

ELGE®

Shell and Coil Heat Exchanger



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Elge Instantaneous Indirect Hot Water Generators

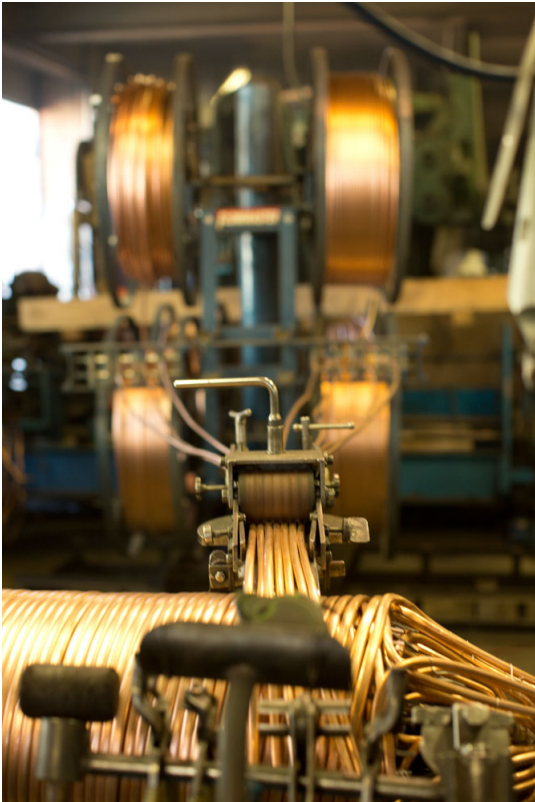
Elge High efficiency Heat exchangers are ideal for domestic hot water generation using low pressure steam. The Swedish design uses is a highly efficient copper spun coil with formed unique collection chambers in a compact package.

Standard components include either electronic or self-contained mixing valve for controlling water temperature, safety relief valve, strainer, steam trap, temperature gauges and isolation valves.



**CAPTURE
THE
ENERGY.**

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Coil Design is Reliable, Self-Cleaning

ELGE®'s coil design eliminates stress at the connection points due to expansion and contraction. In addition, this movement causes the coil to be self-cleaning. Scale is automatically removed and can be easily flushed from the system through the flush valve on the bottom of the Steam Water Heater.

