

Spiral Heat Exchanger

용접식 스파이럴 열교환기



WOO SUNG MACHINERY CO., LTD.

Operating Conditions | 운전조건

Design Temperature
디자인 온도

-50~400°C

Design Pressure
디자인 압력

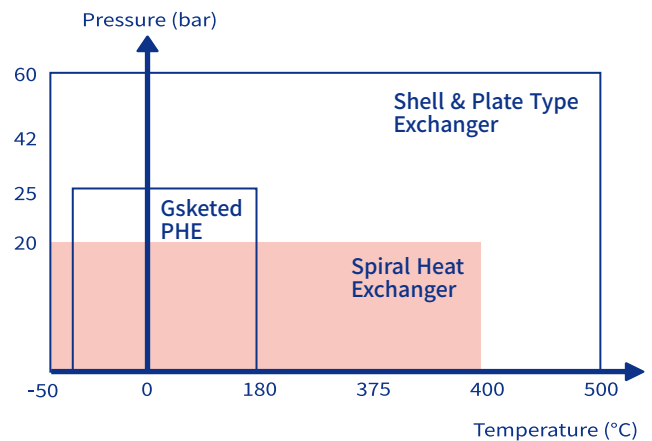
Vacuum(진공)~20 bar

Applied Code
적용 코드

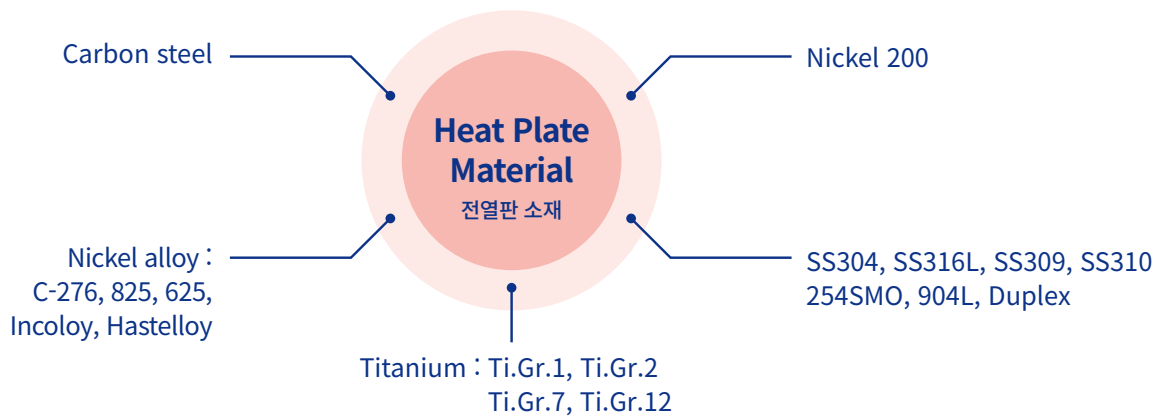
ASME, KS, JIS

Heating Surface Area
전열 면적

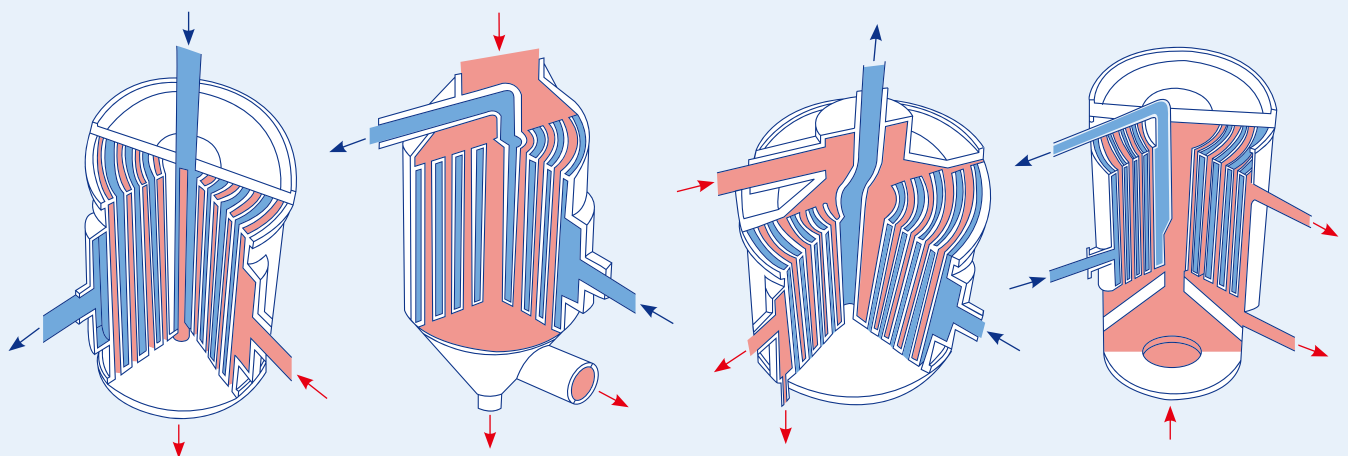
5~300m²/set



Materials | 재질



Structure | 구조



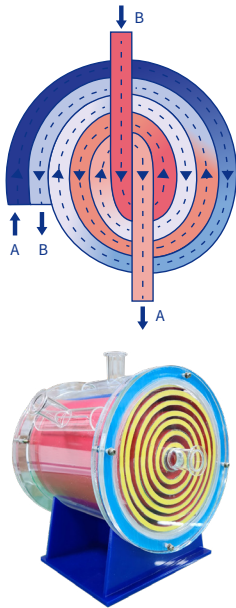
Spiral counter flow
(Liquid/Liquid)
(Gas/Gas)

Helical flow/Axial flow
(Condensing)

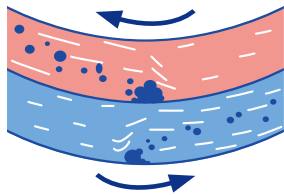
Spiral flow/
Helical, Axial flow
(Vaporising)

Top Condenser

Single flow path(단일 유로)



Self Cleaning(오염물질 박리 용이)



High Overall Heat Transfer Coefficient(높은 총괄 열전달 계수)

Since spiral flow path is easy to cause turbulence and the optimal flow rate is obtained by selecting the width of the heat plate and the gap between the flow paths, the heat transfer performance is maximized.

나선형 유로는 난류를 발생시키기 쉽고 전열판폭과 유로간격의 선택에 의하여 최적의 유속이 얻어지기 때문에 열전달 성능은 극히 높아짐

Little Contamination(적은 오염)

A single flow path evenly distributes the fluid and reduces the adherence of contaminants. Even if the contaminants are adhered, the system cleans itself by removing them with its flow rate, demonstrating its superior ability with fluids, including sludge.

단일 유로는 균등하게 유체를 분배하여 오염 물질의 부착이 적고 부착된다 하더라도 유속에 의한 박리시키는 Self Cleaning 일어나 슬러지를 포함한 유체에 탁월한 능력을 발휘함

