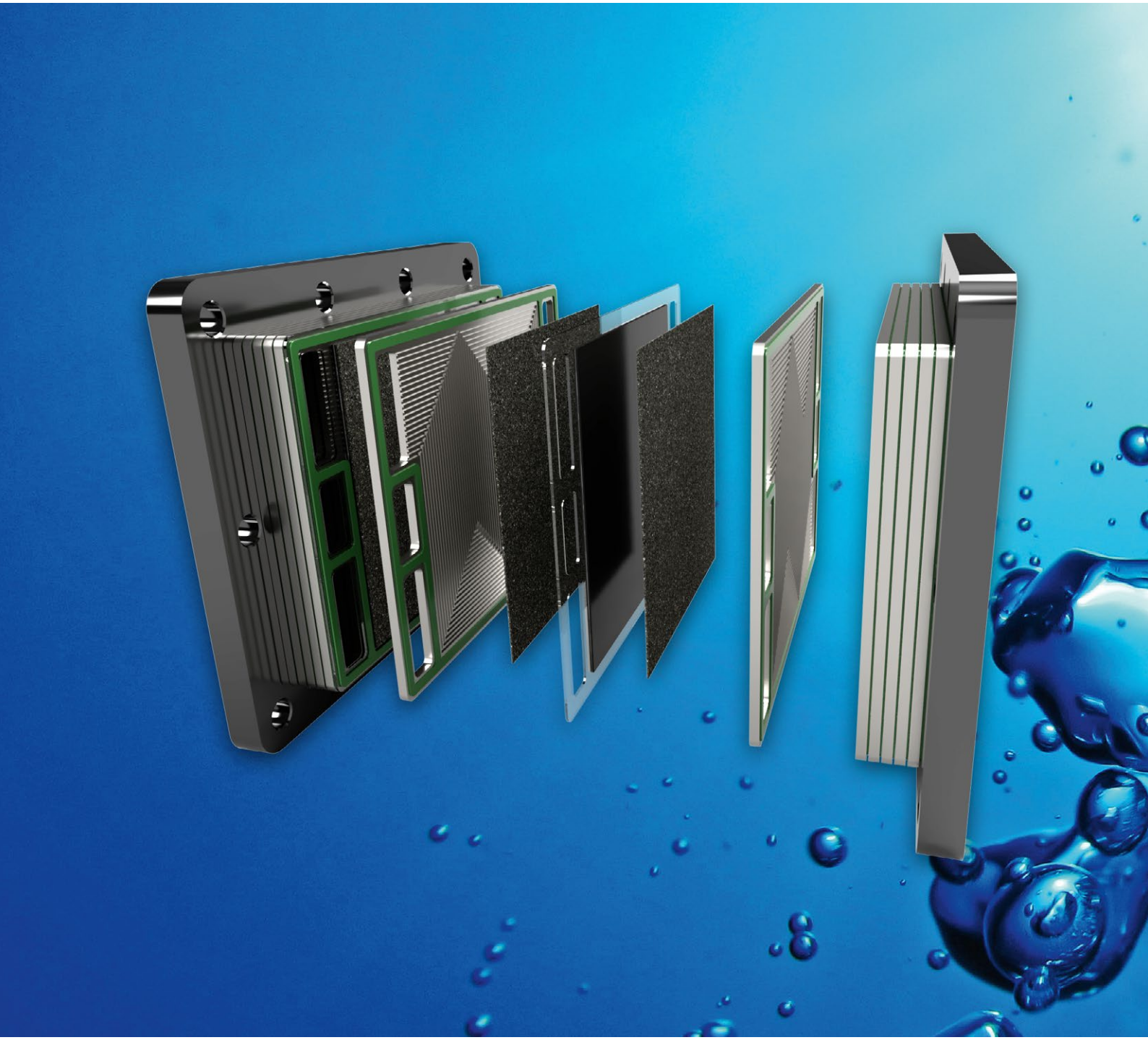
Heraeus

Precious Metals



Electrocatalysts for PEM Fuel Cells

Heraeus' product portfolio includes fuel cell catalysts with different precious metal loadings, which provide numerous benefits to your application. In order to find the perfect solution for your needs, you can conduct tests in Heraeus' fully equipped on-site laboratories and test center.

Heraeus' fuel cell catalysts provide dedicated solutions for PEM fuel cells addressing the various requirements of anode and cathode:

ACTIVITY
Efficient use of platinum in different catalyst concepts helps to gain highest performance.

STABILITY
Achieve long lifetime for your application by using catalyst designed for best stability and reliability.

CELL REVERSAL TOLERANCE
This feature protects the anode by allowing significantly lower damage throughout time.

A comprehensive product portfolio to fit your needs

Catalyst	H2FC-40Pt-C100 + H2EL-IrO	H2FC-40Pt-C240	H2FC-50Pt-C700	H2FC-50Pt-C700M
Features	Pt on highly stable Carbon & application of an Ir-containing OER additive	Highly dispersed Pt on Medium Surface Area Carbon Black	High performance Pt on High Surface Area Carbon Black	Highly stable Pt on High Surface Area Carbon Black
Application focus	Highly stable anode – Adjustable cell reversal tolerance > 8000 s (15 µgIr/cm²) (~75 s w/o OER additive)**	Anode and Cathode – High precious metal efficiency	Cathode – High performance catalyst	Cathode – Long-term performing performance catalyst Pt-AST*** > 30 000 cycles
Electrochemical Active Surface Area [m²/g Pt]	> 45 (RDE)	> 75 (RDE)	> 85 (RDE)	> 85 (RDE)
Cell voltage @ 0.1 A/cm² (CCM)* [V]	~ 0.80	~ 0.82	~ 0.85	~ 0.85

*Automotive conditions **Cell reversal tolerance time until -1.25 V_{cell} ***DOE protocol

For more detailed information about our broad product portfolio, please contact our sales experts.

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