## PROCESS TECHNOLOGY



XC inline heat exchangers (cutaway for illustrative purposes).

# XC SERIES Inline Heat Exchanger

Process Technology's rugged XC inline chemical heat exchangers are ideal for one-pass cooling of chemicals dumping to waste stream. This product is also appropriate for heating applications. The system innovatively eliminates high costs associated with water aspiration. Utilizing polypropylene or PVDF housing and fluoropolymer tubing, XC is configured for your application with custom sizes and configurations available.

FLUOROPOLYMER INLINE HEAT EXCHANGERS									
EXCHANGE AREA (Sq. Ft.)	LENGTH IN(MM)	DIA. IN(MM)	POLYPROPYLENE SHELL	PVDF SHELL					
1.5	10 (254)	4.5 (115)	XCP1.5-***	XCK1.5-***					
2.5	14 (356)	4.5 (115)	XCP2.5-***	XCK2.5-***					
3.5	18.5 (470)	4.5 (115)	XCP3.5-***	XCK3.5-***					

<sup>\*\*\*</sup>Connections and drain specified.

### XC Features and Benefits

**SERVICE:** Inline chemical heat exchanger with all fluoropolymer wetted surfaces (tubing side) for virtually any wet chemistry application.

#### SIZES:

- 1.5 ft² (.14m²) of exchange area
- 2.5 ft² (.23m²) of exchange area
- 3.5 ft² (.33m²) of exchange area

#### **STANDARD FEATURES:**

- ½-inch (13mm) PFA tubing, .030" (.76mm) thick
- All welded construction (shell)
- 4½-inch (114mm) diameter polypropylene or PVDF shell
- Internally baffled for enhanced heat exchanger performance
- "U" factor (depending on flow rate): 25-50 BTU/(hr. x ft<sup>2</sup> x °F) = 142-284 J/(s x m<sup>2</sup> x °C)
- Shell-side drain connection

#### **FLUID CONNECTIONS:**

 Tube, Shell and Drain: Flared connections standard, choose sizes and other options when ordering.

#### **MAXIMUM PRESSURE/TEMPERATURE:**

- Tube (PFA): 25 PSIG (172 kPa) at 275°F (135°C)
- Shell (PP): 30 PSIG (207 kPa) at 180°F (82°C)
- Optional shell (PVDF): 30 PSIG (207 kPa) at 275°F (135°C)

#### **OPTIONS:**

- ¼-inch (6.4mm) to ¾-inch (19mm) Super 300 Pillar Type® connections
- · Custom sizes based on application
- Heavy-wall PFA tubing, .062" thick
- 4 ¾" (121mm) PTFE shell

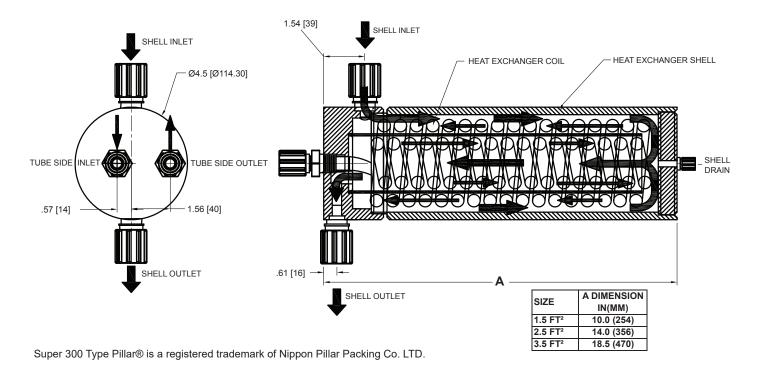
**EXCEPTIONALLY CLEAN PERFORMANCE:** Chemical heat exchanger is cleanroom assembled and tested to ensure the highest manufacturing standards.

**LEAK FREE OPERATION:** Integral inlet/outlet for single point fluid connections simplifies installation and greatly reduces the potential for chemical leaks.

**COMPACT SIZE:** Less surface area required for same BTU exchange compared to most other fluoropolymer exchangers.

**EXTREMELY RUGGED CONSTRUCTION:** Thick wall, welded construction provides extremely long service life.

#### **XC CUTAWAY**



#### XC SERIES HEAT EXCHANGER ORDERING INFORMATION

xc	Material	Exchanger Area	A Circuit Connections (Tube)	B Circuit Connections (Shell)	Drain Connection	<u>Options</u>
			1	l	1	I
XC Series	P = Polypro Chamber	1.5 = 1.5 ft <sup>2</sup>	A = 1/2" Flared	A = 1/2" Flared	A = 1/2" Flared	
	K = Kynar PVDF Chamber	2.5 = 2.5 ft <sup>2</sup>	B = 3/4" Flared	B = 3/4" Flared	B = 3/4" Flared	-THK =.062" wall exchanger tubing.
		3.5 = 3.5 ft <sup>2</sup>	C = 1" Flared	C = 1" Flared	C = 1" Flared	-SS = 316SS FNPT union half.
			S = 3/8" Flared	D = 3/8" FNPT (via union)	S = 3/8" Flared	-P = PFA Ferrule (standard is PVDF)
			T = 3/8" Super 300 Pillar	F = 1/2" FNPT (via union)	T = 3/8" Super 300 Pillar	
			V = 1/2" Super 300 Pillar	S = 3/8" Flared	V = 1/2" Super 300 Pillar	
			W = 3/4" Super 300 Pillar	T = 3/8" Super 300 Pillar	W = 3/4" Super 300 Pillar	
				V = 1/2" Super 300 Pillar	Y = 1/4" Super 300 Pillar	
				W = 3/4" Super 300 Pillar	Z = 1/4" Flared	
				O = 3/8" Pipe size stub	No drain = Blank	

