

High-Pressure Electrolysis Fixture

Designed For PEM & AEM Operation

FEATURES

Operating Parameters:

- Rated for 50 bar (735 psi) operating pressure
- Green anodized 6061 aluminum end-plates, for increased visibility in laboratory settings
- 25 mm thick Grade 2 titanium with >99% purity Platinized coating (other materials available upon request)
- Fully platinized electrical connections for reduced resistance
- Flow field contains precision machined wells and Swagelok® fitting for thermocouple installation
- Flow fields available in various channel patterns to support research needs
- End-plate contains precision machined wells for cartridge cell heaters for evenly distributed and precise heating
- Cartridge heaters are shielded and electrically grounded for additional safety
- End-plates are electrically isolated from the cell
- Operating temperature up to 200 °C

Additional Components:

- 200 W cartridge cell heaters with braided stainless steel armored cable for superior durability (115 V or 230 V)
- Gasket, gasket templates and thermocouple included
- Flow Fields with reactant input/output ports, stainless steel Swagelok® SC-10 compression fittings (SC-11 Fittings available upon request)
- 75 cm heavy gauge copper conductor load cables

Parts derived from National Renewable Energy Laboratory: J. Wrubel, S. Ware, C. Schaffer, M. Allen, E. Klein, R. Rice, C. Engtrakul, and G. Bender. "NREL 25-cm2 High-Pressure Low-Temperature Electrolysis Cell Hardware (Open Source)." National Renewable Energy Laboratory Data Catalog. DOI: 10.7799/2205626. 2023.