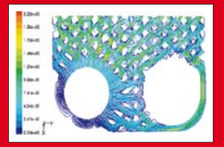


Simulation is one of the most important stages in the development of new and existing CBEs. The ability to evaluate different plate patterns by simulating flow rate and directions offers great opportunities for improved functionality.

Each SWEP CBE is delivered with full traceability and verified functionality. A SWEP CBE is approved by leading independent international bodies, such as PED, UL, KHK and CSA.

Our "Technical Handbook about Refrigerant Applications" offers you every opportunity to broaden your competence, with first-class information about everything from basic heat transfer to gas boilers and district heating systems.

A step towards a more efficient refrigerant industry

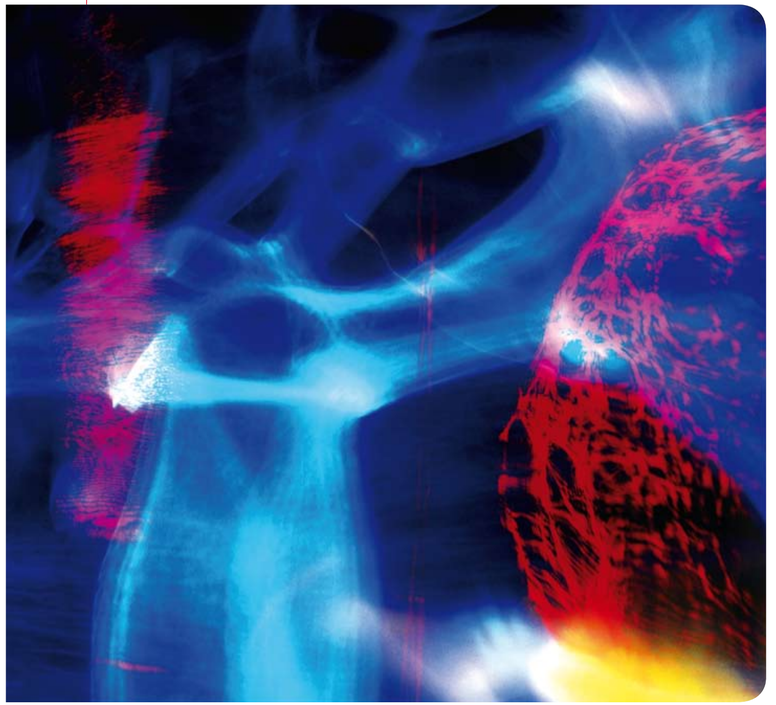
Air dryers, chillers, cascade heat pumps and refrigeration systems are typical examples of applications that operate more efficiently using compact brazed heat exchangers(CBEs). The list of new applications is growing continuously, and today you will find SWEP CBEs in virtually all kinds/sorts of applications in the global refrigerant market. Alongside the increase in the areas of use,there is also a rapid technologicalchangeover to modern high-effi-ciency SWEP CBEs where shell-and-tubes were previously used.Extensive research and develop-ment combined with effective use of CFD (Computational Fluid Dyna-mics) have enabled us to offer the market's most comprehensive range of condensers, desuperheaters,evaporators and subcoolers for all types of refrigerant applications.And by using standardized compo-nents, we can cost-effectively mass customize the product precisely to your needs.We can always offer you more,thanks to our complete program of effective aids. SSP, the SWEPSoftware package that we have developed for dimensioning ex-changers and dynamic drawing generation, is the soft way to get hard facts. Or why not do some in-depth reading in our Refrigerant Handbook, the complete handbook for CBE refrigerant applications?Contact one of our expert heat transfer consultants today to find out more about SWEP CBEs and energy-saving solutions.

SWEP is the world's leading supplier of compact brazed heat exchangers (CBEs). These products are used where heat needs to be transferred efficiently in air conditioning, refrigeration, heating and industrial applications. SWEP has annual sales of USD 250 million and is close to its customers, with representation in more than 50 countries and its own dedicated sales force in more than 20 countries. Highly efficient production units in Sweden, Switzerland, the USA, Malaysia, Slovakia and China enable SWEP to serve customers all over the world. SWEP is part of the global Dover Corporation, which is a multi-billion-dollar, NYSE-traded, diversified manufacturer of a wide range of proprietary products and components for industrial and commercial use.

