

SUNGREENH2 BIFUNCTIONAL AEM ELECTRODE

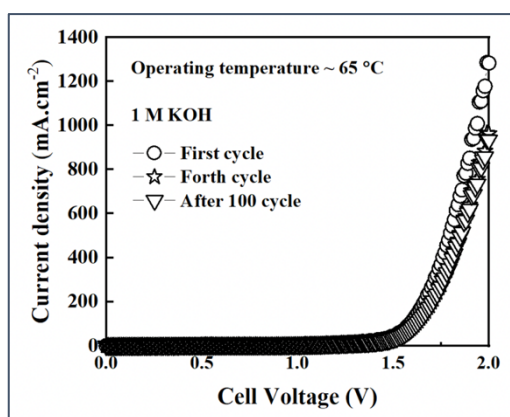
SunGreenH2 bifunctional electrodes are made of low-cost materials which are compatible with alkaline environment. The electrodes are capable of continuous operation up to 30,000 hours.

Technical specification of the electrodes:

Electrode Thickness	300 μm
Porosity	60%
Compression	5%
Materials	Nickel Alloys

Highly stable performance of SunGreenH2 electrodes

Includes initial performance, after four cycles, and after one hundred cycles at 65°C. As demonstrated here, our electrodes can operate stably after initial few cycles.



NB: 1M KOH = 56 G KOH PELLETS+ 944 ML H₂O

How to use the electrode:

1. Cutting to the required size maybe done using a CNC machine: using mill bit of either 0.5mm or 1mm, with the spindle speed of 15k to 20k.
2. Do use the right gasket material and thickness to seal the cell from gas and electrolyte leakage, which should also be capable of holding enough pressure between the electrode and the bipolar plate to minimize contact resistance. For instance, a silicon gasket needs around 30% elastic compression to act perfectly as a sealing layer; i.e. for a 300 μm thick electrode, around a 400 μm gasket should suffice.
3. The torque required for each bolt in a 5 cm x 5 cm cell is around 0.8N.m to 1.2N.m. An alternative way to check the torque amount is correct is to measure the thickness and to consider achieving 30% thickness reduction after tightening.