Introduction to the Press Machine

NIIGATA Niigata Co., Ltd.

In Niigata, we manufacture custom experimental equipment, as well as undertake experiments using it and collect data.
Let me introduce a part of our press machine. If you have any issues during development, please do not hesitate to contact us first.

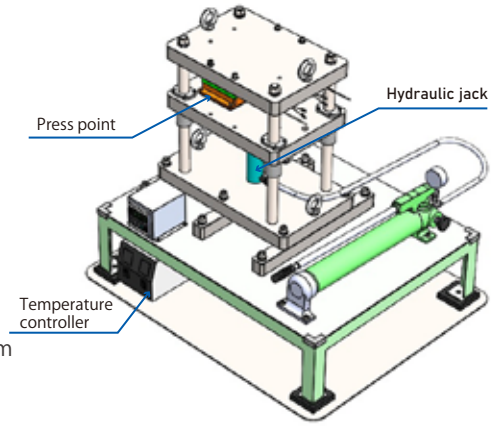
Heat Press machine

This device can apply heat and pressure to samples while controlling and monitoring both.

Examples of Use

Adhesion of resin sheets:
The resin sheets are adhered while maintaining strength and preventing wrinkling through temperature control.
(The sample is provided by customer)

Maximum load：10 tons
Maximum temperature:：200℃
Dimensions of the sample press point：350mm x 150mm



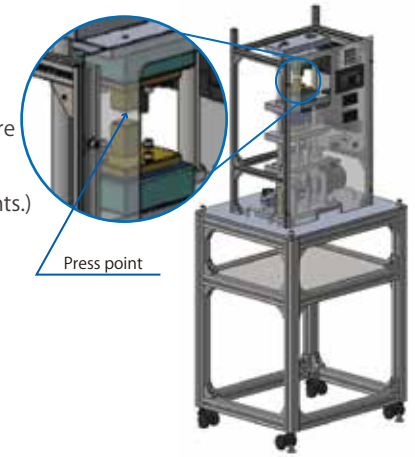
Voltage-Press machine

This device can apply pressure to a sample and monitor displacement while applying current and voltage.

Examples of Use

A test piece of hydrogen fuel cell material is subjected to pressure and measured for its resistance.
(Resistance is measured by commercial measurement instruments.)
(The sample is provided by customer)

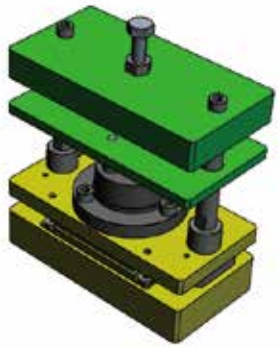
Maximum load：2000N
Maximum output voltage：30V
Maximum output current：2.0A
Dimensions of the sample press point：18mm x 18mm



Restraining jig with load cell

Product Overview

This jig can measure the pressure changes in the battery cells caused by stress applied to the battery using a load cell.
The battery material can be restrained by hand-tightening screws.
Load, work size, and operating temperature can be customized according to the application.



Medium-sized restraining jig

Product Overview

This jig allows materials to be placed in a temperature chamber while being restrained.
It is possible to remove a load cell before placing it in a temperature chamber, allowing the use of non-heat-resistant load cells.
Additionally, one load cell can measure multiple jigs.