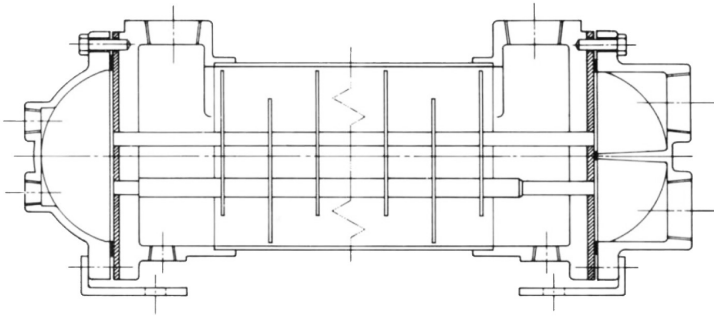


# Marine Heat Exchangers

SALES • SERVICE • REPAIR

# Marine Heat Exchangers



## TYPE HCF-B

**Details:** Where lower heat loads are encountered in freshwater and lube oil cooling. Fixed tubesheet, straight-tube design, fabricated from stocked components. One-, two- or four-pass models. 2" through 8" shell diameters. Complete units available from stock in "BCF" version. See Bulletin 104-23 for details.

**Tubes** - 1/4", 3/8" or 5/8" diameter, admiralty, 90/10 or 70/30 copper-nickel

**Tubesheets** - Brass or 90/10 copper-nickel face plate

**Shell** - Brass

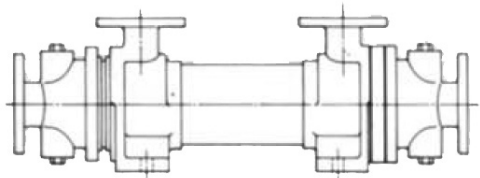
**Bonnets** - Cast-iron or cast-bronze

	Shellside	Tubeside
Design pressure	200 psig 14.1 kg/cm <sup>2</sup>	150 psig 10.5 kg/cm <sup>2</sup>
Design temperature	300° F 149° C	300° F 149° C

## NAVY COOLERS TO MIL-C-15730

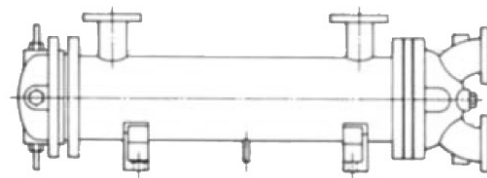
Standard Xchange manufactures a complete line of Type A oil and water coolers for surface vessels and submarine service, meeting the requirements of MIL-C-15730.

Standard coolers are Classes 3, 4 and 5, freshwater and seawater cooled. Special high-pressure seawater coolers in Classes 1 and 2 are available on request.



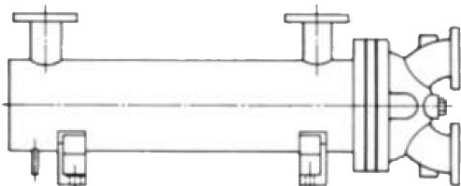
## NAVY BCP

**Details:** Removable bundle design with straight tubes and packed floating head. Brazed shell assembly using red brass shell, bronze hubs with cast bronze bonnets. One- or two-pass tube side, 3" through 8" shell diameters.



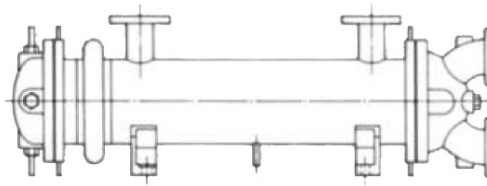
## NAVY EP

**Details:** Removable bundle design with straight tubes and packed floating tubesheet. Welded shell construction with cast bonnets. One- or two-pass tube side with single or double tubesheet. 3" through 23" shell diameters.



## NAVY EU

**Details:** Standard U-tube, removable bundle design. Welded shell construction with cast bonnet. Two-pass tube side with single or double tubesheet. 4" through 23" shell diameters. Available with high-pressure tube side on request.



