

Cell Eraser

【Eraser for white board which is made from biodegradable material】

1. INTRODUCTION

Asahi Fiber Industry's Cell Eraser is replaceable cartridge type eraser made from biodegradable fiber of Polylactic acid fiber. Fibers are slivered and adhered by heat without any binder. Because fibers contact vertically to erasing surface, its cleaning performance will not change since dust came out from erasing are kept in the space between fibers, and the dust will not fall on floor. This cell is available to replace, replacement cell are also on sale.

The holder is made with soft material so it will be not broke easily by falling and it fits hand with this shape. There are 4-cells type, double cells type and single cell type, It is selectable according to board size.

We can correspond with customer's required volume from small lot to large lot by making products from slivering fibers to foaming goods by using original machine which is designed & manufactured by us. Fig1. is products of Cell Eraser.



Fig1. Products of Cell Eraser
Single cell, Double cells, Four
cells type.

2. CHARACTERISTICS OF CELL ERASER

① It is an environment friendly eraser since it is made from the polylactic acid fiber which is a biodegradability fiber.

② Fibers are slivered and adhered by heat without any binder. Because fibers contact vertically to erasing surface, its cleaning performance will not change since dust came out from erasing are kept in the space between fibers, and the dust will not fall on floor. Fig2. shows how fibers keeps black and red color erasing dust



Fig2. Cross section of Eraser
[Holdings of dust from erasing]

③ Cell Eraser is the product applies the technology of the fiber rod by ASAHI FIBER INDUSTRY. Therefore, stiffness of fibers are kept long time, so its cleaning performance will not change long time.

④ Cell Eraser is structured as holder and cell. And cell can be apart from holder and replaceable. Cell can be used at both end so it does not need to be replaced often.



Fig3. Holder and Eraser

Fig3. shows the image of Cell Eraser of 4cells type.

⑤ It is easy to hold by hand and received good design award in Japan.

The Good Design Award is Japanese comprehensive design evaluation and commendation system, operated by the Japan Institute of Design Promotion (formerly known as the Japan Industrial Design Promotion Organization). The system has its origins in the “Good Design Selection System” (known as the “G-Mark System”) instituted by the Ministry of International Trade and Industry of Japan in 1957.

3. SPECIFICATION OF CELL ERASER

Material		Specifications	Holder color
Holder	Eraser		
Elastomer	Polylactic acid fiber (biodegradable fiber cell)	① 4 cells type ② Double cells type (2 stocks for replacement as an extra) ③ Single cell type [with magnet] (1 stock for replacement as an extra)	Orange Blue Green

4. USAGE OF CELL ERASER



Fig4.
White board and
Cell Eraser

5. HOLDING OF DUST AT GAP BETWEEN FIBERS FROM ERASING

5-1) Observations of erasing surface by microscope

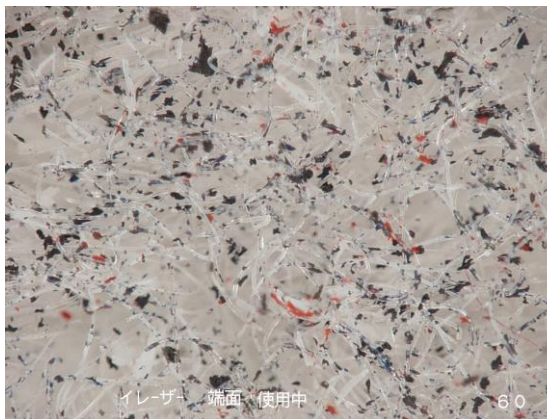


Fig5.
Image of erasing surface
[Erased only few time]
Magnification : $\times 60$

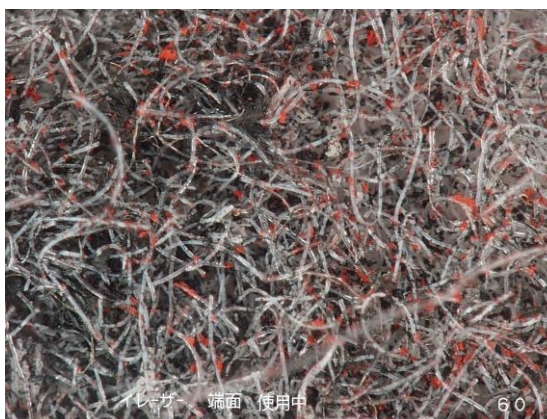


Fig6.
Image of erasing surface
[Erased many time]
Magnification : $\times 60$

5-2) Cross section of Eraser

Fig. 7,8,9 shows the cross section of erasing end of cell apart from holder

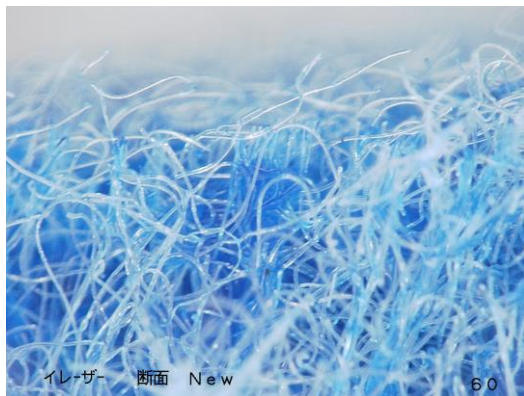


Fig7.
Cross section of New(unused) eraser
Magnification : $\times 60$
[Fibers are stained blue for visibility]

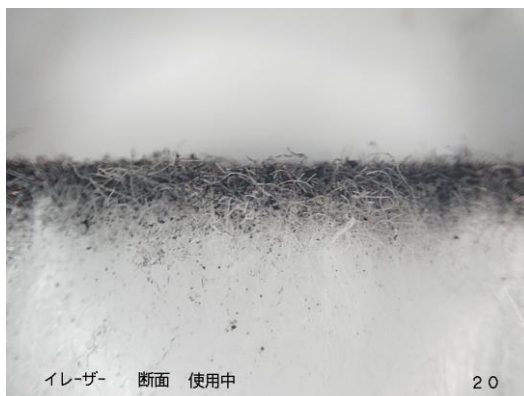


Fig8.
Cross section of used eraser
Magnification : $\times 20$
Dusts invade 2.5mm~5mm from surface.

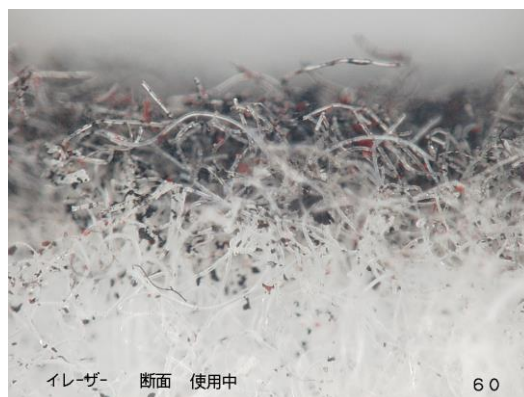


Fig9.
Cross section of used eraser
Magnification : $\times 60$