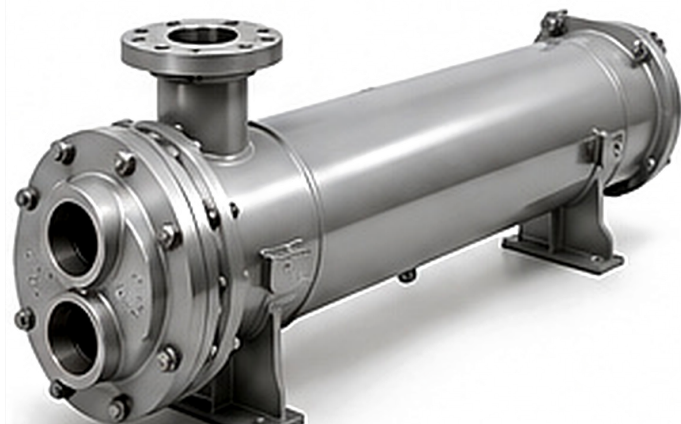


Water U-Tube Tank Heaters TCW Series

WATER TANK HEATER

SHELL & TUBE

REMOVABLE HEAT-TRANSFER BUNDLE



Performance Notes

- TCW tank heaters are U-tube immersion heaters intended for hot-water service. The removable bundle provides a compact way to transfer heat directly into a storage or process tank.
- Shell diameter range in supplied data: 4-14 in..
- Tube length range in supplied data: 12-120 in..
- Tube-pass arrangements in supplied data: 2-Pass.

Ratings	Materials
Shell pressure 150 PSI	Shell Steel
Tube pressure 150 PSI	Tubes Copper
Maximum temperature 375°F	Tubesheet / bonnets Steel, Steel or Brass, Brass / Cast Iron, Cast Iron or Brass, Cast Brass

Series Configuration

Shell diameter	Tube OD	Tube passes	Tube lengths	Surface area
4-14 in.	3/4" O.D.	2-Pass	12-120 in.	2.1-292 ft²

Ratings, materials and dimensional ranges above are summarized from the supplied HeatX/Bell & Gossett catalog spreadsheet. Exact construction varies by model and option code.

TCW Series Size Range & Model Guide



CATALOG RANGE FROM SUPPLIED DATA

Shell dia.	Catalog records	Tube length	Surface area	Passes	Tube-side conn.
4"	52	12-96 in.	2.1-18.6 ft ²	2-Pass	1.5" NPT
6"	52	12-96 in.	3.3-36.2 ft ²	2-Pass	2.0 " NPT
8"	48	18-96 in.	11-67 ft ²	2-Pass	3.0" NPT
10"	48	24-108 in.	27-131 ft ²	2-Pass	4.0" NPT
12"	48	36-120 in.	61-212 ft ²	2-Pass	4.0" NPT
14"	24	36-120 in.	86-292 ft ²	2-Pass	6.0" NPT

Construction Summary

Feature	Catalog summary
Tube construction	3/4" O.D.
Shell material	Steel
Tube material	Copper
Tubesheet	Steel, Steel or Brass, Brass
Bonnet / head	Cast Iron, Cast Iron or Brass, Cast Brass
Tube passes	2-Pass
Pressure / temperature	Shell: 150 PSI; Tube: 150 PSI; Temp: 375°F

The range table is intended as a family-level guide. Use the complete part number and current dimensional submittal when replacing an installed exchanger.

Representative TCW Models

SELECTED FROM THE SUPPLIED PART-NUMBER FILE

Part / model	Shell	Length	Surface	Tube conn.	Passes
TCW-412	4"	12"	2.1	1.5" NPT	2-Pass
5-275-04-096-001	4"	—	18.6	1.5" NPT	2-Pass
5-276-04-084-002	4"	—	16.3	1.5" NPT	2-Pass
5-275-06-066-001	6"	—	24.1	2.0 " NPT	2-Pass
5-276-06-072-002	6"	—	26.8	2.0 " NPT	2-Pass
5-275-08-060-001	8"	—	41	3.0" NPT	2-Pass
5-276-08-084-001	8"	—	58	3.0" NPT	2-Pass
5-275-10-054-001	10"	54"	63.5	4.0" NPT	2-Pass
5-276-10-108-001	10"	108"	131	4.0" NPT	2-Pass
5-276-12-066-002	12"	66"	115	4.0" NPT	2-Pass
5-276-12-120-002	12"	120"	212	4.0" NPT	2-Pass
TCW-14120	14"	120"	292	6.0" NPT	2-Pass

Model / Part-Number Identification

Bell & Gossett heat-transfer equipment exists under multiple numbering generations. The supplied data includes current 5-xxx drawing-style numbers as well as legacy model designations on some series. For replacement work, retain the complete original model, part number and nameplate information rather than inferring construction from a shortened designation.

Selection Inputs

- Heat load or required duty
- Hot- and cold-side fluids
- Entering and leaving temperatures
- Flow rates on both sides
- Available pressure drop
- Design pressure and temperature
- Fouling allowance and fluid properties
- Required materials, code stamping and double-wall requirement where applicable

TCW Application & Specification Guide



ENGINEERING CHECKLIST

Typical Applications

- Hot-water tank heating
- Process tank temperature maintenance
- Hydronic storage tanks
- Industrial liquid heating

Specification Notes

- Series: Bell & Gossett TCW
- Configuration: Water Tank Heater
- Size the exchanger on the actual fluid properties, temperatures, flow rates and allowable pressure drops.
- Confirm the exact model pressure rating, connection size, materials and tube-pass arrangement before release.
- Provide service clearance for bonnet/head removal and bundle withdrawal where the construction is removable.
- For steam service, provide proper condensate drainage and venting. For liquid service, arrange piping to keep the exchanger flooded and ventable.
- Where potable or contamination-sensitive fluids are involved, confirm local code requirements for double-wall construction and leak detection.

Source & Data Basis

Catalog values and representative part numbers in this HeatX guide are derived from the supplied Bell & Gossett series spreadsheet dated 8/9/2026. Product-family descriptions were cross-checked against official Bell & Gossett / Xylem literature, including: Bell & Gossett TCS/TCW U-Tube Tank Heaters; Xylem heat exchanger literature.

This document is a HeatX selection and replacement reference, not a substitute for the current manufacturer-certified submittal. Dimensions and ratings should be verified for the exact part number before fabrication, purchase or installation.

