

▶▶ Cryogenic Heat Exchanger and System Engineering **Global Leader**

PCHE Printed Circuit Heat Exchanger

New Energy Transfer Solutions
Satisfactory performance in any environment
Various applications



DongHwa Entec

PCHE Printed Circuit Heat Exchanger

Applications

Marine Fields

- HP/LP Vaporizer, Gas Heater Fuel Gas Supply System
- BOG Compressor Pre Heater Package
- Regasification HP Vaporizer / Trim Heater
- Reliquefaction MCHE(Main Cryogenic Heat Exchanger)

Oil & Gas, Industry Plant

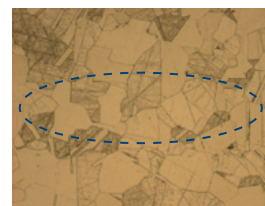
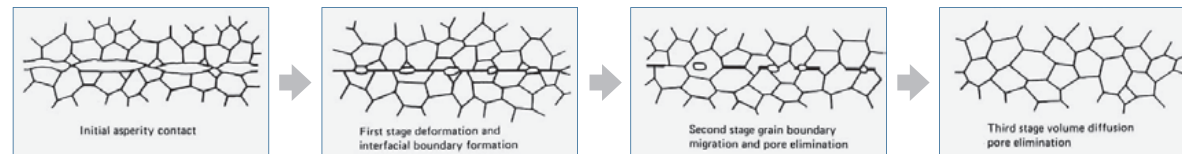
- Compressor Cooler
- Fuel Gas Heater for Gas Turbine
- Cryogenic Heat Recovery

Energy System

- H₂ Pre Cooler for Hydrogen Discharge Station
- SMR(Steam Methane Reforming) High Temperature Heat Exchanger
- SCO₂ Evaporator, Recuperator
- Heat Recovery Energy System



Diffusion Bonding Technology



[Diffusion bonded joint]

- (1) Filler metal is not required.
- (2) Bonded by atomic diffusion on interface.
- (3) High pressure and Temperature is required during bonding.
- (4) Diffusion bonding technology can provide the same strength level of the base metal.

Compact Size

Small Footprint, Small Weight

Excellent performance

High Heat Duty, Low Pressure Drop

Long Service Life

High Durability, Easy Maintenance

Extreme Environments

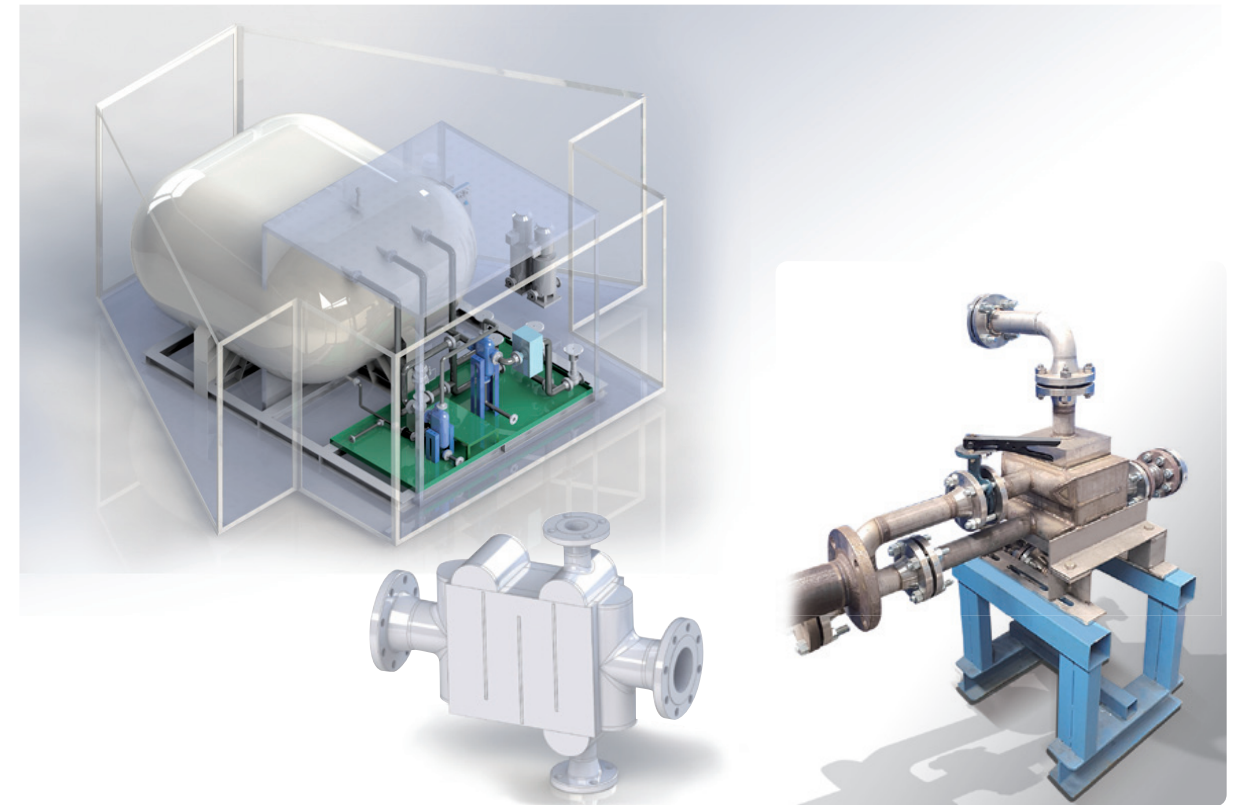
Cryogenic Service, High Pressure, High Temperature

- Max. Pressure Test : above, 4,000bar
- Cyclic test : 0~1,000 bar, 1 CPM, 10,000 cycle



LNG Fueled Ship Application

PCHE is applied to FGSS(Fuel Gas Supply System) as LNG vaporizer and BOG Heater. Also, it is design to have the capability to anti-icing and deicing function based on our own patents.



Excellent Performance and Compactness

DongHwa Entec's PCHE is widely used for various industrial application due to its effectiveness and compactness. It can be applied to extreme environments such as a cryogenic condition with high pressure.

Perfect Quality Process





WORLD CLASS
300

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Hwajeon Office and Factory



Energy. Environmental Tec. Lab.



DongHwa Pneutec

DongHwa Entec

Donghwa Entec Co.,Ltd

Noksan Office and Factory

7, Noksansandan 261-ro, Gangseo-gu, Busan, Korea
T. +82-51-970-1000 F. +82-51-970-1001

Hwajeon Office and Factory

20, Hwajeonsandan 1-ro 63beon-gil, Gangseo-gu, Busan, Korea
T. +82-51-970-1100 F. +82-51-970-0710

Energy·Environmental Technology Laboratory

7, Gwahaksandan-ro 305beon-gil, Gangseo-gu, Busan, Korea
T. +82-51-970-0711 F. +82-51-970-0730

DongHwa Pneutec Co.,Ltd

75, Mieumsandan-ro 8beon-gil, Gangseo-gu, Busan, Korea
T. 82-51-974-4800 F. +82-51-974-4896