FUEL CELL SYSTEM BIPOLAR PLATE (BPP)

With the demand for longer operational lifespan, we deliver Bipolar Plates with **low variation in evenness** and PVD coating that provides **ultra-low contact resistance** to boost power efficiencies and prolonged lifespans, while retaining performance when ramping up to **high volumes**.



PROLONGED LIFESPAN

 Supports an operational lifespan of over 8,000 hours.



ULTRA-LOW CONTACT RESISTANCE

Our proprietary PVD coating is finished 20% faster than other suppliers.



ENHANCED PLATE EVENNESS

Assured leak-tight operation and even power distribution across the entire surface of their plates.

GASKET

- > Liquid silicon or EPDM rubber.
- > High-precision molding.
- > One-time mold on both anode and cathode sides.
- > No deformation on the BPP flow channels.

FLOW CHANNEL -

- > High-precision CNC for the flow channels tooling.
- > Channel height: ±0.015mm.
- > Thickness evenness: ≤8% (active area).
- > Thickness thinned ratio: $\leq 25\%$.
- > Channel flat width: ±0.03mm.
- > Channel pitch down to: 1.0mm.

CATHODE SHEET -

- > Progressive stamping for mass production.
- > 100% welding quality leakage test.
- SUS316L Stainless Steel or similar corrosion resistant material.
- Raw material thickness: 0.075 0.1mm.

ANODE SHEET -

PHYSICAL VAPOR DEPOSITION (PVD) COATING

> OEM-approved PVD protection layer on both sides of the BPP.

NEED A CUSTOMIZED SOLUTION?

CONTACT US



FINITE ELEMENT ANALYSIS (FEA) BEFORE DESIGN

- > Forming parameters definition
- Material thinning ratio verification
 Overall flatness verification
- Channel height control Channel flat area control

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