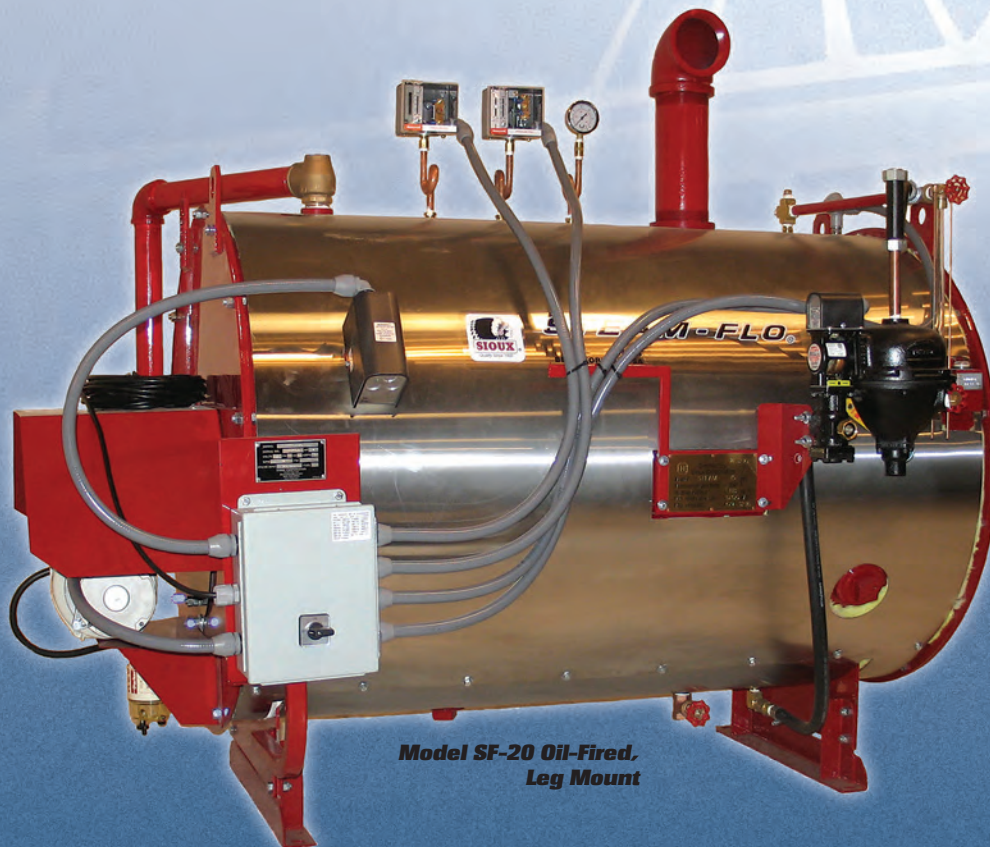


# **Sioux® Steam-Flo® Steam Generators**



**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

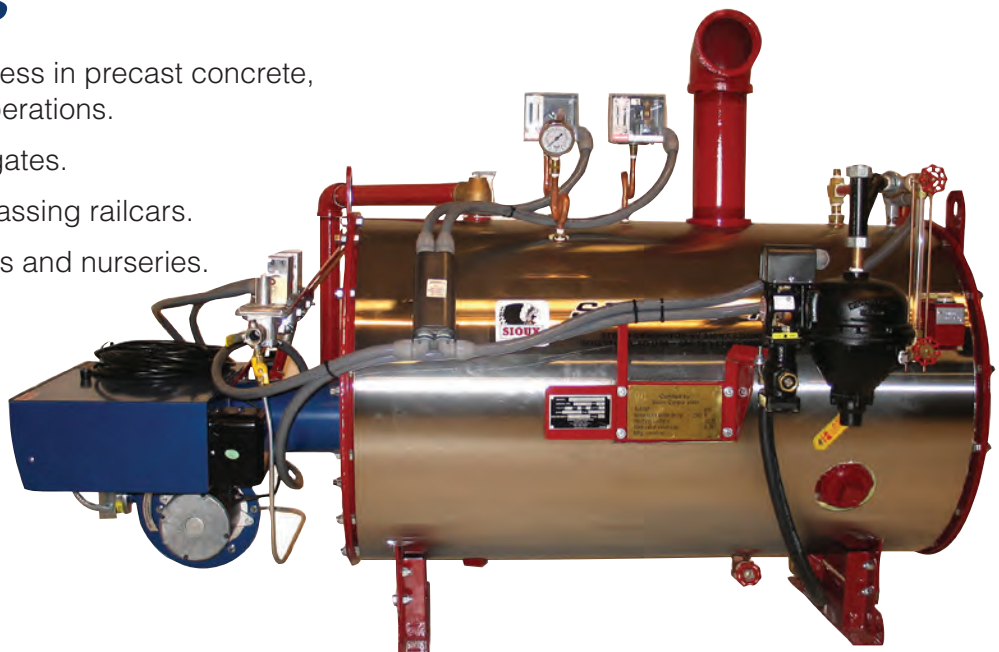
Sioux has been the number one manufacturer of portable Steam-Flo® steam generators since 1939. A wide variety of models are in operation worldwide. The Sioux Steam-Flo® line provides low pressure steam for a variety of applications. The Steam-Flo® vessel is constructed from 1/4" (6.4 mm) boiler plate 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<br>(152 x 102 x 130 cm) | 70"L x 51"W x 61"H<br>(178 x 129.5 x 155 cm) | 85"L x 51"W x 61"H<br>(216 x 129.5 x 155 cm) | 110"L x 72"W x 72"H<br>(279 x 183 x 183 cm) |
