Battery film peeling device

Can electro-capillary peeling be used for reusing soft materials?
This work shows the great potential of the electro-capillary peeling method to provide a simple way to transfer films and facilitates valid avenues for reusing soft materials. Current methods for thin film peeling suffer from limitations because of complicated preparations and the limitations of applied films.

Can electro-capillary peeling be used to detach a thin film?
For some thin films vulnerable to water, the electro-capillary peeling method could be applied to detach them using organic solvents, such as alcohol, acetone, and glycerol solutions (Supplementary Fig. 13). Finally, the electro-capillary peeling method could also easily detach fully attached micro/nanofilms due to the special peeling mode.

What is electro-capillary peeling?
Unlike the complicated modification of the bonding layer and applied film restriction of capillary peeling,the electro-capillary peeling method is an active detaching approach with a direct current (DC) supply powerand can be applied to a broad range of films,even in hydrogels of high adhesion stress.

How to Peel PDMS film from ITO glass?
Ultimately,the experimental setup and the critical peeling voltage indicated that the electro-capillary peeling methodcould easily peel the PDMS film (thickness of 100 um and elastic modulus of 1.0 MPa) from the ITO glass by using a 0.7 V power supply (corresponding to Figs. 1,4).

Is electro-capillary peeling suitable for stronger interface detachment?
It was inferred from the working mechanism that the applied voltage could be increased to detach thin film with a strong bonding layer,indicating that the electro-capillary peeling method would be suitable for stronger interface detachmentthan the capillary peeling approach.

Does electro-capillary peeling remove wet adhesion?
The water blister and peeling test presented that the electro-capillary peeling method readily detaches the film of the wet adhesionfrom 37 to 3656 mJ m -2 (Supplementary Tables 1 - 3).

The invention provides a method for testing the peeling force of a lithium battery adhesive and a foil, which is characterized by comprising the following steps of: the method comprises the ...

The automatic peeling machine for cylindrical batteries is a specialized automatic device designed specifically for removing the outer PVC film of 18650 ...

The present invention relates to an apparatus for removing a touch panel protective film, and more particularly, to reverse the fixing plate fixed by vacuum suction to the upper surface of the ...

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The utility model provides a cut mechanism, shell membrane device and battery piece lamination equipment and can cut the carrier film, make the tie coat of carrier film form the incision to peel ...

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The film-stripping method comprises the following steps of conveying the battery to a conveying mechanism, cutting a protection film on the surface of the battery, and removing the cut...

Download scientific diagram | Schematic illustration of the peeling-off process of thin film batteries using encapsulation film. from publication: Direct Bonding and Debonding Approach of ...

The present invention relates to an insulating layer peeling device for a pouch-type battery cell and to a peeling method using the same, capable of efficiently peeling a release paper ...

The waste material adopts special environmental protection recycling system device. Technical Pa rameters. ... Battery Cell Automatic PVC Film Peeling Machine; ... Previous. 21700 ...

A technique for peeling from the band-like base a light shielding adhesive sheet which is called a RIM sheet and is used for a backlight unit for a module for a liquid crystal panel. A film peeling ...

Material selection for separator film is essential for battery integrity as any mechanical performance issues can increase the potential for internal short circuits, which can lead to ...

The production line includes a complete set of process equipment for battery cell rework, including adhesive removal from battery cell structures, film peeling, automatic wrapping, and electrode ...

The present invention relates to an insulating layer peeling device for a pouch-type battery cell and to a peeling method using the same, capable of efficiently peeling a release paper...

The invention discloses a power battery disassembling and recycling process, which comprises the steps of peeling a power battery, then discharging the power battery, automatically and ...

This invention aims to provide a film peeling device capable of preventing broken pieces of a film from remaining on a substrate by preventing the film from breaking in peeling off the film, even ...

Disclosure of the Invention A problem of the present invention is to provide a film peeling apparatus capable of preventing breakage of a film on a substrate by preventing breakage of ...

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