

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

H₂ Fueling Station PCHE Type Pre Cooler

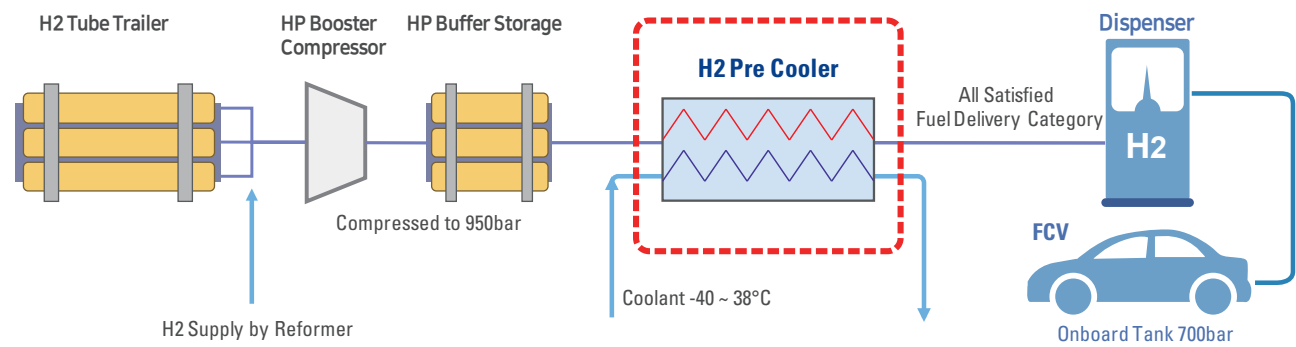


DongHwa Entec

H2 Fueling Station PCHE Type Pre Cooler

H₂ Pre Cooler is used to cool the high pressure hydrogen during vehicle fuel tank charging. It also features fast temperature response and large number of cycle with structural stability. H₂ Pre Cooler can be installed inside the Dispenser box or can be installed independently outside. Various coolant fluids can be applied to cool high-pressure hydrogen, which makes it easy to design a hydrogen filling station.

H2 Discharge Station General Diagram for FCV



Specification

- H₂ Pre Cooler Type : PCHE (Printed Circuit Heat Exchanger, made by diffusion bonding)
- Design Pressure : 1,000 bar.G
- Design Code and Approval : KGS & ASME "U" Stamp, PED with CE
- Material : Stainless Steel – SSRT (Slow Strain Tensile Tests) carried out
- Applied to Variable Coolant

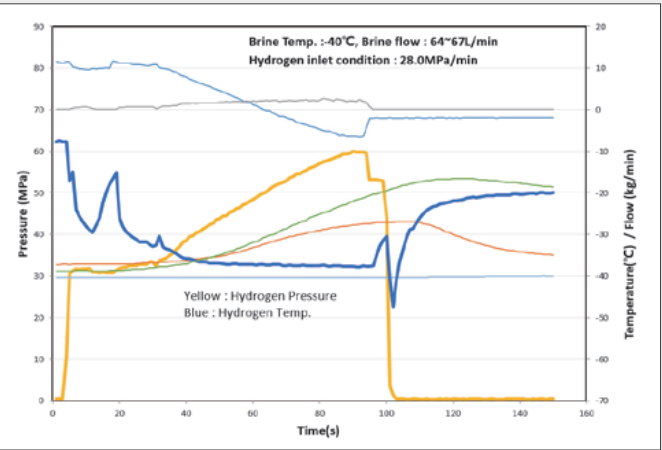
* Model No. : **DHE** **T40** **PC** **50** **KG**

- Certification : KGS, ASME, PED
- H₂ Flow Rate : 3.6kg/min, 5kg/min, 10kg/min
- Heat Exchanger Type : PCHE
- SAE J2601 Fuel Delivery Category
- Manufacture : DongHwa Entec CO., Ltd

Model No.	DHE-T40-PC-36-DV	DHE-T40-PC-50-KG	DHE-T40-PC-10-AS
Cooling Capacity	Based on SAE J2601 Pre Cooling Category T40		
H ₂ Flow Rate	3.6kg/min	5kg/min	10kg/min
Design Temperature	-70℃ ~ 70℃		
Design Pressure	100MPa		
Material	Stainless Steel – SSRT (Slow Strain Tensile Tests) carried out		
Certification	Donghwa Verified	KGS, ASME U, PED with CE	

Excellent Performance

According to test results at operating condition, the hydrogen outlet temperature (Blue line) is rapidly approaching T40 condition.



All operating scenarios **(Filling Pressure, Flow, Temperature)** of hydrogen refueling stations can be satisfied.

Perfect Quality Process



Perfect quality
Excellent performance
Fast delivery





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