BRAZED PLATE HEAT EXCHANGERS FOR HIGH-PRESSURE CO₂ COOLING APPLICATIONS

light enerc

energy

oxygen

oxygen

SWEP provides a complete range of reliable and compact brazed plate heat exchangers (BPHE's) that are designed for optimal performance under extreme pressure. Our range of BPHE's are designed to operate at high pressures in CO₂ cooling applications. The range is optimized for environmentally friendly CO₂ systems and provides energy savings, reliability and a lowered footprint.

Benefits:

arbon dioxide

carbon dioxid

carbon dioxide

- CO₂ refrigerants fullfill legislative requirements as they are nontoxic and non-flammable.
- + CO_2 refrigerants are an economical alternative to other refrigerants.
- Excellent performance in tap water heating, in supermarket freezing and heat recovery.
- CO₂ is the most efficient refrigerant in the low temperature systems.



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BRAZED PLATE HEAT EXCHANGERS FOR HIGH-PRESSURE CO₂ COOLING APPLICATIONS

Our ranges of high pressure brazed plate heat exchangers are designed to operate at high pressures in CO_2 cooling applications. The range is optimized for CO_2 systems and provides energy savings, reliability and lowered footprint.

B9					B17				
U-class For applications operating up to 140 bar at 135°C. Suitable for use as a gas cooler, evaporator, economizer, and oil cooler in CO ₂ transcritical applications.		A: 378.7 mm (1- B16DW	Working conditions Max working pressure at 135°C Max working pressure at 225°C Min temperature Max temperature Test pressure 4.91") B: 78.7 mm	Inner circuit 140 bar (2.030 PSIG) 110 bar (2.030 PSIG) -196°C 225°C 207 bar (3.1")	Outer circuit 48 bar (653 PSIG) 38 bar (653 PSIG) (-320.8°F) (437°F) 72 bar	A: 377 mm (14 B18	Working conditions Max working pressure at 135°C Max working pressure at 225°C Min temperature Max temperature Test pressure .84") B: 119.5 mm (4	Inner circuit 129 bar (2.030 PSIG) 104 bar (2.030 PSIG) -196°C 225°C 200 bar	Outer circuit 99 bar (1.740 PSIG) 80 bar (1.740 PSIG) (-320.8°F) (437°F) 153 bar
		B B A A A A A A A A A A A A A A A A A A	Working conditions Max working pressure at 135°C Min temperature Max temperature Test pressure 42") B: 119.5 mm	Inner circuit 140 bar (2.030 PSIG) -10°C 150°C 200 bar (6.28")	Outer circuit 140 bar (2.030 PSIG) (14°F) (302°F) 200 bar	B A A A: 377 mm (14	Working conditions Max working pressure at 135°C Max working pressure at 225°C Min temperature Max temperature Test pressure .84") B: 119.5 mm (4)	Inner circuit 129 bar (2.030 PSIG) 104 bar (2.030 PSIG) -196°C 225°C 200 bar +.7")	Outer circuit 99 bar (1.740 PSIG) 80 bar (1.740 PSIG) (-320.8°F) (437°F) 153 bar
P195									
Breed Breed Succe A press	<mark>rking condition</mark> x working ssure at 135°(x working ssure at 225°(ns Inner circuit 131 bar (2.030 PSIG) 115 bar (2.030 PSIG)	Outer circuit F 96 bar F (1.450 PSIG) F 84 bar 1 (1.450 PSIG) 1	R-class For applications operating up to 95 bar at 100°C. Suitable for use as a gas cooler, evaporator, economizer, cascade operations and oil cooler in CO ₂ trans-critical applications			Working conditions Max working pressure at 135°C Max working pressure at 225°C	Inner circuit 90 bar Not UL a 76 bar Not UL a	Outer circuit 70 bar pproved 57 bar pproved
A: 452 mm (16.74")	temperature x temperature t pressure B: 203 mm	-196°C 225°C 226 bar (8")	(-320.8°F) (437°F) 166 bar			A: 377 mm (14	Min temperature Max temperature Test pressure .84") B: 119.5 mm (4	-196°C 225°C 139 bar 4.7")	(-320.8°F) (437°F) 109 bar
12H						25H			
D-class For applications operating at 60 bar up to 100°C. Suitable for use as an evaporator, condenser, suction gas heat exchanger and for cascade operations.		A: 287 mm (11.	Working conditions Max working pressure at 135°C Max working pressure at 225°C Min temperature Max temperature Test pressure 29") B: 117 mm (4	Inner circuit 56 bar (650 PSIG) 44 bar (650 PSIG) -196°C 225°C 88 bar .6")	Outer circuit 56 bar (650 PSIG) 44 bar (650 PSIG) (-320.8°F) (437°F) 88 bar	A: 524 mm (20	Working conditions Max working pressure at 135°C Max working pressure at 225°C Min temperature Max temperature Test pressure .62") B: 117 mm (4.6	Inner circuit 56 bar (650 PSIG) 44 bar (650 PSIG) -196°C 225°C 88 bar	Outer circuit 56 bar (650 PSIG) 44 bar (650 PSIG) (-320.8°F) (437°F) 88 bar
120TH						400H			
E-class For sub-critical applications operating at 56 bar up to 100°C. Suitable for use as an evaporator, condenser, and for cascade operations.		B B A A: 525 mm (20.	Working conditions Max working pressure at 135°C Max working pressure at 225°C Min temperature Max temperature Test pressure 66") B: 243 mm (9	Inner circuit 52 bar (650 PSIG) 45 bar (650 PSIG) -196°C 225°C 81 bar .56")	Outer circuit 52 bar (650 PSIG) 45 bar (650 PSIG) (-320.8°F) (437°F) 81 bar	B B C C C C C C C C C C C C C C C C C C	Working conditions Max working pressure at 135°C Max working pressure at 225°C Min temperature Max temperature Test pressure .32") B: 304 mm (11	Inner circuit 52 bar (650 PSIG) 45 bar (650 PSIG) -196°C 225°C 81 bar .96°)	Outer circuit 52 bar (650 PSIG) 45 bar (650 PSIG) (-320.8°F) (437°F) 81 bar
PSIG values are related to UL.									

All products in the CO_2 range are PED approved.

Printed on 100% recycled paper. SWEP is an ISO 14001 certified company.