| Shipping Dimensions (Approx.)*    | 85"L x 54"W x 60"W<br>(216 x 137 x 152 cm) | 76"L x 58"W x 72"H<br>(193 x 147 x 183 cm)   | 94"L x 58"W x 72"H<br>(238.8 x 147 x 183 cm) | 118"L x 80"W x 80"H<br>(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

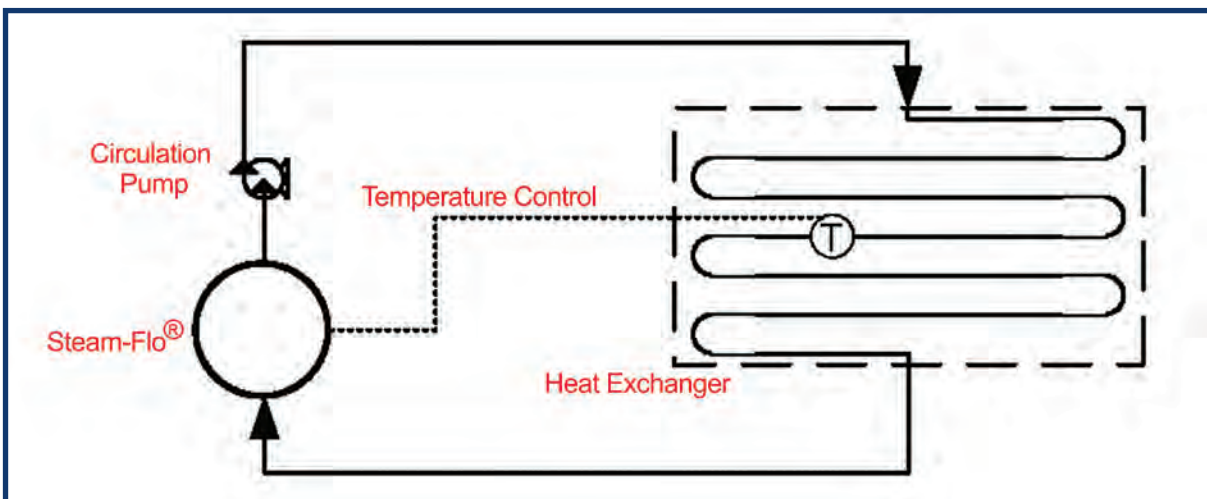
- Simple, reliable and economical.
- Glycol/water mixture prevents freezing in the system.
- No lime build up in heater due to closed loop design.
- No water runoff – prevents mud and ice build up.
- Fuel options – Diesel, NG, LP Gas or Waste oil.
- Digital thermostat – simple to adjust and maintains 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**