Fuel Cell-related Component: Separators

Toyota Boshoku's proprietary high-precision stamping technology enables production of titanium sheets with ultra-narrow channels for hydrogen flows within the fuel cell, resulting in improved power generation.

Vehicle: TOYOTA MIRAI

01

Originally developed for production of vehicle seat frame components, Toyota Boshoku's high-precision, high-speed stamping technology also enables greater precision in pressing titanium, a material with a low expansion coefficient.

02

Ultra-narrow microchannels enable uniform flows of hydrogen in the fuel cell and help to improve output density.

Cross-section

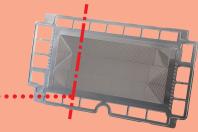
Usual press

In conventional pressing, sheets are thinner at some points, resulting in hydrogen leakage.

Thinner walls







MIRAL

The company's proprietary high-precision stamping technology results in precise forming and uniform thickness.



