



**PRAGMA
INDUSTRIES**

SquarePak

Single cells and short stacks for research
and teaching courses



**Robust and reliable
design**

Assembling accuracy

Design flexibility

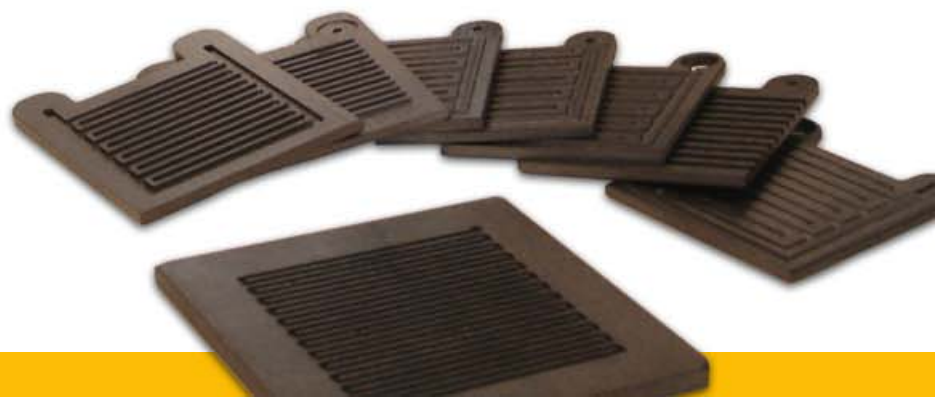


Pragma Industries provides a wide range of **single cells and short stacks** for **research and teaching**.

We deliver all the necessary components and fittings: MEAs, GDLs, GDEs, current collectors, bipolar and monopolar plates, compression plates, heaters, gaskets, fittings and gas connectors.

With robust design and quality manufacturing, our fuel cells will serve you during years of intensive research.

We ensure fast reactivity on tailored designs. **Have you specific needs? Contact us for our custom-made fuel cells.**



Pragma Industries

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Active area	5 cm ²	25 cm ²	50 cm ²	100 cm ²	Custom-built
Monopolar plates material	Fuel cell grade graphite compound with resin filler				
Flowfield type	single serpentine		3-fold serpentine	5-fold serpentine	any flowfield design
Flowfield size	2.2x2.2cm	5x5cm	7x7cm	10x10cm	custom
Current collectors	High grade copper plate, 15µm nickel + 5µm gold plating				
Compression plates	Aluminium equipped with heating cartridges				
Inlet manifold	4/2 quick gas connector		6/4 quick gas connector		custom
Integrated heaters	2x90W		4x90W		custom
Sealing	high temperature Viton O-ring/ MeOH compatible up to 10M				
Max operating temperature	180°C				
Max operating pressure	3 bar				
Fuel compatibility	Hydrogen, reformat, MeOH, oxygen, air				

SquarePak package includes:

- All parts required for assembling and connecting the cell
- Heating cartridges inserted in aluminum compression plates
- O-ring gaskets (MEA sealing)
- K-type temperature sensor
- Voltage sense line (inserted in graphite plates)

Accessories:

- Specific plugs and connectors
- Custom design and materials