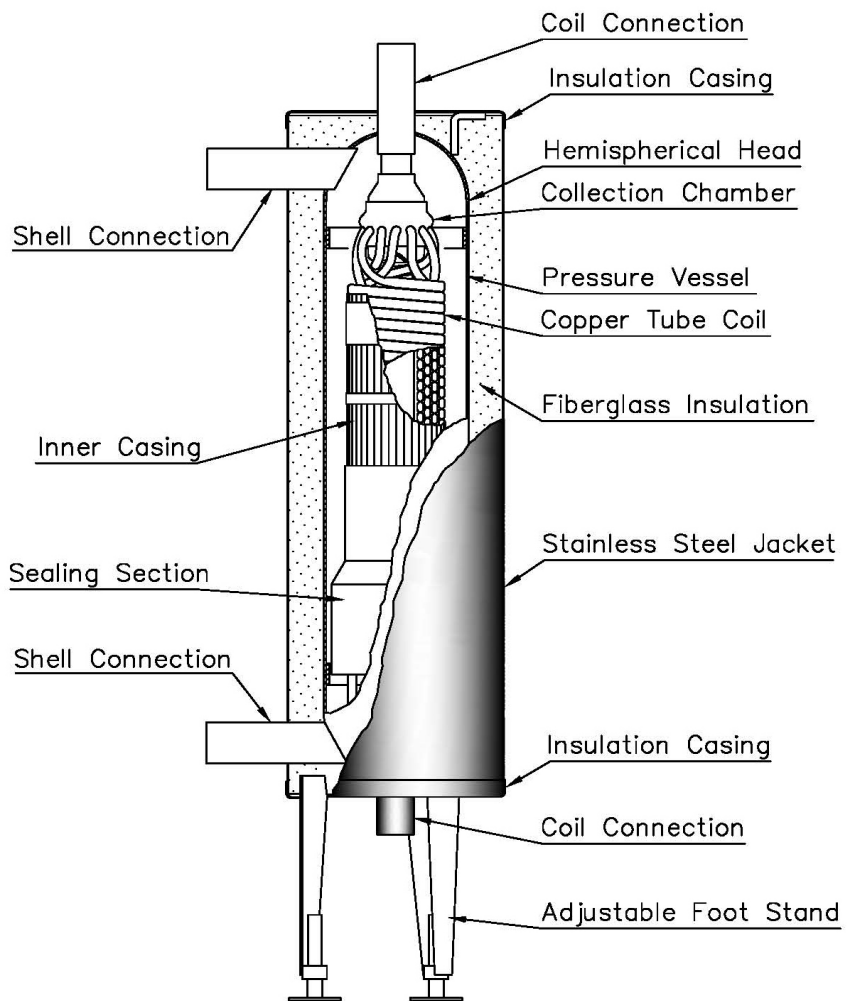
Efficient and Economical

ELGE®'s Model A/AR Water Heater is efficient in both space and performance. Its vertical design requires less than 4 square feet. ELGE's use of proven components provides a reliable yet economical package.

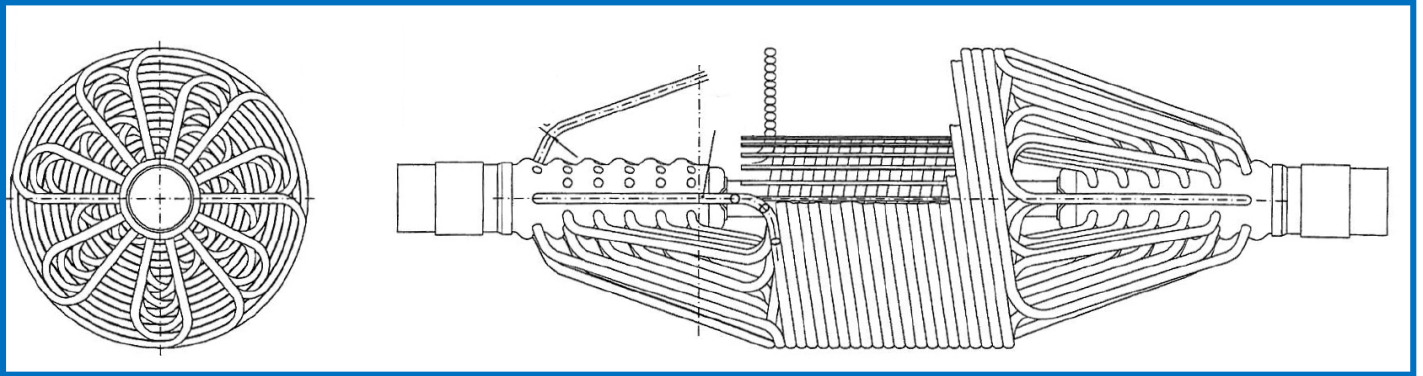
Eliminates Storage Tank Hazards

Expensive, space-hog storage tanks can be eliminated or their size minimized by using an instantaneous ELGE® Steam Water Heater.

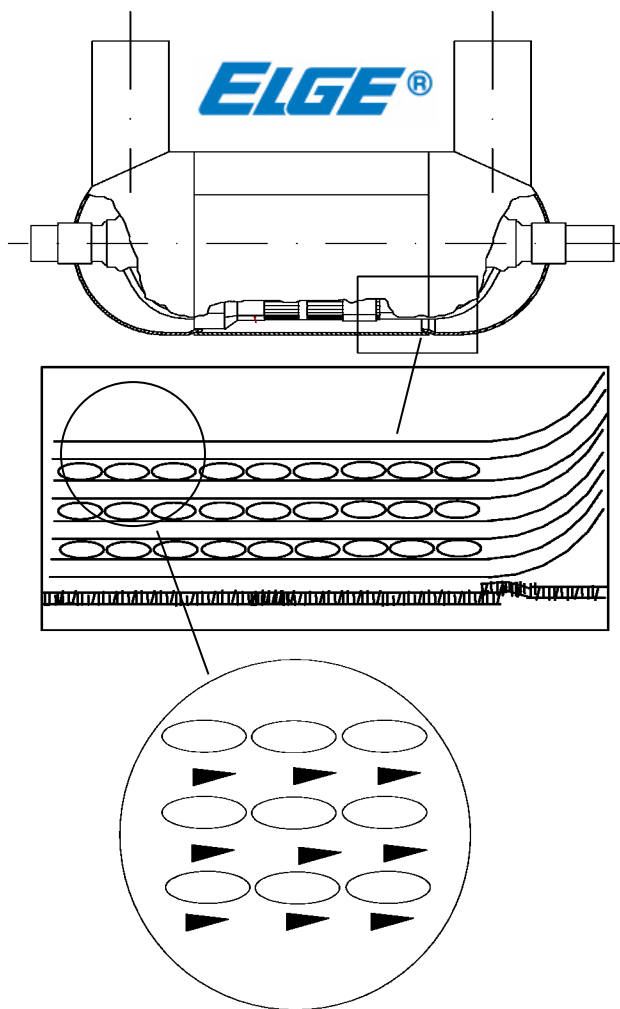
Storage tanks are a breeding ground for corrosion-causing bacteria and hazardous bacteria such as legionella, etc. Stratified tanks can supply the ideal breeding temperature for any type of water borne bacteria.



