HUBBELL
a **nudyne** company

Point-Of-Use Steam Fired Water Heater

65–119 Gallon Capacity

HydraStone™ cement lining provides long tank life

Copper-silicon alloy tappings cannot rust or corrode

High impact composite jacket cannot rust or corrode and minimizes damage during installation and transit

2" thick polyurethane foam insulation reduces heat loss

- Copper fin tube heating coil provides highly efficient heat transfer
- Steam operating controls are factory sized and selected for efficient installation and operation
- Numerous options available for specialized applications

Applications

Schools, office buildings, hotels, hospitals, process systems, industrial facilities.

SYNERGY STEAM SERIES

PS

Compact steam fired water heater

The Hubbell Synergy Steam PS is a point-of-use storage water heater that utilizes steam to heat domestic water. Its compact design takes up minimal floor space. The Hubbell PS is constructed for demanding commercial and industrial applications. The heavy-duty HydraStone cement lined storage vessel and copper-silicon threaded tank openings help to ensure longevity and efficiency. As an option, the PS is available with electric back up in case of steam failure.

Over 100 years of water heating expertise

Hubbell water heaters are the right choice for your commercial and industrial applications. We have water heating solutions for most energy sources with storage capacities from 1–10,000 gallons — all designed, engineered, and manufactured for reliability and longevity coupled with unparalleled support and service.

Intertek

ISO 9001:2015

MADE in the USA
Buy American Act Compliant
Contains Imported Components

The Difference: HydraStone™ Cement Lining

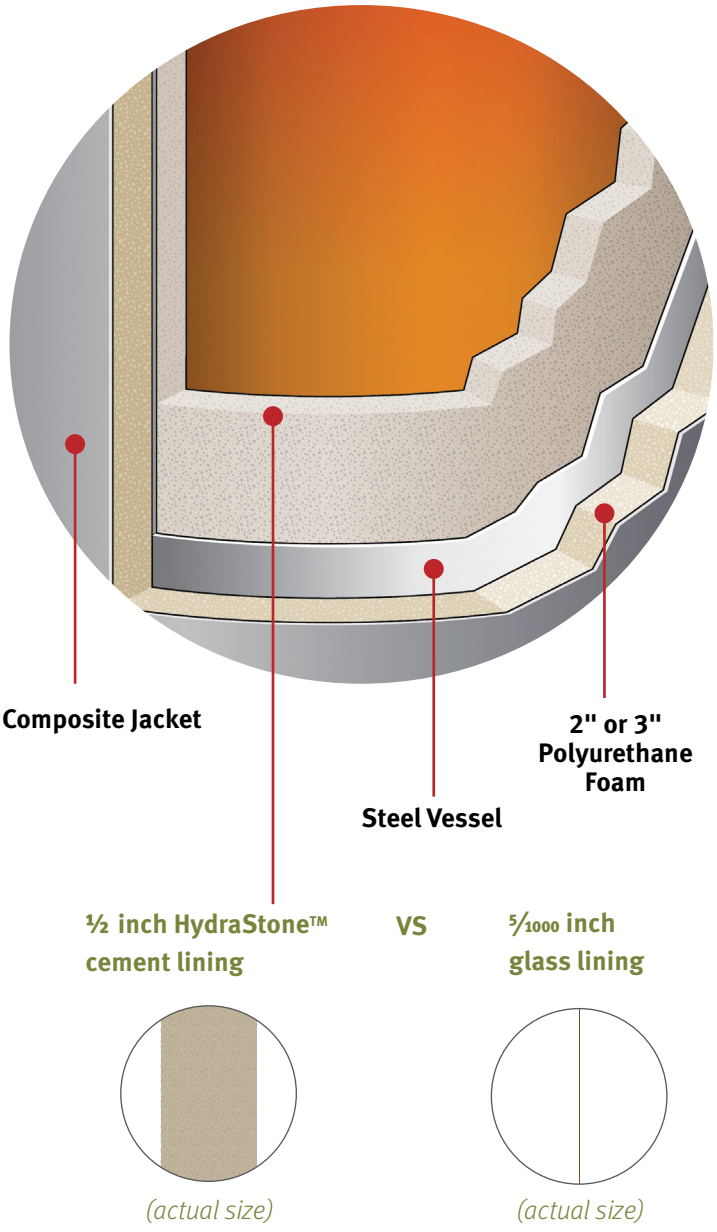
Cement lined tanks offer significant longevity, trouble-free operation and a lower lifetime cost.

The type of protective lining is the single most important feature when determining the quality of any water heater. The ability of a lining to protect the steel tank is primarily based on its thickness and complete coverage of all steel surfaces.

A glass lined tank uses only 5/1000 inches of glass (the thickness of a sheet of paper) which does not cover all internal surfaces. To compensate, all glass lined tanks require a sacrificial anode rod which must be periodically inspected and replaced.

