



# Application News

Rapid Prototyping (Wood molding for vacuum forming a package)

RIO VIVID-001

## Introduction

How do you save time, money and man hours when producing vacuum packaging like blister packing? Use Minolta's VIVID 700 non-contact 3D color digitizer. It is easy to design the most complicated shapes of the plastic packaging by using the VIVID 700. And, it is economical, even if you only require a limited quantity of a large variety of products.

## Work-Flow

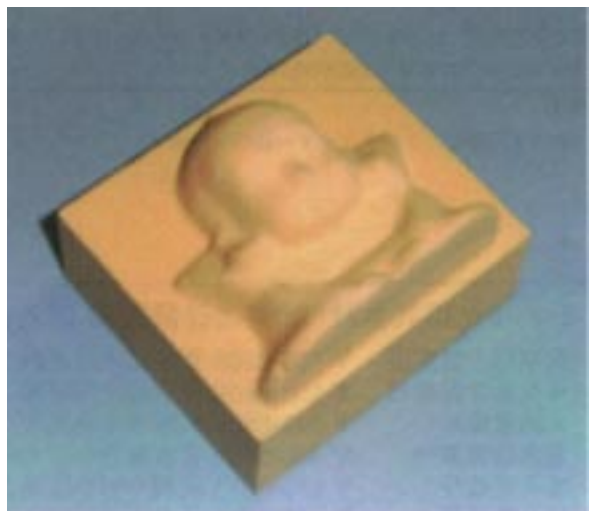
### 1) Scanning & Editing

The VIVID 700 takes only 0.6 seconds to complete a scan. You can scan the actual product you are packaging, or a mock up, to construct a polygonal mesh image. If the product's surface is not suitable for scanning, (e.g., black or dark blue in color, transparent or mirror-like,) it is necessary to cover the surface with white matte paint before scanning. Once the scan is complete, you can edit the polygonal mesh image using your PC and the utility software that is bundled with the VIVID. After merging, modeling, and scaling to your requirements, you can take the final image and save it as a DXF file.



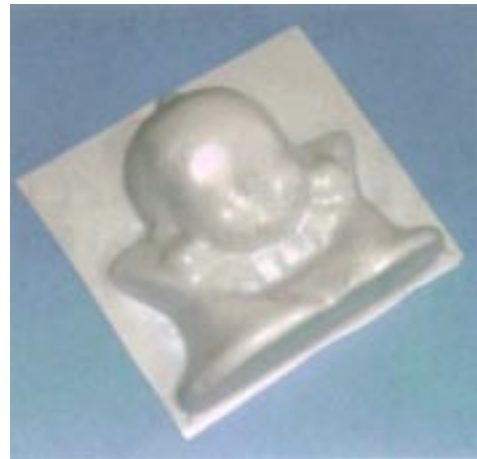
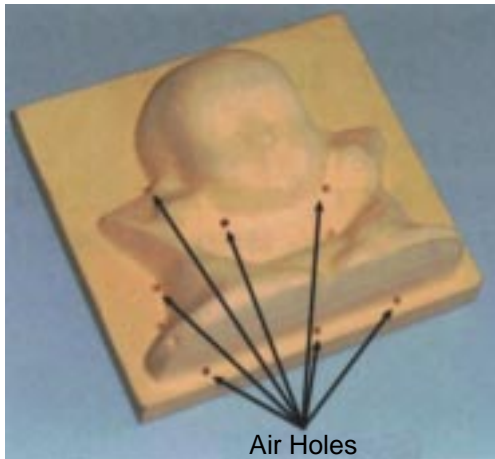
### 2) Making a Wood Mold

Make a wood model for the package from the data that was constructed in item (1) above. Import the converted data into CAM software called "MAQUETTE Volume" and adjust the size, as you require. (You can create a female mold by reversing the shape of the data.) Next, input the parameter of the NC cutting machine to the MAQUETTE Volume to calculate the path of the cutting tool.

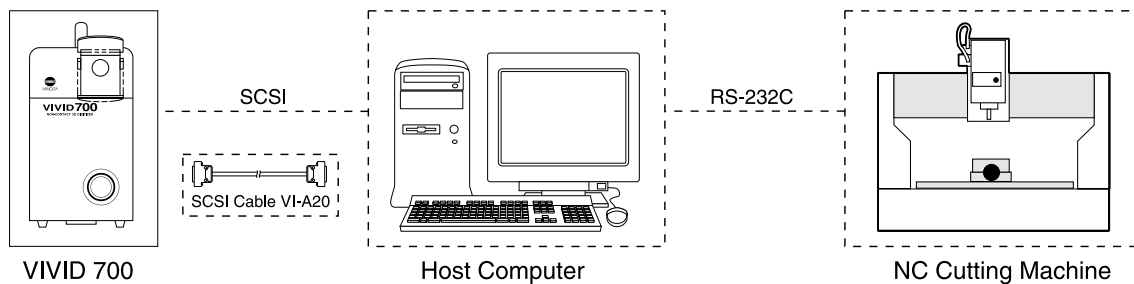


### 3) Vacuum-Forming a Package

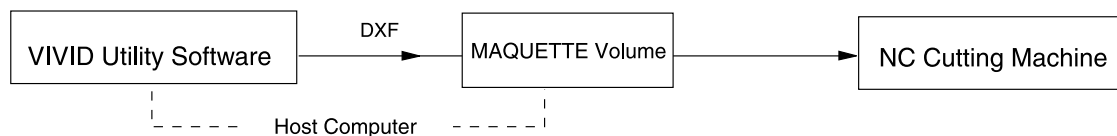
Produce a plastic (blister) package by using the wood mold in (2) above. After making some small air holes in the wood mold, set it on the vacuum forming machine. The machine will take the plastic and heat-soften it so that the plastic conforms to the shape of the wood mold. Next, let the air out of the plastic package by puncturing holes above the air holes in the wood model. Cut the edge around the plastic and remove from the wood model and machine.



### <System Chart>



### <Data Flow>



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VIVID 700 WEB SITE: <http://www.minolta.co.jp/japan/rio/vivid/>

*VIVID 700 is sold with the name of VI-700 in Europe.*