

Combined

Flooded evaporator / cascade with integrated separator

Vahterus Combined is a compact solution available for use with both flooded evaporators and flooded cascades. These Combined solutions integrate the evaporator and separation system within a single vessel, creating a compact solution with low refrigerant charge. The compact size of Combined creates cost savings both in terms of insulation and piping. Cleaning can be easily and efficiently performed via back flushing and/or chemical cleaning. Constructed from fully welded circular plates housed within a protective shell, Combined ensures safe and durable operation, which is suitable for use with all refrigerants. The Vahterus fully welded construction eliminates the use of gaskets, providing operational benefits, both in terms of cost and safety.

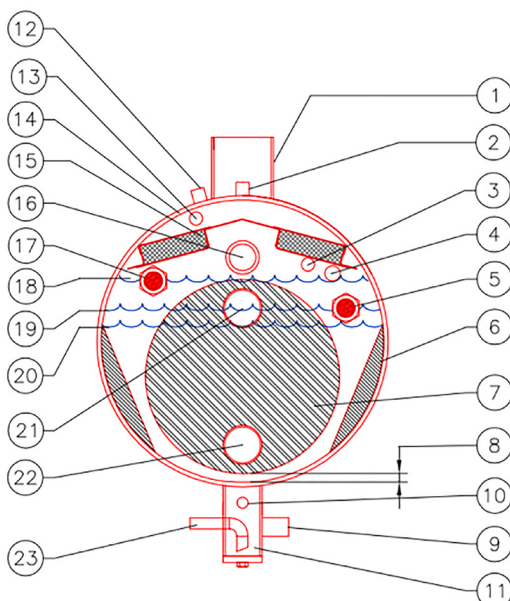
Applications

- Water / Glycol chiller
- Process liquid coolers
- Cascade units
- Economizers

Standard shell / plate combinations

- 3/2 (400) * shell diameter, mm
- 4/3 (510)
- 5/4 (670)
- 6/4 (750)
- 7/5 (840)
- 8/6 (990)
- 9/7 (1150)

Key features of Combined with ammonia



1. Suction connection (refrigeration outlet)
2. Safety valve connection DN25
3. Standpipe (level control) DN25
4. Maximum level alarm (optional DN32 or 3/4" NPT)
5. Sight glass, control level
6. Filling material (optional)
7. Plate pack
8. Distance between plate pack and the bottom of the shell
9. Automatic Oil removal connection (NH3) DN32
10. Stand pipe (level control) DN32
11. Oil collection dome
12. Higher pressure drop measurement connection (for NH3/CO2 units only) DN15
13. Lower pressure drop measurement connection (for NH3/CO2 units only) DN15
14. Shell
15. Droplet separation system
16. Refrigerant shell inlet
17. Sight glass, max level
18. Maximum level
19. Control level (operation)
20. Minimum level
21. Outlet, plate pack side (cocurrent)
22. Inlet, plate pack side (cocurrent)
23. Manual oil drain (NH3) DN20