SWEP
A DOVER COMPANY

www.swep.net

Compact brazed heat exchangers For refrigerant applications



92030-9540-R2

SWEP
A DOVER COMPANY

B Standard CBE (Compact Brazed Heat Exchanger). V Specially designed CBE with a built-in distribution device for S R134a, P R410A, VH R407 C high efficiency evaporator duties. DB Patented True dual-circuit CBE. DV DP DS

A complete range of dedicated CBEs for refrigerant applications

B5

Dimension	72 x 187 mm 2.84 x 7.45 in
Weight	0.6+0.044xNoP kg 1.4+0.1xNoP lb
Max NoP	60

B8

Dimension	72 x 310 mm 2.84 x 12.20 in
Weight	0.9+0.07xNoP kg 2+0.2xNoP lb
Max NoP	60

B10T V10T

Dimension	117/119 x 287/289 mm 4.61/4.68 x 11.31/11.37 in
Weight	1,4+0,09xNoP kg 3.1+0.2xNoP lb
Max NoP	140

B12

Dimension	117 x 287mm 4.61 x 11.31 in
Weight	1,7+0,116xNoP kg 3.2+0.3xNoP lb
Max NoP	140

B15

Dimension	72 x 465mm 2.84 x 18.32 in
Weight	1,3+0,106xNoP kg 2.9+0.2xNoP lb
Max NoP	60

B25T V25T

Dimension	117/119 x 524/526mm 4.61/4.68 x 20.65/20.71 in
Weight	2,1+0,17xNoP kg 4.6+0.4xNoP lb
Max NoP	140

B35 V35

Dimension	243 x 393mm 9.57 x 15.48 in
Weight	6,7+0,336xNoP kg 15.4+0.7xNoP lb
Max NoP	250

B50

Dimension	243 x 525 mm 9.57 x 20.62 inch
Weight	13,8+0,43xNoP kg 34.2+0.9xNoP lb
Max NoP	280

B56

Dimension	243 x 525mm 9.57 x 20.69 in
Weight	16+0,431xNoP kg 35.3+1xNoP lb
Max NoP	250

B57

Dimension	243 x 693 mm 9.57 x 27.30 in
Weight	16+0,565xNoP kg 35.3+1.2xNoP lb
Max NoP	280

B60

Dimension	364 x 374 mm 14.34 x 14.74 in
Weight	13+0,47xNoP kg 28.7+1xNoP lb
Max NoP	300

B80 V80 P80 Q80

Dimension	119 x 526 mm 4.69 x 20.72 in
Weight	2,1+0,17 (0,186) xNoP kg 4.6+0.4xNoP lb
Max NoP	140

B120T P120T V120T

Dimension	243 x 525mm 9.50 x 20.65 in
Weight	10+0,374xNoP kg 22+0.8xNoP lb
Max NoP	250

B200T V200T P200T

Dimension	243 x 525 mm 9.50 x 20.65 in
Weight	10,7+0,37xNoP kg 23.6+0.8xNoP lb
Max NoP	250

DB200 DV200 DP200

Dimension	243 x 525 mm 9.57 x 20.69 in
Weight	10,9+0,42xNoP kg 24+0.9xNoP lb
Max NoP	202

B400T V400T P400T S400T VH400T

Dimension	304 x 694 mm 11.98 x 27.34 in
Weight	17+0,6 (0,63)xNoP kg 37.5+1.3xNoP lb
Max NoP	300

DB400 DS400 DV400 DP400

Dimension	304 x 694 mm 11.98 x 27.34 in
Weight	15,4+0,58xNoP kg 34+1.3xNoP lb
Max NoP	282

B427

Dimension	304 x 694mm 11.97 x 27.32 in
Weight	29+0,62xNoP kg 63.9+1.4xNoP lb
Max NoP	280

B500T S500T VH500T

Dimension	304 x 980 mm 11.98 x 38.59 in
Weight	21+0,96xNoP kg 43.6+2.1xNoP lb
Max NoP	300

DB500 DS500

Dimension	304 x 980 mm 11.98 x 38.59 in
Weight	20+0,93 (0,96)xNoP kg 44.1+2.1xNoP lb
Max NoP	294

The concept

In principle, a CBE is constructed as a plate package of corrugated channel plates between front and rear cover-plate packages. The cover plate packages consist of sealing plates, blind rings and cover plates. During the vacuum-brazing process, a brazed joint is formed at every contact point between the base and the filler material.

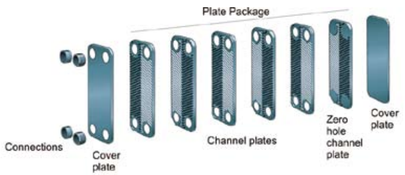
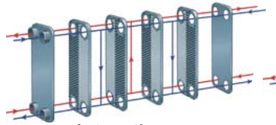
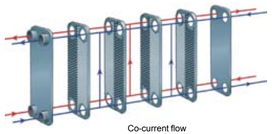


Figure 1. CBE principle

The fluids can pass through the heat exchanger in different ways. For parallel flow CBEs, there are two different flow configurations: co-current or counter-current.



Counter-current flow



Co-current flow

There are several different versions of the channel plate packages. Below is one example.

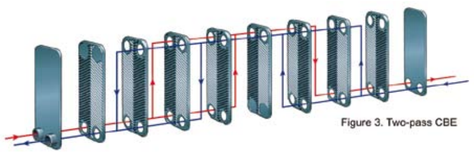


Figure 3. Two-pass CBE