## NAVY EF

**Details:** Standard fixed bundle coolers with double-tube/double-tubesheet construction. Specifically designed for hydraulic cooling applications. All-welded shell with cast bonnets. One- or two-pass tube side. 4" through 12" shell diameters.

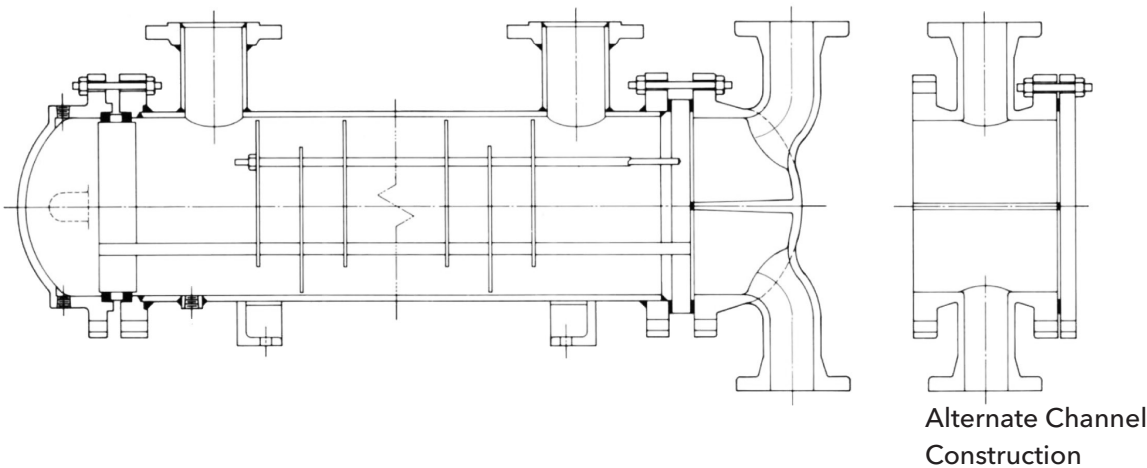
## Standard Xchange Heat Exchangers for:

**Cooling lube oil** in main propulsion diesels, steam and gas turbines, generator engines, reduction gears, clutches, fans, pumps, compressors. **Cooling water** for diesel jackets, compressors, electronics. **Heating water, fuel oil and lube oil** for many shipboard uses.

We've been building heat exchangers for marine applications since 1917. First as Ross, then as American-Standard and now as Standard Xchange, a Xylem brand. Today practically every US Commercial or US Naval ship in commission has Ross or American-Standard heat exchangers aboard. So do many other vessels operating from ports and on inland waterways all over the world.

Quality is the most important reason. Our comprehensive, fully documented quality assurance program meets the current inspection codes issued by Lloyd's of London, the US Coast Guard, the American Bureau of Shipping, US Navy specification MIL-I-45208, and The Canadian Board of Steamship Inspection.

We built the first shell-and-tube heat exchanger available off-the-shelf, our now famous BCF® and HCF, in popular sizes. And we're noted for the ready availability of our pre-engineered units. When you install Standard Xchange heat exchangers you benefit for our extensive parts and service operations, too. We're there when you need us – worldwide.



### CPK SERIES

**Details:** Most popular design in commercial marine service for water and oil cooling with either fresh or sea water. Removable bundle design with straight tubes and packed floating tubesheet. One-pass and two-pass models. 3" through 31" shell diameters. Request Bulletin 104-38 for additional information.

**Tubes** - 3/8", 5/8" or 3/4" diameter, admiralty, 90/10 or 70/30 copper-nickel

**Tubesheets** - Muntz metal, naval brass, 90/10 or 70/30 copper-nickel

**Shell** - Carbon steel

**Bonnets** - Cast-iron or cast-bronze

**Alternate Channels Available** - Cast-iron or cast-bronze

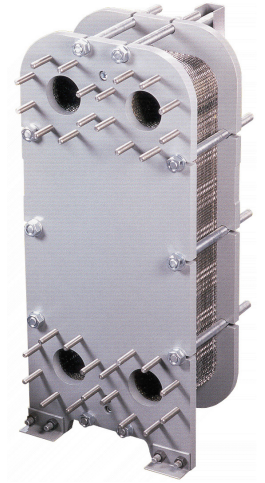
	Shellside	Tubeside
Design pressure	150 psig 10.5 kg/cm <sup>2</sup>	75 psig 5.3 kg/cm <sup>2</sup>
Design temperature	300° F 149° C	300° F 149° C

