Stainless Steel Indirect Water Heaters

12 SQUIRE MODELS TO CHOOSE FROM
- 6 STANDARD MODELS FROM 30 TO 119 GALLONS
- 6 SOLAR MODELS FROM 65 TO 119 GALLONS

316L PASSIVATED STAINLESS STEEL TANK

316L HIGH CAPACITY STAINLESS STEEL COIL

FULLY WELDED CONSTRUCTION
The Squire Stainless Steel Indirect Water Heater -- with 12 models to choose from in capacities from 30-119 gallons, we are sure to have the right size indirect water heater to fit your application.

Squire features important enhancements that our customers will recognize and benefit from such as a welded and passivated stainless steel tank and heat exchanger, two-inch thick, high-density insulating foam, and best of all it is designed, engineered and assembled in America.

Stainless Steel Tank Manufacturing

**Laser Cut Precision**
A CNC laser uses Programmable Logic Controls to precisely cut the Squire Indirect Water Heater’s tank shell out of 14 gauge 316L stainless steel to a tolerance of .01 inch.

**Tank Cylinder Roller**
The computer controlled tank cylinder rolling machine ensures that the 316L stainless steel is transformed into a geometrically perfect cylinder.

**Coil Winder**
Straight tubes are rolled by a seven axis coil winder and turned into a precise, round coil used in the indirect water heater to transfer the BTU’s from the heat source to the potable water stored in the tank.

**Robotic Welder**
This state of the art six axis programmable robotic welder uses computer guidance to accurately weld the stainless steel fittings to the tank.

**Hydrostatic Leak Test**
After welding, the tank is hydrostatically pressure tested to ensure quality conformance.

**Passivation Process**
Each tank is subjected to a soaking spray of nitric acid. This treatment washes away any iron that was left behind during the welding process and re-establishes the oxide level of the stainless steel to ensure corrosion resistance. By removing iron from the welded surfaces, the Squire is less susceptible to corrosion brought on by aggressive water.

**Jacket and Foam**
The dent resistant polypropylene jacket and ABS caps are attached to the tank assembly, and then high density foam is added using a high pressure dispensing system to provide insulation that will keep the heat where it belongs, in the water. The result is a tank that is jacketed and evenly foam insulated with standby losses as low as 0.5°F per hour.
**Six Standard Models from 30 to 119 Gallons**  
The highest quality indirect water heater in the market also has one of the widest ranges of gallon capacities. With 6 models covering gallon capacities from 30 to 119 gallons the Squire is one of the broadest lines available.

**Six Solar Models from 65 to 119 Gallons**  
With three dual coil models for solar heating in conjunction with a heat source and three models with a solar coil and an electric element the Squire line of water heaters has a model to fit any residential or light duty commercial solar application.

**100% Stainless Steel Construction**  
Squire Water Heaters are constructed with Stainless Steel materials that are highly resistant to corrosion that can result from poor water quality.

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**316L Passivated Stainless Steel Tank**  
316L Stainless Steel material is used for the tank interior for superior durability and long life. The rust prohibitive characteristics of this material make it the perfect material to resist the corrosive tendencies of domestic water. The passivation process consists of a treatment method that enhances and increases the superior corrosion resistance of stainless steel.

**316L High Capacity Stainless Steel Coil**  
The Squire’s 316L Stainless Steel heating coil efficiently transfers high volumes of BTU’s from the heat source to the domestic water with high first hour delivery capability.

**Designed, Engineered and Assembled in the USA**  
A 100% stainless steel indirect water heater built in the USA, the Squire is completely assembled in Lebanon, Tennessee.

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**Inside Look**  
Dent resistant polypropelene jacket*  
Temperature & pressure relief valve  
Sensor well  
316L Stainless Steel coil  
High density foam insulation  
Cold water inlet  
Boiler water outlet  
Boiler water inlet  

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**How it Works**  
**Stainless Steel SIT Indirect**

The Squire uses the power and efficiency of the building’s heating boiler or solar array to generate domestic hot water for showers, dishwashing, clothes washing or any potable hot water demand. The efficiency of the heating boiler could be as much as 20% higher than a direct-fired tank-type water heater. So, why not use that efficiency to “indirectly” provide hot water for all potable applications?

