



# BPX Brazed Plate Heat Exchangers

EFFICIENT HEAT TRANSFER. COMPACT DESIGN.



 **Bell & Gossett**  
a xylem brand

C-316A

# BPX Brazed Plate Heat Exchangers

## THERMAL PERFORMANCE

Bell & Gossett unique heat transfer plate designs provide high rates of heat transfer requiring less surface area than conventional shell and tube heat exchangers.

## Design Performance

### MECHANICAL DESIGN

Standard design pressures up to 435 psig at maximum design temperature of 450°F. Custom designs to pressures of 1000 psig. Minimum design temperature to -310°F.

### CONSTRUCTION CODES

Available codes include; UL, CRN, ASME Sec.VIII Div.1 "U" stamp, ASME Sec.III "N" stamp, Pressure Equipment Directive (97/23EC), China ML, Korean KGS, Brazilian NR-13.

### MATERIALS

Stainless Steel 316L plates.  
Copper or Nickel braze material.

### PERFORMANCE

Single Wall and Double Wall Options.

### CAPACITY

Up to 800 GPM and 1100 Sq.ft. of surface area.

### CONNECTIONS

From 1/4 inch to 4 inch. Standard connection options include NPT, SAE, Flanged and Sweat. Custom connections available.

### MOUNTING

Reduce mounting costs with optional threaded studs or integral mounting bracket. Custom mounting options available.

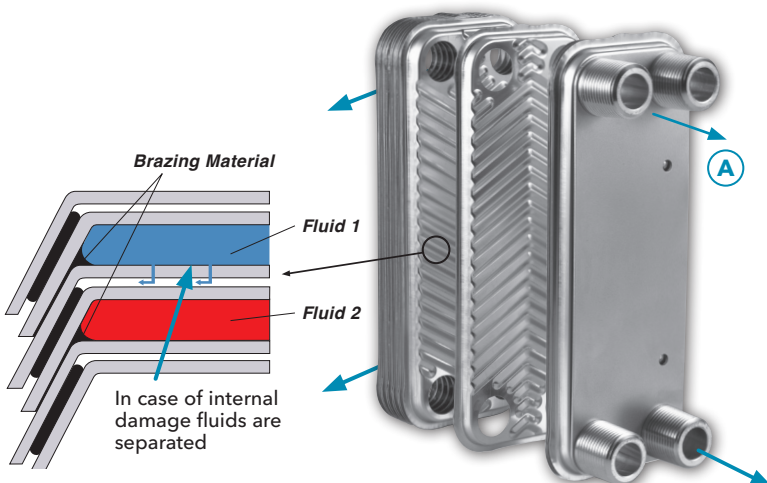
Compare BPX with conventional shell and tube units:

- One-sixth the size
- One-fifth the weight
- Uses only one-eighth the liquid
- Requires one-third to one-fifth the surface area



## BPX DOUBLE-WALL

BPX Double-Wall brazed plate heat exchangers offer the highest level of leak protection, safety, thermal efficiency and durability in a compact, low cost unit. Bell & Gossett advanced lean manufacturing process provides fast deliveries with maximum design flexibility.

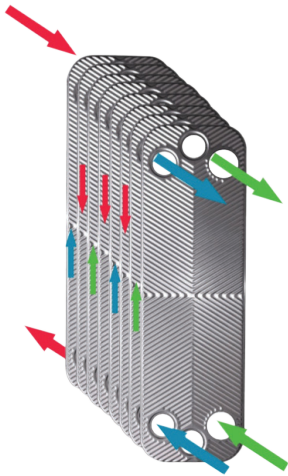
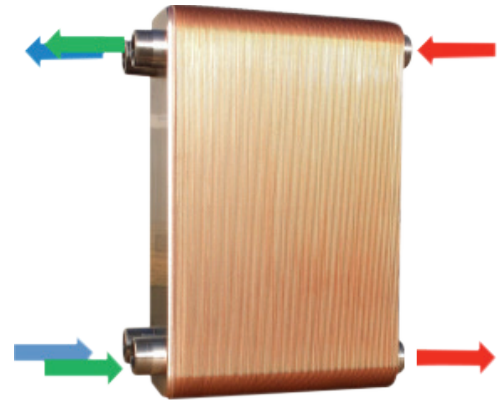


## BPX DOUBLE WALL PROVIDES

- True double-wall construction, including port regions
- Double-wall plate design with unique air vent leak paths
- Complete peripheral braze for additional strength
- Four dedicated leak ports for quick and easy leak detection (A)
- Excellent performance for domestic water applications
- Dependable protection of fresh water streams for cooling of oils and refrigerants

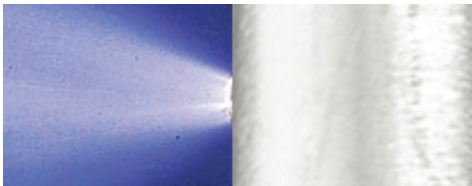
## BPX DUAL CIRCUIT

BPX Dual Circuit braze plate exchangers offer true two independent refrigerant circuit performance. The special designed plate configuration allows for two separate refrigerant circuits to operate with one common process circuit. The specially designed plate configuration allows for each refrigerant circuit to be in contact with all process flow channels even at a partial load condition (i.e. one compressor running).



### BPX DUAL CIRCUIT PROVIDES

- True dual circuit construction for operation with two independent refrigerant circuits.
- Facilitates operation at partial load with only one compressor running maximizing performance.
- Specially designed plate configuration for uniform distribution of fluid across heat transfer plates minimizes maldistribution and allows for more convenient same side flow arrangement for refrigerant.



### BPX REFRIGERANT DISTRIBUTOR

BPX refrigerant distributor ensures all refrigerant evaporator channels receive equal amount of flow to maximize performance, efficiency, and superheat and to protect against thermal expansion valve instability.

### BPX REFRIGERANT DISTRIBUTOR PROVIDES

- Equal flow of refrigerant to each refrigerant flow channel.
- Permits stable operation of evaporator, thermal expansion valve, and compressor.
- Reduces chance of freeze-up caused by overfeed of refrigerant to specific channels.





# BPX Brazed Plate Heat Exchangers

## HIGH PERFORMANCE

BPX brazed plate heat exchangers offer the highest level of thermal efficiency and durability in a compact, low-cost unit.

## COMPACT DESIGN

The corrugated plate design provides very high heat transfer coefficients, resulting in a smaller surface area. This makes the BPX an excellent choice; especially where space is a consideration.

## SOLID SELF-CONTAINED UNIT

Thin corrugated stainless steel plates are vacuum brazed together to form a very durable, integral piece that can withstand both high pressure and high temperature.

## NUMEROUS APPLICATIONS

BPX units are ideal as refrigerant condensers and evaporators, as oil coolers for engines and machinery, and in many other industrial applications.

## BELL & GOSSETT HEAT EXCHANGERS

- Brazed Plate Heat Exchangers: BPX
- Gasketed Plate Heat Exchangers: GPX
- Straight Tube Heat Exchangers
  - Gas Cooler
  - Small Coolers
  - Aftercooler
  - Large Straight Tube
- U-Tube Heat Exchangers
  - Type SU, WU, HTWU, DSU, DWU, DTC
  - Tank Heaters

For more information on heat exchangers visit:  
<http://bellgossett.com/heat-exchangers/>

We value your feedback. Please take our 3 question survey at  
[bellgossett.com/survey](http://bellgossett.com/survey) to let us know how we are doing.



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