 of the ASME Code.
- Third party approved to UL508A and CAN/CSA-C22.2 No. 14-10. Canadian Registration Number.
- Built to Section IV of the ASME Code.

<b>Features:</b>	<b>Benefits:</b>
3-pass dry back Scotch boiler	Smaller, lighter and much more efficient than single pass designs, saves space and reduces operating costs.
ASME approved	Vessels are inspected by Hartford Steam Boiler. This ensures a high standard of quality and equipment that is engineered for performance and safety.
Power gas burners	A consistent burn will save fuel and have lower emissions.
Simple design and controls	Reliable and simple pressure control.
Fiberglass insulation with stainless steel outer jacket	Increased efficiency, faster re-heating, and protects operators from hot surfaces.

## Applications

- Accelerating the curing process in precast concrete, pipe, prestress and block operations.
- Thawing and heating aggregates.
- Thawing, sterilizing and degassing railcars.
- Sterilizing soil in greenhouses and nurseries.
- Thawing and de-icing tanks, well heads, lines and valves.
- Many other applications...



**SF-25 LP/NG-Fired, Leg Mount**

# Specifications

Model	SF-11	SF-20	SF-25	SF-50
Fuel	Oil, LP, Natural Gas	Oil	LP or Natural Gas	LP, Natural Gas, Oil
Boiler Horsepower	10.7 BHP	19.7 BHP	24.5 BHP	50 BHP
Steam Output	370 Lbs./Hr. (168 Kg/Hr)	680 Lbs./Hr. (308 Kg/Hr)	845 Lbs./Hr. (383 Kg/Hr)	1,725 Lbs./Hr. (782 Kg/Hr)
Firing Rate (#2 Fuel Oil)	3.05 GPH (11.5 LPH)	5.65 GPH (21.4 LPH)	N/A	14 GPH (53 LPH)
Firing Rate (LP Gas, GPH)	4.66 GPH (17.6 LPH)	N/A	11 GPH (41.6 LPH)	22 GPH (83.3 LPH)
Firing Rate (Natural Gas, CFH)	427 CFH (12.1 m <sup>3</sup> /Hr)	N/A	1,010 CFH (28.6 m <sup>3</sup> /Hr)	2,000 CFH (57 m <sup>3</sup> /Hr)
Input BTU/Hour	427,000 (125 KW)	791,000 (232 KW)	1,010,000 (296 KW)	2,000,000 (590 KW)
Steam Working Pressure	0-15 PSI (0-1.03 BAR)	0-15 PSI (0-1.03 BAR)	0-15 PSI (0-1.03 BAR)	0-15 PSI (0-1.03 BAR)
Max. Temperature	250°F (121°C)	250°F (121°C)	250°F (121°C)	250°F (121°C)
Heating Tube Surface Area	65 Ft <sup>2</sup> (6.04 m <sup>2</sup> )	118 Ft <sup>2</sup> (11 m <sup>2</sup> )	118 Ft <sup>2</sup> (11 m <sup>2</sup> )	278 Ft <sup>2</sup> (25.8 m <sup>2</sup> )
Boiler Volume (Approx.)	55 Gallons (208 Liters)	135 Gallons (511 Liters)	135 Gallons (511 Liters)	325 Gallons (1230 Liters)
Oil Fuel Tank Capacity (Optional)	36 Gallons (136 Liters)	65 Gallons (246 Liters)	N/A	N/A
Efficiency (Approx.)	84%	83%	81%	85%
Operating Current (AMPS)	3 Amps (Oil) 4 Amps (Gas)	3 Amps	4 Amps	10 Amps
Machine Dimensions (Approx.)*	60"L x 40"W x 51"H (152 x 102 x 130 cm)	70"L x 51"W x 61"H (178 x 129.5 x 155 cm)	85"L x 51"W x 61"H (216 x 129.5 x 155 cm)	110"L x 72"W x 72"H (279 x 183 x 183 cm)
Shipping Dimensions (Approx.)*	85"L x 54"W x 60"W (216 x 137 x 152 cm)	76"L x 58"W x 72"H (193 x 147 x 183 cm)	94"L x 58"W x 72"H (238.8 x 147 x 183 cm)	118"L x 80"W x 80"H (300 x 203 x 203 cm)
Machine Weight, Dry (Approx.)*	900 Lbs. (408 Kg)	1,200 Lbs. (544 Kg)	1,200 Lbs. (544 Kg)	3,500 Lbs. (1,588 Kg)
Shipping Weight (Approx.)*	1,220 Lbs. (554 Kg)	1,820 Lbs. (825 Kg)	1,910 Lbs. (866 Kg)	4,300 Lbs. (1,950 Kg)

