

# GET FULL CONTROL in FC testing with the CELL COMPRESSION UNIT



The **compression force** applied to the fuel cell core has a drastic influence on performances: it modifies the gas permeation, water management and electrical contact between interfaces. Thanks to the **Cell Compression Unit (CCU)**, you will now be able to precisely measure the influence of compression over MEA and GDL.

The cell design achieves gas tightness and compressive force with two separate

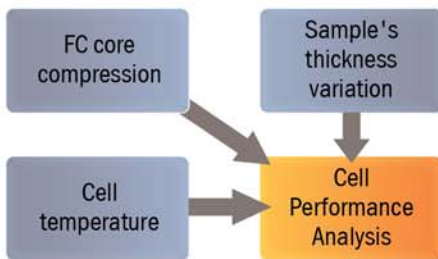
actions. The force applied by the CCU piston is only transmitted to the active surface for perfect reproducibility and accuracy.

Place your components in the single-cell hardware, the CCU will monitor and control the exact pressure you have set. The CCU is a fully autonomous, programmable, self-regulated unit, equipped with a force sensor and a graphical touch screen interface.

ACCURACY ■■■  
RELIABILITY ■■■  
REPRODUCIBILITY ■■■



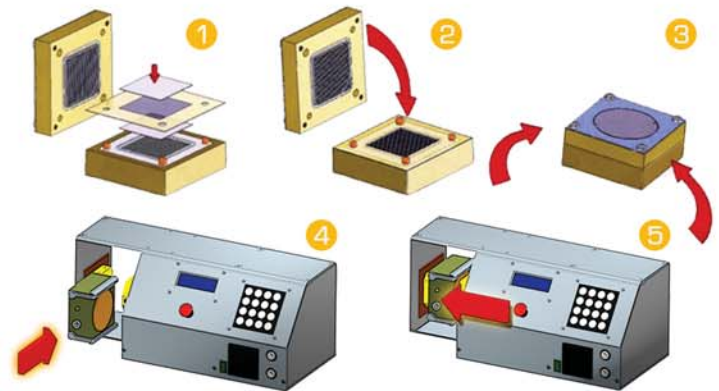
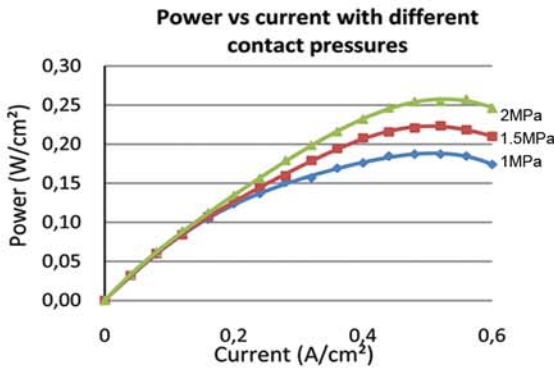
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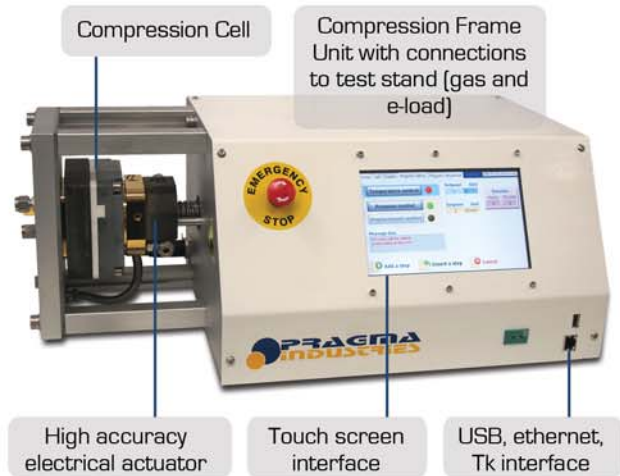
The Cell Compression Unit is ideal for:

- Determining optimal contact force for maximum power density
- Reproducing identical testing conditions for different MEA and GDL samples
- Increasing your screening throughput

The Compression Cell is easily mounted for testing and it takes only seconds to set the MEA and GDLs inside the cell fixture precisely.

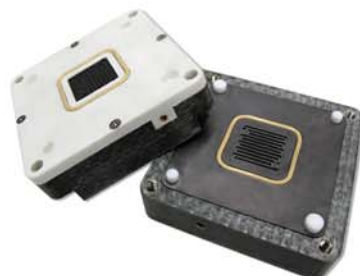
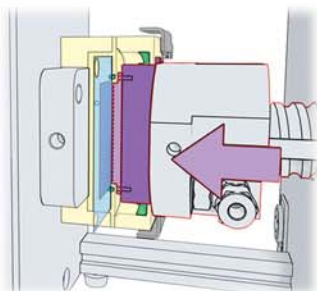


<b>Compression force</b>	500 to 10,000N
<b>Force accuracy</b>	2%FSR
<b>Integrated cell heating</b>	24V, 2x120W, 240°C max
<b>Inputs/outputs</b>	7" touch screen display, EMO Type K plug + thermocouple USB, Ethernet
<b>Controls and monitoring</b>	<ul style="list-style-type: none"> <li>• Compression force</li> <li>• Sample thickness</li> <li>• Cell temperature</li> <li>• Programmable test sequence</li> <li>• Data logging in CSV format</li> </ul>
<b>Dimensions</b>	510 x 230 x 194 cm (WxDxH)



Compression cell models	CC5	CC25	CC50	CC custom
<b>Application</b>	PEM, DMFC	PEM, DMFC	PEM, DMFC	PEM, DMFC
<b>Fuel</b>	H <sub>2</sub> , MeOH, reformat	H <sub>2</sub> , MeOH, reformat	H <sub>2</sub> , MeOH, reformat	H <sub>2</sub> , MeOH, reformat
<b>Active cell area</b>	5 cm <sup>2</sup>	25 cm <sup>2</sup>	50 cm <sup>2</sup>	Custom
<b>Operating temperature</b>	180°C	180°C	180°C	180°C
<b>Standard flowfield design</b>	Single serpentine	Single serpentine	5-fold serpentine	Custom
<b>Flowfield material</b>	Graphite compound	Graphite compound	Graphite compound	Custom

Check out the video of the CCU in action and the list of accessories on our website.



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