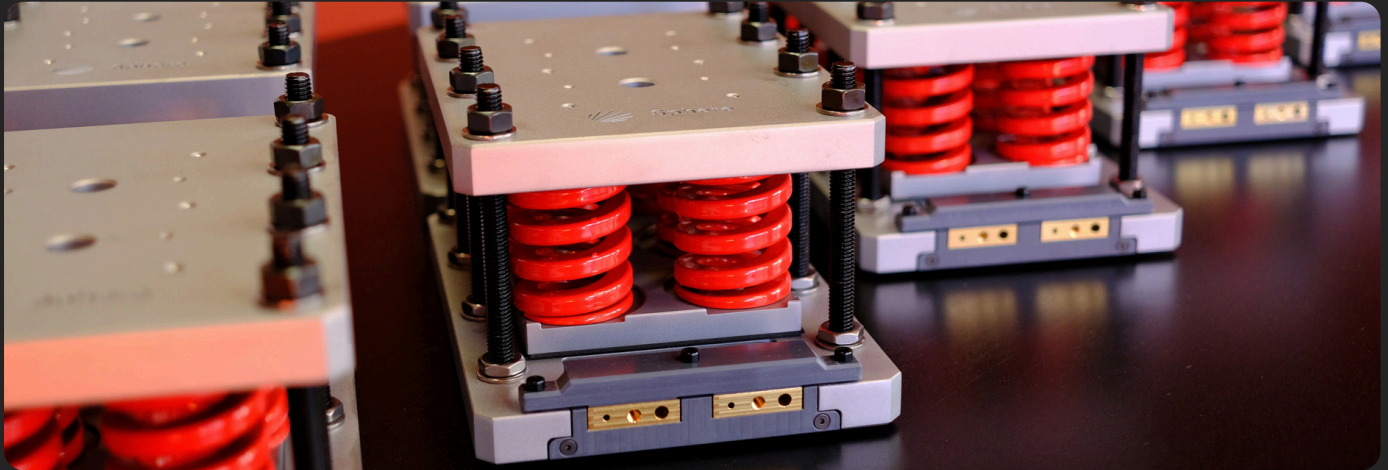


custom jigs, fixtures and test setups

Your cell doesn't fit the standard line? We adapt it.

We don't start from a blank page. Most custom requests begin with an ASC cell, frame or sensor we already make, then we change what your cell needs: the size, the sample holder, the force range, the connectors. You get a setup that fits, built on parts already proven in labs around the world.



24 h

first feedback on your brief

1 to series

from a single prototype to batches

5 formats

pellet, coin, pouch, cylindrical, prismatic

24 months

warranty on every setup

when clients come to us

01

The cell is a different size

A bigger pouch, a prismatic or cylindrical cell, a pellet outside 8 to 14.5 mm. We resize the plates, pistons and sleeves.

02

They need many identical units

Ten or a hundred test channels, several sites. Every jig is built the same way, so the data can be compared.

03

They want more data from the test

Pressure, swelling or temperature added to an existing protocol, recorded next to the voltage on their cycler.

modules we reuse from the ASC line

Pressure

Fixed thickness, fixed force via springs, or dynamic pressure, up to 20 kN (400 MPa on 8 mm).

Swelling

Multi-point displacement sensing, sub-micron: 1 µm precision, 0.1 µm resolution.

Mapping

Up to 56 pressure and temperature points across the cell surface.

Temperature

Heated fixtures, thermocouples and control boxes with programmable PID.

how it works

Start from what exists, change what's needed

01

Brief

Send a drawing, cell spec or test protocol. First feedback within 24 hours.

02

Design

We pick the closest ASC setup and show you what we'd change, with a quote.

03

Prototype

Once it works, we build as many as you need, all the same.

04

Series

Once it works, we build as many as you need, all the same.

what we build

- Compression jigs and cell holders for any format
- Fixtures with pressure, swelling and temperature sensing
- Multi-cell racks for high-throughput test channels
- Complete test setups wired for your cyclers or potentiostat
- Adaptations of ASC cells to your sample size or environment
- Series production of proven designs

any cell format

pellet

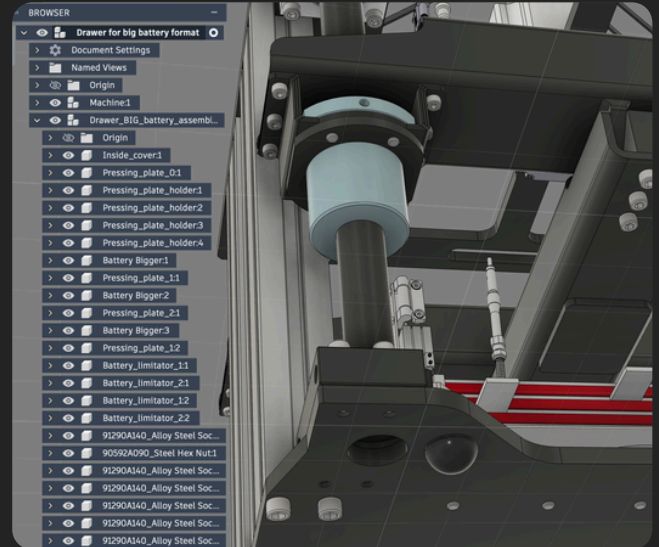
coin

pouch

cylindrical

prismatic

solid-state



what makes the difference

Not from scratch

We adapt the ASC line: the same frame, control boxes, swelling and mapping sensors already used in 35+ published studies. Less risk, faster delivery.

Easy to use, in the lab or on the line

Simple assembly, few tools, fits a glove box. Analog output works with the cycler, potentiostat or software you already have, in a research lab or an industrial test bench

One jig or a batch

Our supplier network lets us make a single prototype or a full batch with the same quality.

Confidential

Your drawings stay yours. We can sign an NDA.

Made in France

Every setup is validated before shipping and covered by a 24-month warranty.

Support after delivery

When your protocol changes, we add sensors or swap springs and sleeves instead of building a new setup. Answer within 24 hours.

to get a first answer in 24 hours, send us

Cell	format, dimensions, tab position, chemistry
Test conditions	pressure or force range, mode (fixed thickness / fixed force / or hybrid), temperature control
Data	what to measure: pressure, swelling, mapping, temperature, gas
Lab setup	cycler or potentiostat, glove box constraints, quantity needed

Send us a drawing or a cell spec. First feedback within 24 hours.

operations@sphere-energy.eu