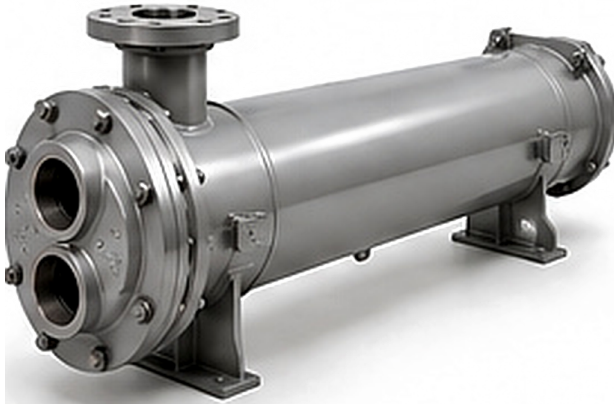


Double-Wall Water Tank Heaters DTCW Series

DOUBLE-WALL WATER TANK HEATER

SHELL & TUBE

REMOVABLE HEAT-TRANSFER BUNDLE



Performance Notes

- DTCW units apply double-wall tube construction to hot-water tank-heating service, providing a leak-detection path between the heating water and the stored liquid.
- Shell diameter range in supplied data: 4-14 in..
- Tube length range in supplied data: 24-120 in..
- Tube-pass arrangements in supplied data: 2-Pass.

Ratings	Materials
Shell pressure 150 PSI	Shell Steel
Tube pressure 150 PSI, 125 PSI	Tubes Copper (Double Wall)
Maximum temperature 375°F	Tubesheet / bonnets Model dependent / Cast Iron

Series Configuration

Shell diameter	Tube OD	Tube passes	Tube lengths	Surface area
4-14 in.	3/4" O.D.	2-Pass	24-120 in.	Model dependent

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

DTCW Series Size Range & Model Guid



CATALOG RANGE FROM SUPPLIED DATA

Shell dia.	Catalog records	Tube length	Surface area	Passes	Tube-side conn.
4"	13	Model dependent	Model dependent	2-Pass	Model dependent
6"	13	Model dependent	Model dependent	2-Pass	Model dependent
8"	12	Model dependent	Model dependent	2-Pass	Model dependent
10"	12	24-108 in.	Model dependent	2-Pass	Model dependent
12"	12	36-120 in.	Model dependent	2-Pass	Model dependent
14"	12	36-120 in.	Model dependent	2-Pass	Model dependent

Construction Summary

Feature	Catalog summary
Tube construction	3/4" O.D.
Shell material	Steel
Tube material	Copper (Double Wall)
Tubesheet	Model dependent
Bonnet / head	Cast Iron
Tube passes	2-Pass
Pressure / temperature	Shell: 150 PSI; Tube: 150 PSI, 125 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 DTCW Models

SELECTED FROM THE SUPPLIED PART-NUMBER FILE

Part / model	Shell	Length	Surface	Tube conn.	Passes
5-277-04-012-001	4"	—	TBD	TBD	2-Pass
5-277-04-054-001	4"	—	TBD	TBD	2-Pass
5-277-06-012-001	6"	—	TBD	TBD	2-Pass
5-277-06-054-001	6"	—	TBD	TBD	2-Pass
5-277-08-024-001	8"	—	TBD	TBD	2-Pass
5-277-08-060-001	8"	—	TBD	TBD	2-Pass
5-277-10-036-001	10"	36"	TBD	TBD	2-Pass
5-277-10-072-001	10"	72"	TBD	TBD	2-Pass
5-277-12-054-001	12"	54"	TBD	TBD	2-Pass
5-277-12-108-001	12"	108"	TBD	TBD	2-Pass
5-277-14-060-001	14"	60"	TBD	TBD	2-Pass
5-277-14-120-001	14"	120"	TBD	TBD	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

DTCW Application & Specification Guid



ENGINEERING CHECKLIST

Typical Applications

- Potable storage tank heating
- Hydronic tank heating
- Sanitary storage systems
- Water-heated tanks requiring double-wall separation

Specification Notes

- Series: Bell & Gossett DTCW
- Configuration: Double-Wall 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 U-Tube / double-wall tank-heater literature and B&G; parts identification 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.