Elge Instantaneous Hot Water Heaters—Why they work best



Even, Controlled Flow: When the copper is coiled, it is molded to a oval shape to yield a larger heat transfer area and spacers are inserted between the rows. Hot water or steam enters the head and is diverted through the coil bundle in a counter/cross-flow manner. The inner casing ensures even and controlled flow over the exterior of the tubes in the bundle.

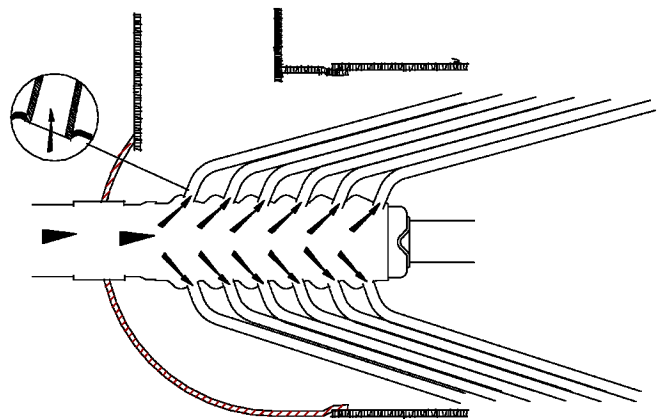


Efficient and Precise:

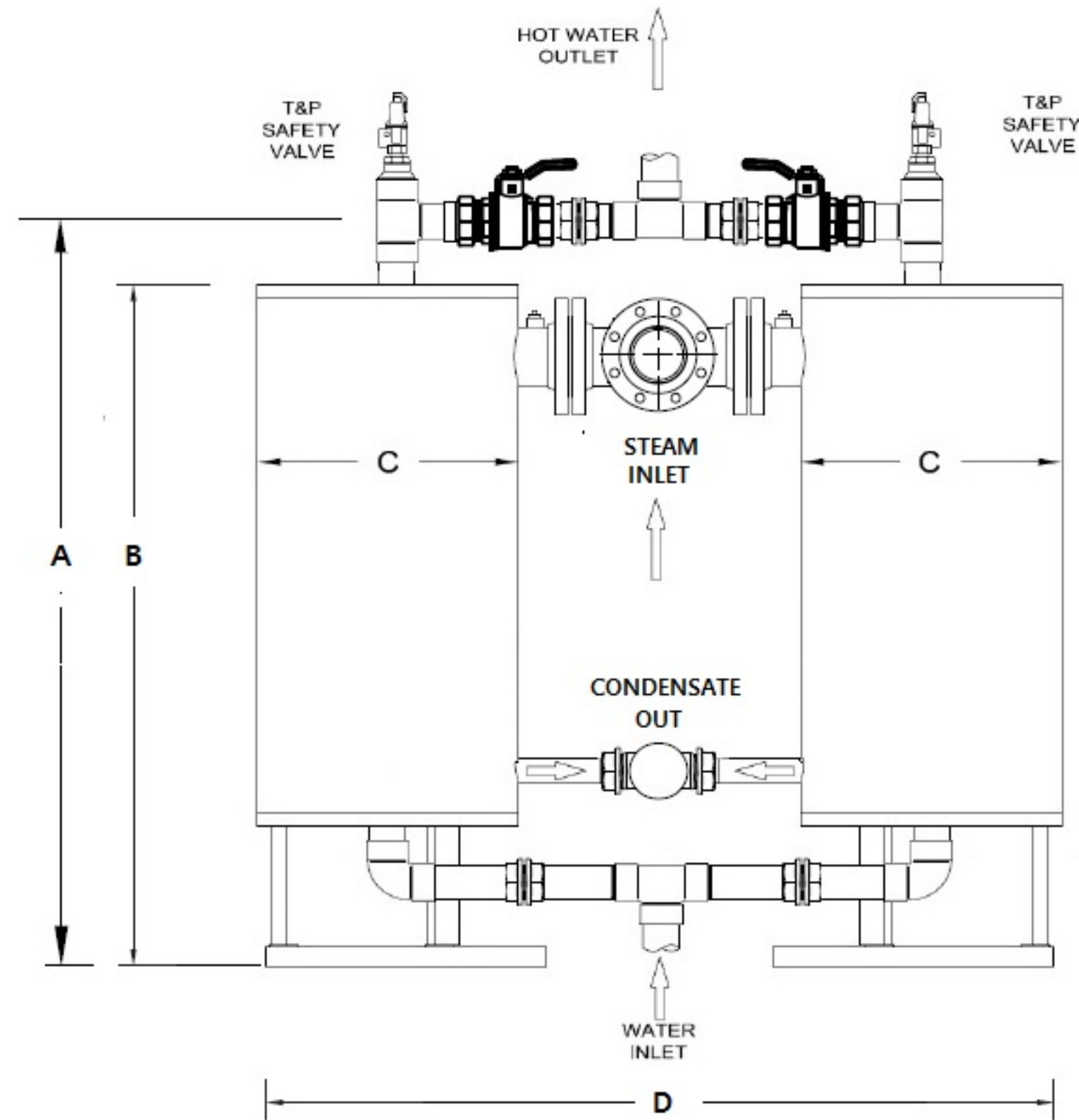
The design of the collection chamber, and the angle of the tubes results in a low flow rate and less resistance where the water enters the tube. This means less erosion. However, as the tube changes from round to oval, there is a 50% increase in flow rate at the point of heat exchange.

