

The most compact, durable, lightweight, scalable bipolar plates available on the market.

## NEXT GENERATION CARBON FIBER BIPOLAR PLATES

Evaluate our technology in a representative environment

Accelerate your development cycle with advanced full-size stack testing platform

### Stack key features

Liquid-cooled stack with power capacity of up to 60 kW

200 cm<sup>2</sup> active area

LT200+ material with a consistent 200  $\mu m$  web thickness

Headers for 300-Cell configuration

External datum centering

Cell voltage monitoring included

Stack fixture & MEAs on demand

### Integrating HYCCO's technology: from design to production

FRANCE

Material Formulation: Tailored composites

Plate Design & Prototyping: Guidance and rapid iteration

Manufacturing: All production tools are supported

**Assembly & Sealing:** Plug-and-Play solutions

**Quality Control:** 100% plates are tested and qualified

**Production Scaling:** Flexible capacity growth

### **Custom co-development**

We collaborate to integrate our technology into your systems. Our team co-develops custom-designed full-scale stacks tailored to your performance requirements.

Through collaborative engineering, we ensure optimized designs that align with your goals.

Leveraging our expertise in material forming, we support you from prototyping to industrialization, ensuring efficient production of bipolar plates tailored to your specific electrochemical requirements.





# HYCCO's comprehensive testing environment

### HYCCO's material : The perfect blend of metallic and composite technology

### Challenges in evaluating a new technology

Time and Capital: Significant investment required

**Complex Impact:** Outcomes are difficult to predict

**Crucial Decisions:** Supplier selection shapes long-term development

### **Our solution: advanced testing platform**

**Cost-Effective:** Minimize development costs

**Time-Efficient:** Accelerate time-to-market

**Informed Choices:** Make data-driven choices for suppliers and technology

**Risk Mitigation:** Minimize adoption uncertainties

### More specifications

External dimensions: 320x310x560 mm

Target power density: 4kW/kg

- Operating pressure: 2.5 bars
- BPP thickness: 1.1mm
- Cell pitch: 1.495 mm
- Airflow: Co-flow
- Hydrogen flow: Counterflow
- Nominal operating point: 2A/cm<sup>2</sup> at 0.6V

Superior electrical conductivity High mechanical strength Excellent temperature resistance Superior chemical stability

Distinctive carbon properties and tailored solutions for a wide range of electrochemical applications :

	<b>ΗΤ400+</b> 400μm	<b>НТ200+</b> 200µт	<b>LT200+</b> 200μm
Application compatibility			
Low Temp. PEMFC	<b>S</b>	$\checkmark$	
High Temp. PEMFC	<b>~</b>	<b>S</b>	
REDOX flow batteries	<b>~</b>	<b>S</b>	
PEM Electrolyzer	<b></b>	<b>S</b>	



**Scan** to access our material data sheets



+33 06 67 93 41 01 contact@hycco.fr www.hycco.fr