

STAINLESS STEEL INDIRECT WATER HEATERS

Squire[®] *Stainless Steel Indirect Water Heater*

6 MODELS FROM 30 TO 119 GALLONS

316L PASSIVATED STAINLESS STEEL TANK

304L HIGH CAPACITY STAINLESS STEEL COIL

FULLY WELDED CONSTRUCTION

LIMITED LIFETIME WARRANTY



Lochinvar.com

Squire®

Stainless Steel Indirect Water Heater

- a new Class of Water Heater

Introducing Lochinvar's newest member of the family, the Squire Stainless Steel Indirect Water Heater. With 6 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 now 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 with a tested R Value of 13.4, and best of all an American made product built in Lebanon, Tennessee.



Stainless Steel Tank Manufacturing



LASER Cut Precision

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 all of the stainless steel fittings and coil to the stainless steel tank.

Hydrostatic Leak Test

After it leaves the robotic welder the tank is hydrostatically pressure tested to ensure quality conformance.



Passivated for Protection

Passivation Process

Each tank is subjected to a soaking spray of citric 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 an evenly foam insulated and jacketed tank with a R-value of 13.4 and stand-by losses as low as .5°F per hour, depending on model.



Robotic Welder



R-13.4 Foam Insulated



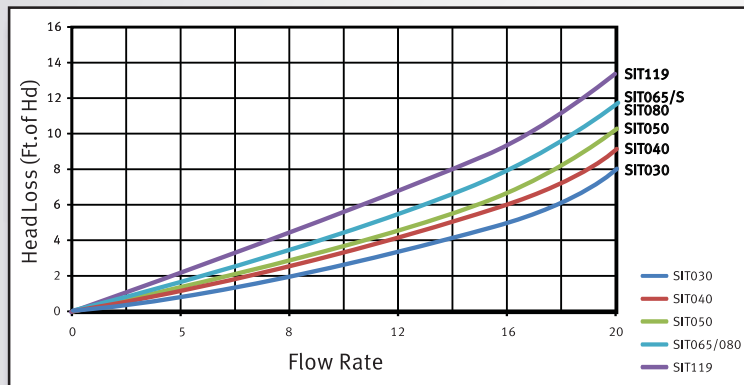
How it works...

The Squire uses the power and efficiency of the building's heating boiler to also generate domestic hot water for showers, dishwashing, clothes washing or any potable hot water demand required. 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?

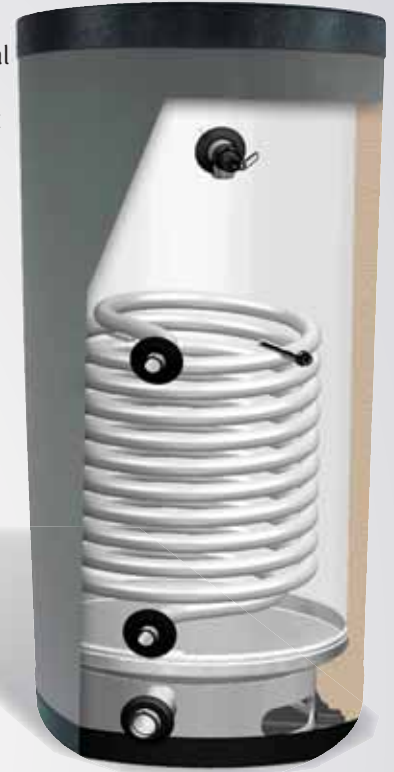
The Squire passes the boiler water used to heat the building through a uniquely designed internal helical coil that is immersed in the water heater tank. The super heated coil then passes its energy directly to the potable water. The end result is hot water for domestic use from boiler water already being used to heat the building.

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.

Squire Heat Exchanger Data



Use this chart as a reference and combine Squire's head loss with your boiler's head loss to determine total head loss in an indirect system.



Outstanding Features

Six 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 six models covering gallon capacities from 30 to 119 gallons the Squire is one of the broadest lines available.

100% Stainless Steel Construction

Squire Water Heaters are constructed with Stainless Steel materials that are highly resistant to corrosion that results from poor water quality.

Built in the U.S.A. at Lochinvar's World Headquarters

A 100% stainless steel indirect water heater built in the United States of America, the Squire is completely assembled in Lebanon, Tennessee at Lochinvar's World Headquarters.

