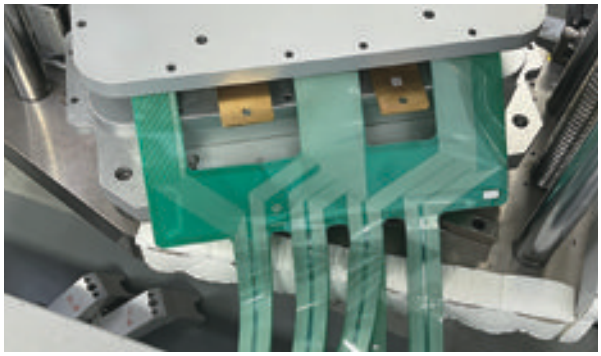
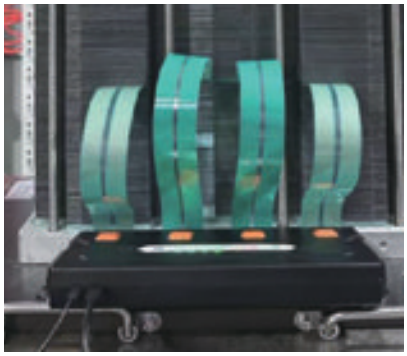
FUEL CELL BIPOLAR PLATE FLATNESS TEST SOLUTION

PROJECT INTRODUCTION

A fuel cell is a device that generates electrical energy by reacting hydrogen with oxygen. In a fuel cell stack, the bipolar plates play a crucial role in not only conducting current, but also driving the reaction process between hydrogen and oxygen in an electrochemical reaction.

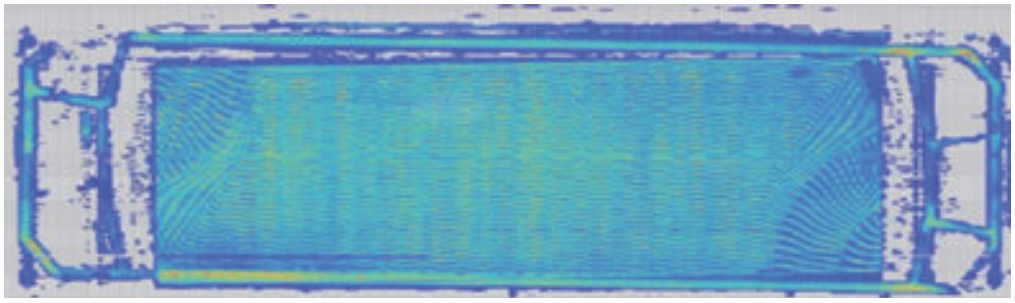




MEASUREMENT PROCESS

Install the hydrogen fuel cell stack on the platform of the pressure tester, insert the sensors and stack them on top of each other, make sure the connection is firm and well sealed, and then fix the screws. Observe the pressure distribution after applying 10000-30000N pressure in the pressure tester.

MEASUREMENT RESULT



Our membrane pressure measurement system can measure and feed back pressure data at each point in real time, which is helpful for the development of next-generation fuel cells and can also be used as a powerful verification tool for detailed finite element models.

USE

Product Design Verification
Factory Inspection

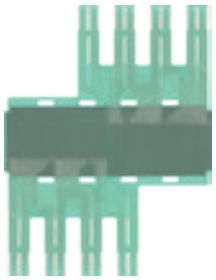
ADVANTAGES

Tight fit bipolar plates
Real-time measurement
Feedback pressure data

EQUIPMENT: D6

Electronic Pressure Sensitive Paper Measuring System
DPM-EPF

MODEL	TC4416-4J
Sensing area	445mm*166mm
No. of sensing points	65536, 256rows*256columns
Point density	84points/cm²
Pressure ranges	500psi



MODEL	TC2014-Y-2Q-8J
Sensing area	408mm*140mm
No. of sensing points	101696, 200rows*512columns
Point density	178.6points/cm²
Pressure ranges	500psi