Our tanks are lined with a minimum of ½ inches of high density HydraStone cement — 100 times thicker than glass lining. Full coverage is achieved by injecting the precise amount of HydraStone cement into each tank and then centrifugally spinning it at 250 RPM to ensure complete and uniform coverage. This process provides maximum protection from the corrosive effects of hot water. Additionally, cement lined tanks do not require a sacrificial anode, eliminating periodic inspections and replacement costs associated with glass lined tanks.

Our water heater tanks are constructed with solid non-ferrous copper-silicon tank tappings which are impervious to the corrosive effects of hot water. Glass-lined tanks have regular steel tappings which are vulnerable to corrosion.



Heater Specifications

Tank	Carbon Steel
Lining	HydraStone™ Cement
Capacities	65–119 gallons
Orientation	Vertical
Connection Sizes	
Inlet/Outlet	1-½" Male NPT
Return Line	¾" Female NPT
Drain	¾" GHT
Relief Valve	¾" Female NPT
Relief Valve Type	T&P, 210°, 150 psi
Pressure rating (tank)	150 psi WP, 225 psi TP
Coil Construction	
Material	Copper Fin Tube
Type	Single Wall
Rating	150 psi WP, 300 psi TP
Max Input	199,900 BTU/HR
Temperature Regulator	On/Off Steam Valve
Temperature Range	100–170°F
Main Trap Type	F & T Cast Iron
Drip Trap Type	Thermostatic
Strainer Type	Y Cast Iron 20 Mesh Screen
Insulation	2" Polyurethane Foam
Warranty	
Tank	3 year Non Pro-Rated
Coil	1 year Non Pro-Rated
Jacket	High Impact Colorized Composite
Color	White and black

Steam Operating Controls Sizing

Steam Pressure	Control Valve	Steam Strainer	Drip Trap	Main Trap
0–10 psi	1"	1"	½"	¾"
11–25 psi	¾"	¾"	½"	¾"
26–125 psi	½"	½"	½"	¾"

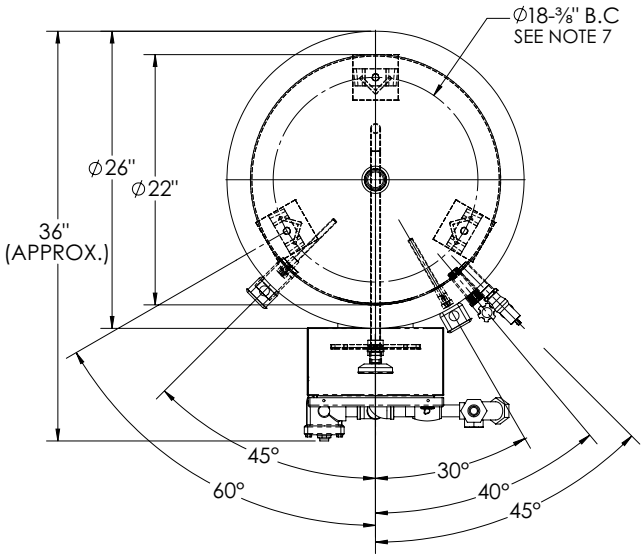
Note: Steam operating controls are factory selected and supplied and shipped loose for in the field installation. Steam controls include the following: steam control valve, steam strainer, drip trap and main trap.

Recovery Ratings and Heating Coil Selection

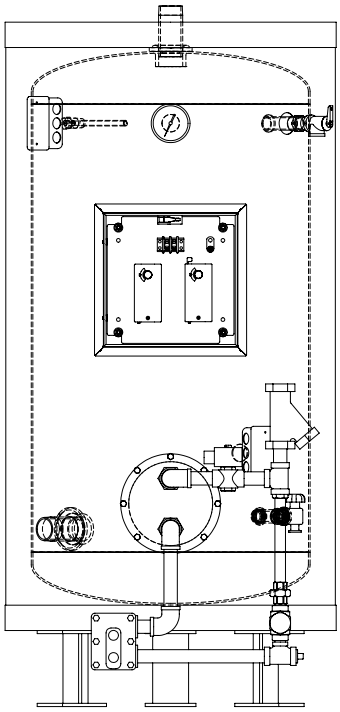
	Gallons Per Hour (GPH) Heated at 100°F ΔT (40°–140°F)						
	Steam Pressure						
Wall Type	**2 PSI**	**5 PSI**	**10 PSI**	**15 PSI**	**20 PSI**	**25 PSI**	**30 PSI**
SINGLE	143	157	171	189	203	217	227

Note: Maximum steam consumption is 211 Lbs/Hr for all of the above recoveries.

