

Printed Circuit Heat Exchanger

K°BOND

Ideal for applications involving extreme process temperatures and pressures

Providing significant savings in weight and footprint

Ensures highest safety level



DIFFUSION BONDING

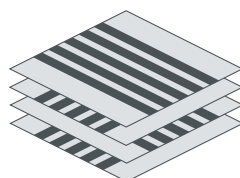
Patterns are designed for each service and chemically etched on stainless steel plates.

Etched plates are stacked and welded through diffusion bonding process, converting them into one solid block of metal (core).

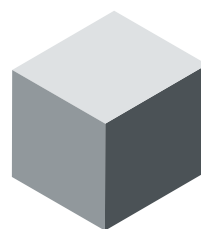
When required, multiple cores are welded together. Nozzles and headers are welded on cores to form final K°Bond.



Plate



Single plates



Solid block

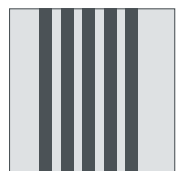
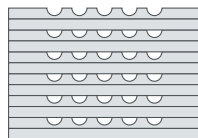
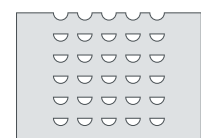


Plate with etched channels



Single plates



Solid block



MARKETS



Renewables



Hydrogen



Supercritical CO₂



LNG



Gas Compression



FSRU

DIFFUSION BONDING

DESIGN PARAMETER



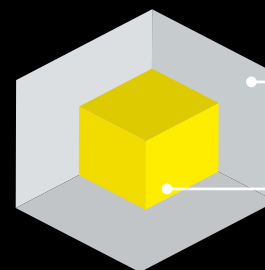
DESIGN PRESSURE

1050 bar
15,229 psi



DESIGN TEMPERATURE

-200°C
-328°F
+600°C
+1112°F



Space requirement Shell & Tube Heat Exchanger with same performance

1:6

K°BOND Space requirement

- ✓ Optimized in-house design software
- ✓ Available in stainless steel 304L & 316L
- ✓ Designed as per ASME rules, CE-marked and/or U-stamped