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.

304L High Capacity Stainless Steel Coil

The Squire's 304L Stainless Steel heating coil efficiently transfers high volumes of BTU's from the heat source to the domestic water stored in the tank. The high first hour delivery rivals the best in the industry.

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

A limit-rated tank sensor is standard equipment on all sizes. This thermostat based control 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 Heating Boilers.

ASME T&P Relief Valve

Supplied with the unit in the carton. (shipped loose)

High Density CFC/HCFC Free Polyurethane Foam

Two inches of R-13.4 High Density Polyurethane foam yields un-paralleled standby losses.

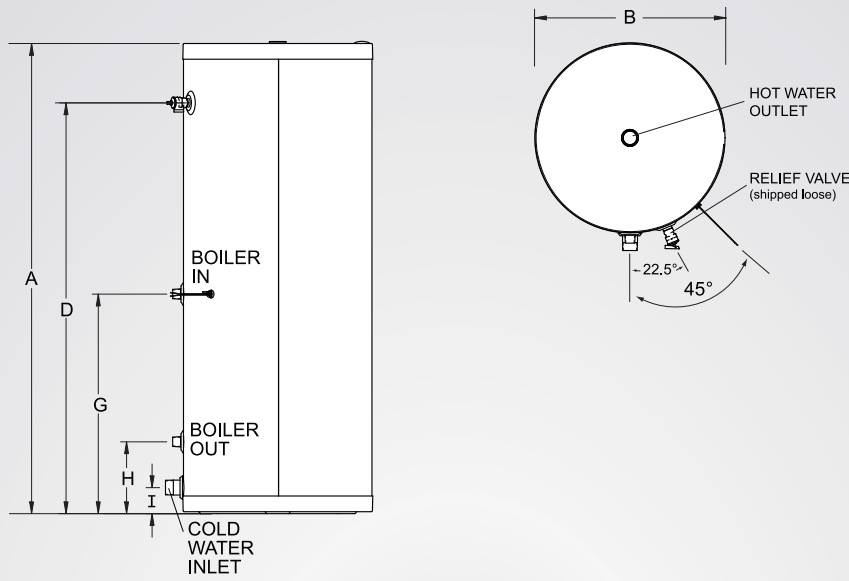
Attractive Rust Resistant Jacket

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.

Stainless Steel Indirect Dimensions and Specifications



Model Number	A	B	D	G	H	I	Domestic Water Conn.	Coil Connection Size	Shipping Wt. (lbs.)
SIT030	39-1/2"	20"	32-1/4"	21-3/4"	8-1/4"	3"	1"	1"	79
SIT040	55-1/2"	20"	48-1/2"	25-1/4"	8-1/4"	3"	1"	1"	105
SIT050	47"	24"	39-3/4"	24-1/2"	9-1/4"	3-3/4"	1"	1"	131
SIT065	60"	24"	52-1/4"	28"	9-1/4"	3-1/4"	1-1/2"	1"	147
SIT080	69-1/2"	24"	61-3/4"	28"	9-1/4"	3-1/4"	1-1/2"	1"	177
SIT119	68-1/4"	28"	60-1/4"	31-3/4"	9-1/4"	3-1/4"	1-1/2"	1"	213

Model Number	Capacity (Gallons)	Heat Source Water Volume (Gallons)	Standby Loss (°F/Hr)	First Draw (Gal.)	Continuous Delivery (GPH)	1st Hour Delivery (Gallons)	Min. Coil Load (Btu/Hr)	Flow Rate (GPM)	Friction Loss (Ft. Hd.)
SIT030	27	1.1	1.5	24	160	183	99,000	14.0	3.9
SIT040	40	1.6	0.9	27	181	208	115,000	14.0	4.5
SIT050	52	1.7	0.8	47	209	255	133,000	14.0	5.3
SIT065	67	1.9	0.7	65	263	327	154,000	14.0	5.7
SIT080	82	2.1	0.6	74	285	358	171,000	14.0	6.1
SIT119	113	3.2	0.5	109	349	459	216,000	14.0	6.5

Performance data is based on IBR test results. All ratings are based on 180°F boiler water temperature.

Includes tank sensor for use with KNIGHT Heating Boiler.

Optional thermostat available for use with other boiler 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.



Lochinvar®
High Efficiency Water Heaters, Boilers and Pool Heaters



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