*Boiler performance ratings are based on 212°F (100°C) boiler feed water temperature and 70°F (21°C) air temperature at sea level, which is standard for the boiler industry. Performance may vary +/- 5%. Sioux reserves the right to make such changes as deemed advisable, which represent improvement of performance and/or reliability. For warranty specifications and limitations of Sioux Corporation see form #844. The information contained in this brochure does not constitute a warranty.*

## Options

- Portable non-highway trailer option includes: 15" (38 cm) pneumatic tires, 36 gallon (136 liter) fuel tank for SF-11, 65 gallon (246 liter) fuel tank for SF-20 or 120 gallon (454 liter) fuel tank for SF-50, and trailer hitch.
- Over the road highway-rated 2-wheel trailer with fuel tank, generator, water tank, highway tail lights and brakes (consult factory for details).
- Insulated trailers are available for severe temperature environments.
- Skid mounted with 36 gallon (136 liter) fuel tank for SF-11, 65 gallon (246 liter) fuel tank for SF-20 or 120 gallon (454 liter) fuel tank for SF-50.
- Available as a Hot Water Boiler (max pressure 30 PSI). For this option consult factory for circulation pumps, controls and other accessories available.



**Self-Contained Model SF-11 Oil-Fired with water tank, generator and highway trailer**

# Closed-Loop Thawing & Heating

The Steam-Flo® can be used in a closed-loop system in which water or a water/glycol mixture is heated to a desired temperature by the Steam-Flo® Steam Generator and circulated through the customer's heat exchanger then returned to the Steam-Flo®.

## Benefits

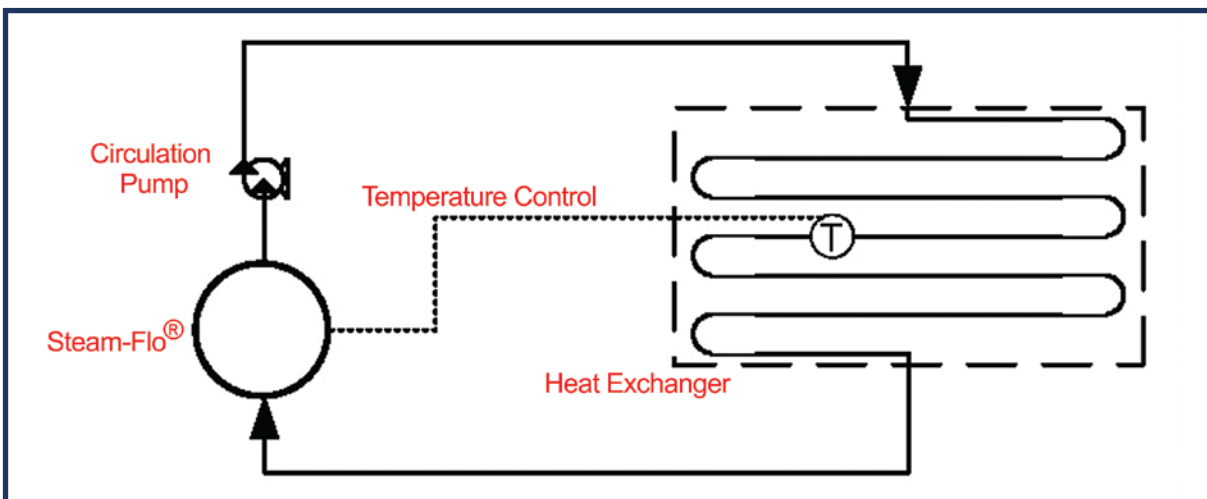
- Simple, reliable and economical.
- Glycol/water mixture prevents freezing in the system.
- No lime build up in heater due to closed loop design.
- No water runoff – prevents mud and ice build up.
- Fuel options – Diesel, NG, LP Gas or Waste oil.
- Digital thermostat – simple to adjust and maintains set temperature.
- No steam jets to clog.
- Designed to prevent thermal shock from extremely cold return water temperature.
- Minimal footprint.

## Applications for Closed-Loop System

- Heat sand and aggregate for concrete production without introducing moisture (which can freeze).
- Heat a floor or room to accelerate curing of concrete products such as walls, vaults, slabs, etc.
- Heat a tank or reservoir of gray water for reuse in concrete production.
- Heat or thaw rail tank-car contents.
- Thaw drainage culverts to maintain water flow.
- Thaw frozen earth (cemeteries, construction, etc.)
- Heat the floor of a shop, industrial facility, or a building to provide indoor space heat.
- Heat vessels or components in a chemical or pharmaceutical facility.
- Wide range of other applications.

## Options

- Circulation pump sized to your application.
- Self-contained systems including generator. for remote locations.
- Trailer mounted systems for portability.
- Insulated trailers for low temperature environments or to protect the equipment.



Typical Closed-Loop System



For more information:



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