

Rapid-prototyping (Stereo Lithography System: STL)

RIO VIVID-002

Introduction

There is a rapidly increasing demand to make replica models of various kinds of objects. Typical examples include new product design, medical applications such as prosthesis, simulation of rare artifacts, etc. By utilizing Minolta's non-contact 3D Digitizer, VIVID 700, you can easily and efficiently create, view, edit and scale these models on your CRT.

Work-Flow

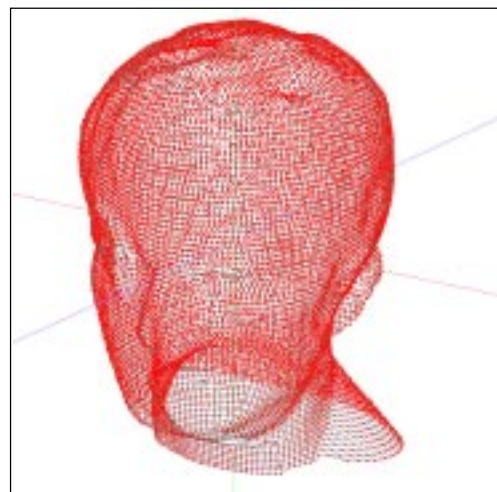
1) Scanning

First, scan the object that you would like to replicate. The VIVID 700 can take a single scan in 0.6 seconds and convert all the scanned images into a polygonal mesh model. If the object's surface is not suitable for scanning (e.g. black color / dark blue color / transparent / mirror-like) it is necessary to cover the surface with white matte paint before scanning. <Fig.1> <Fig.2>



2) Editing

Next, edit the constructed polygon mesh data with the utility software that is bundled with the VIVID 700, or use Rapid Form 2000. After merging and cleaning the polygonal data, save the image as an STL file. <Fig.3>



3) STL

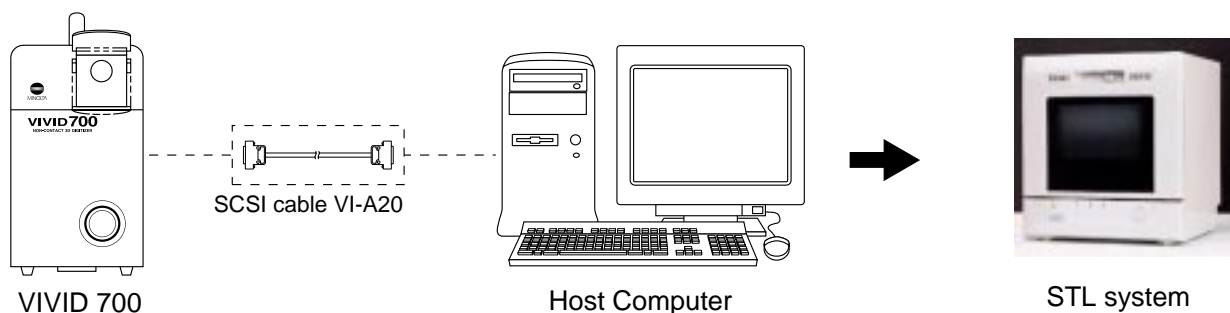
Finally, import the converted data into an STL system to render a finished model that replicates your original object.

You can utilize STL system for a variety of purposes, such as:

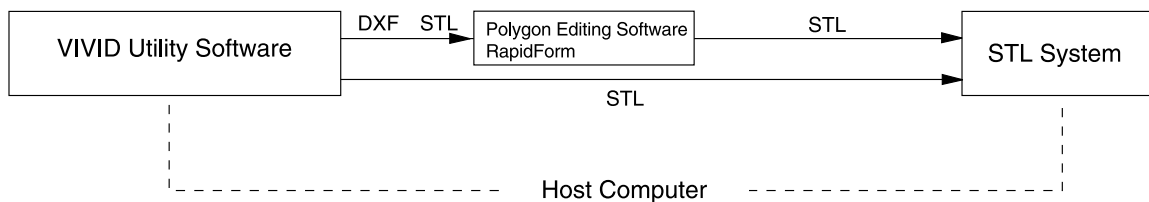
- Checking and modifying industrial products or pottery design
- Producing a prototype for evaluation or presentation
- Copying a cultural or historic work of art for preservation or display
- Creating models for medical research, e.g. limbs, teeth, cranium, etc.
- Making toys, souvenirs, promotional items
- Educating people in the methodology of work-flow production



<System Chart>



<Data-Flow>



<Contact address>

Minolta Co.,Ltd. Radiometric Instruments Operations 3-13,2-Chome,Azuchi-Machi, Chuo-Ku, Osaka 541-8556, Japan
Minolta Corporation / ISD 101Williams Drive, Ramsey, New Jersey 07446, USA. Phone:201-529-6060, 1-888-ISD-COLOR FAX:201-529-6070
Minolta Europe GmbH Minoltaring 11, 30855 Langenhagen, Germany PHONE:0511-74040 FAX:0511-741050
Minolta France S.A. 365-367, Route de Saint-Germain, 78424 Carrières-Sur-Seine, France PHONE:01-30866161 FAX:01-30866280
Minolta U.K. Ltd. Precedent Drive, Roocksley Park, Milton Keynes, MK13 8HF, England PHONE:01-908200400 FAX:01-908618662
Minolta Schweiz AG Riedstrasse 6, 8953 Dietikon Switzerland PHONE:01-7403727 FAX:01-7422350

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

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