# PLATEFLOW® Heat Exchangers

## COMPACT, VERSATILE, EASY-TO CLEAN

Compact PLATEFLOW heat exchangers handle high heat loads in less space – give close temperature control of fluid flows to 30,000 gallons per minute. Are ideal for applications involving temperature crossing or requiring close approach temperatures. Disassemble easily for inspection and cleaning. And they're easy to install – vertically or horizontally, in available space.

You can get standard plates of titanium, 316 stainless steel (or other materials), PLATEFLOW units easily handle large cooling loads, using seawater.



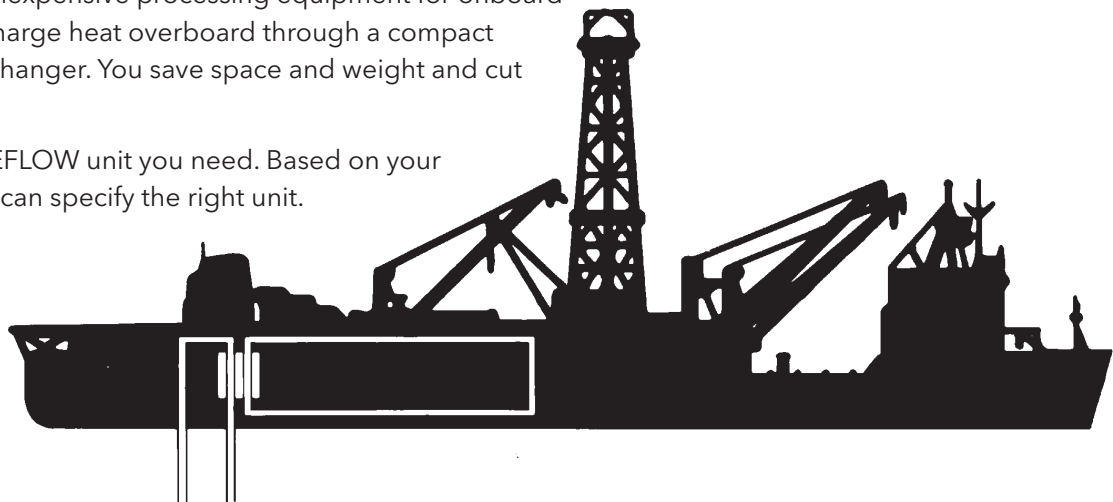
## TECHNICAL DATA

Performance: Maximum Flow Rate (GPM)	30,000 GPM
Maximum Heat Transfer Area (sq. ft.)	Up to 50,000 sq. ft.
Connections: NPT Nozzles - Size (inches)	1 inch to 2.5 inch
Connections: ANSI Studed - Size (inches)	3 inch to 24 inch
Frame Materials	Primed and Epoxy Coated Carbon Steel
Plate Materials	Stainless Steel, Titanium, Hastelloy™, other higher alloys
Gasket Materials	Nitrile, EPDM, Viton™
Frame Design Pressure	150 PSI and 300 PSI Standard. Up to 450 PSI by request.
Design Temperatures	- 31°F to 338°F
Bolting Materials	Zinc Plated Carbon Steel, options available
Plate Pack Shroud	Aluminum with option for Stainless Steel

## IDEAL FOR CLOSED-CIRCUIT SYSTEMS

Use fresh water and inexpensive processing equipment for onboard ship or rig. Then discharge heat overboard through a compact PLATEFLOW heat exchanger. You save space and weight and cut maintenance costs.

Get exactly the PLATEFLOW unit you need. Based on your needs, our computer can specify the right unit.



Xylem  
[www.xylem.com/standardxchange](http://www.xylem.com/standardxchange)

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