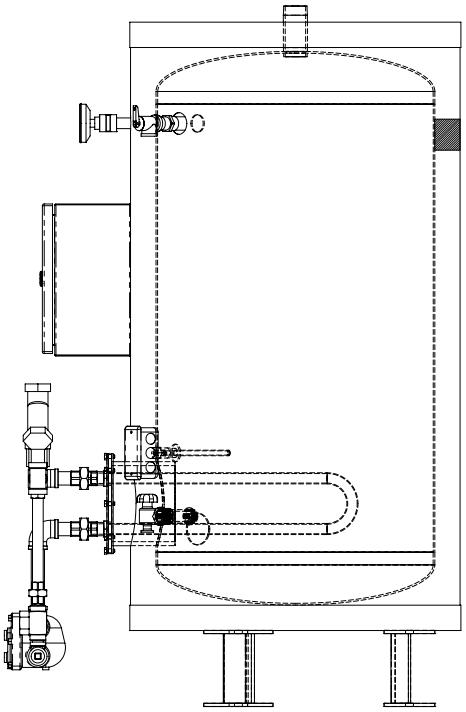
Dimensions



TOP VIEW



FRONT VIEW



SIDE VIEW

Synergy Steam PS Outline Dimensions

Base Model	Storage Capacity (Gallons)	Overall Diameter (Inches)	Overall Height (Inches)	Floor to: (Inches)					Shipping Weight (lbs)
				Inlet	Outlet	Return	Relief Valve	Coil	
PS65	65	26	54	14	Top	15	46	16	395
PS80	80	26	64	14	Top	15	57	16	470
PS100	100	26	76	14	Top	15	68	16	485
PS120	119	28	76	14	Top	15	68	17	555

kW and Amperage Selection Charts

XX Gallon kW and Amperage Chart

(Amperage shown in chart below indicates available models)

kW	Recovery @100°dT	1 Phase Voltages					3 Phase Voltages – Balanced (lower element only)				
		120	208	240	277	480	208	240	380	480	600
0.5	2	4	2								
1	4		5	4	4						
1.5	6	13	7	6	5						
2	8	17	10	8	7	4	6				
2.5	10	21	12	10	9	5					
3	12		14	13		6	8	7	5		
3.5	14		17	15	13	7					
4	16		19	17	14	8	11	10	6	5	
4.5	18		22	19	16	9					
5	21		24	21	18	10	14	12	8	6	
6	25		29	25	22	13	17	14			6
7	29				25	15			11	8	
8	33		38	33	29	17	22	19	12	10	8
9	37		43				25				
10	41			42		21		24	15		10
11	45		53		40		31			13	
12	49			50				29	18		
13	53					27					13
14	57		67	58	51		39	34		17	
15	62					31					
16	66				58				24	19	
17	70		82				47				
19	78			79	69			46	29	23	
23	94			96				55			

Synergy Steam PS Model Number Designation

MODEL	STORAGE CAPACITY (GAL)	TANK TYPE	WALL TYPE	STEAM SUPPLY PRESSURE	kW SELECTION	VOLTAGE/ PHASE	OPTIONAL EQUIPMENT
PS	65–120	**SL** = HydraStone cement lined **SS** = 316L stainless steel	**S** = Single wall	0–125 psi	1.5–23 kW *(complete only when specifying a back-up electric heating element)*	**A** = 120/1 **RS** = 208/1 **S** = 240/1 **W** = 277/1 **R** = 208/3 **T** = 240/3 **T3** = 380/3 **T7** = 415/3 **T5** = 440/3 **T4** = 480/3 **T6** = 600/3	Write/type optional equipment code in the gray box below in alphabetical order. For multiple options separate codes with a dash (–)

PS			–	S		–			–

Example: PS120SL-S15

Is a Hubbell Synergy steam fired water heater with a 119 gallon cement lined steel storage vessel. Heating coil is rated to heat 189 GPH from 40–140°F when supplied with 15 psi steam to the control valve. No electric back up heat provided.

Optional Equipment

Note: Optional equipment must be called out in the written specifications, use the codes below.

Controls

C60 Single Solenoid Safety System, Closes the Supply to the Heating Coil

C61 Double Solenoid Safety System, Closes the Supply to the Coil and Opens the Hot Water Outlet to Drain

***Please note:** Optional equipment may impact overall dimensions and weight. Please request submittal drawing from factory.

General

G1 Combination Temperature & Pressure Gauge: 3.5" Dial, 70°F - 250°F, 0 - 200 PSI, Tank Mounted

G2 Intra-Tank Circulation Pump Package with On/Off Switch To Continuously Circulate Water within the Tank

Heat Exchanger

H10 Additional Single Wall Steam Coil Installed in Tank

H11 Additional Double Wall Steam Coil Installed in Tank

Available Accessories

10-year Warranty: 10-year non pro-rated tank warranty, specify part number "VESSEL WARRANTY"

(Fill out form below to order accessories.)

Accessories Name **Part #**

Units over 200,000 BTU, see ST model brochure

Notes