Space-Saving(공간 절약)

The small form-factor of the high-performance equipment saves installation costs.

고성능인 동시에 구조가 컴팩트하여 설치 비용이 저렴함

Effective Utilization of the Temperature Difference(온도차의 유효 활용)

Counterflow allows heat exchange even up to extremely small temperature difference and demonstrates the optimal energy saving effect.

완전항류로 인하여 극히 적은 온도차까지 열교환 할수 있으므로 에너지 절약에 최적의 효과를 발휘함

Easy Maintenance and Inspections(용이한 보수 및 점검)

Open the cover at both sides to easily repair and inspect the internals of the equipment.

내부의 점검은 양단의 커버를 개방하여 손쉽게 보수 및 점검이 가능함

Usage(Application Areas) | 용도(적용처)

Fluids 유체

· Contaminating liquids(오염 액체)

Solid matters, fibers, alcoholic beverages, sludge and slurry fluids

고형물, 섬유, 알코올 음료, 슬러지 및 슬러리 유체

· Gas(가스)

Pure or mixture of inert gases

이너트 가스(inert gas)를 가진 순수 또는 혼합 기체

Applied Areas 적용처

· Liquid/liquid(액/액)

Preheating, Heating, cooling, Interchanging, Heat recovery

· Vapor/liquid(증기/액)

Top condenser, Reflux condenser, Vacuum condenser Vent condenser, Reboiler, Gas cooler

Industry 산업군

· Petrochemical(석유화학)

· Refinery(정유)

· Steel making(철강)

· Pulp and paper(펄프 및 종이)

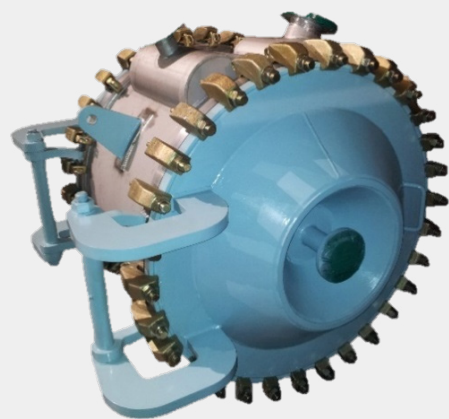
· Metal/ore processing (금속/광석 프로세스)

· Wastewater treatment(폐수 처리)

· Pharmaceutical(의약)

· Vegetable oil processing (식음료 프로세스)

· Distillery(증류)



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