Designed to Last

The connection of the tubes to the chamber and of the coil to the head provide a large, strong silver solder area (15% silver used Cu-Cu and 45% used Cu-Steel). The coil design allows expansion and contraction to occur in the coil and minimizes any stress at these connective points.



Elge Flow-Through Design



| | |
|-----------------|-----------|
| APPROVED | |
| Company: | _____ |
| Approved by: | _____ |
| | Name |
| | _____ |
| | Signature |
| Date: | _____ |

MATERIAL

| | |
|---------|--------------|
| SHELL | SA 53 GR E/B |
| HEAD | SA 414 GR.D |
| FLANGES | SA 105 |

DESIGN DATA

| LOCATION | PRESSURE PSIG | | TEMPERATURE °F | |
|---------------------|---------------|-------|----------------|------|
| | DESIGN | TEST | DESIGN | TEST |
| SHELL | 200 | CODE | 400 | 70 |
| CORROSION ALLOWANCE | | | 0.0625" | |
| MDMT | = | 20° F | (325psi) | |

| ELGE HIGH EFFICIENCY DUPLEX STEAM WATER HEATERS | | | | | | | | | | |
|---|-------------|-------------|------------|----|----|----|-------------|-------------------|------------------|--------|
| Model | Flow Single | Flow Duplex | DIMENSIONS | | | | STEAM INLET | CONDENSATE OUTLET | DOMESTIC HW CONN | |
| | | | A | B | C | D | | | INLET | OUTLET |
| Duplex SWH30-41 | 30 | 60 | 49 | 45 | 14 | 48 | 2.5 | 1.5 | 1.5 | 1.5 |
| Duplex SWH50-61 | 60 | 120 | 54 | 50 | 14 | 48 | 3.0 | 1.5 | 2.0 | 2.0 |
| Duplex SWH81-120 | 120 | 240 | 63 | 59 | 18 | 60 | 4.0 | 2.0 | 3.0 | 3.0 |

NOTES

| | |
|---|---|
| 1 | FABRICATED AND STAMPED IN ACCORDANCE WITH ASME CODE, SECTION VIII |
| 2 | NO RADIOGRAPHY |
| 3 | NO PHWT |
| 4 | PAINT: ONE COAT KEM HI-TEMP HEAT FLEX II 450 (GREY) |

ELGE®

Shell and Coil Heat Exchanger

STEAM INSTANTANEOUS DOMESTIC HW HEATERS

DRG NO. NYCHA PATERSON

REV 0

CUSTOMER: AMERESCO