By using the Squire to indirectly heat the domestic water, you eliminate the additional gas line, electrical connections and vent ducts needed with direct-fired tank-type water heaters.

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*SET models feature metal jacket*
Fully Welded Construction
Lochinvar utilizes state of the art, highly accurate robotic welding equipment that results in a fully welded construction method that requires no gaskets or mechanical sealing methods. Gaskets and seals are the weak point of any water storing appliance, therefore Lochinvar’s advanced design eliminates this potential failure point.

Factory Supplied Tank Sensor (SIT and SDT only)
A tank sensor with built in temperature limit is standard equipment on all sizes. This sensor accurately monitors the water temperature and sends a call for heat when the tank temperature drops below the desired setpoint. This sensor is 100% compatible and can be directly connected with Lochinvar’s line of KNIGHT or Cadet Heating Boilers.

T&P Relief Valve
Supplied with the unit in the carton. (shipped loose)

High Density CFC/HFC Free Polyurethane Foam
Two inches of R-13.4 High Density Polyurethane foam yields the lowest standby losses in the industry.

Attractive Rust Resistant Jacket
Resistant to scratches and dents, the Squire will maintain its classic high quality appearance for years.

Limited Lifetime Warranty*
Lochinvar believes that the Squire is the best built Indirect Water Heater on the market, we have a Limited Lifetime warranty to prove it.
*SIT models only

Solar Indirect with SDT Dual Coil
Squire Indirect Water Heaters with a dual coil design have a coil in the lower portion of the tank to transfer heat from a solar array to the water that is stored in the tank.

An additional coil in the upper portion of the tank will transfer heat from a back-up boiler into the water. This will ensure that the tank has ample hot water even at times when the solar array cannot generate enough heat to suitably heat the tank.

Solar Indirect with SET Electric Back-up
Squire Indirect Water Heaters with a single coil and an electric element are designed to collect heat from a solar array and transfer the collected heat into the stored water by way of the indirect coil which is located in the lower portion of the tank.

An electric element, which is controlled by a factory supplied thermostat, is positioned in the top half of the tank to ensure ample hot water even at times when the solar array is not capable of collecting the heat required by the DHW demand.
Stainless Steel Indirect SIT Models Dimensions and Specifications

<table>
<thead>
<tr>
<th>Model Number</th>
<th>A</th>
<th>B</th>
<th>D</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>Domestic Water Conn.</th>
<th>Coil Connection Size</th>
<th>Shipping Wt. (lbs.)</th>
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Model Number | Capacity (Gallons) | Heat Source Volume (Gallons) | Standby Loss (°F/Hr) | First Draw Gals. | Continuous Delivery (GPH) | 1st Hour Delivery (Gallons) | Min. Coil Load (Btu/Hr) | Flow Rate (GPM) | Friction Loss (Ft. Hd.) |
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Performance data is based on IWH-TS1 test results. All ratings are based on 180°F boiler water temperature with incoming cold water at 58°F and a Delta T of 77°F. Includes tank sensor for use with KNIGHT Heating Boiler.

Optional thermostat available for use with other boiler models.

SIT MODELS
All models standard with a Lifetime Limited Warranty against tank failure. All parts are warranted for one year. Five year limited tank warranty on all models when installed in a commercial application.
Solar Stainless Steel Indirect Dimensions and Specifications

SDT Models Dimensions and Specifications

<table>
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<tr>
<th>Model Number</th>
<th>A</th>
<th>B</th>
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<th>E</th>
<th>F</th>
<th>G</th>
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<th>I</th>
<th>Domestic Water Conn.</th>
<th>Coil Connection Size</th>
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Performance data based on incoming cold water at 50°F and a Delta T of 77°F. Delivery ratings for boiler coil only. Includes tank sensor for use w/ KNIGHT Heating Boiler.

SET Models Dimensions and Specifications

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All SET models: 4500w 240v 1 phase.

*SET models only

The “Hot Water Outlet” connection is Female NPT. All other connections are Male NPT.

SET & SDT MODELS
All models standard with a 5 Year Limited Warranty against tank failure. All parts are warranted for one year.