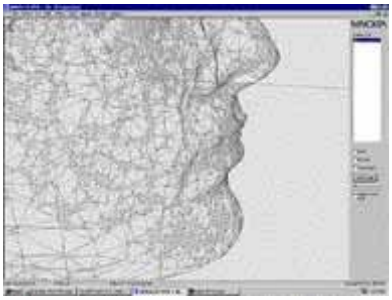
Virtual Kingdom of Beauty- The Making Of

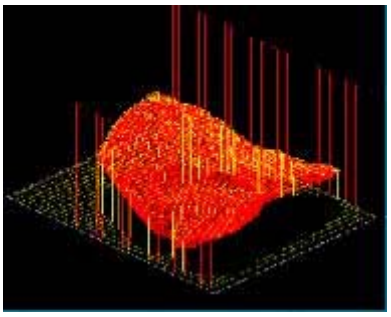
All faces and heads of 'live' people and the Roman and Greek statues were digitized with the Konica Minolta VIVID 700 3-D Laser Scanner.

As this scanner can be used 'on location' using the memory card function, all statues were scanned without first removing them from the museum.



The scanned data is converted to a polygon mesh and edited in the Konica Minolta VIVID software. Then directly exported to SoftImage 3D.

In SoftImage 3-D the data was collated and rendered with unusual texturing and light effects. These rendered digital images provided the basis for the computer art holographic projections.



The scan data was imported to Mechanical Desktop as dxf file from the VIVID software. This CAD/CAM programme calculates the tool paths for the CNC milling.

A 3 axes milling machine was used to machine cut the contour paths of the models into a foam block. The data from the front and back of the same head were separated and separately milled.

The foam heads halves were glued together and finishing touches done

by hand. Then plaster forms were created from these foam originals.

Wax was then poured into the plaster form to create a wax model. After cooling down the wax model was removed, small bubbles and surface imperfections were improved by hand.

Using the final wax model as a master the final plaster mould was created. Some channels were made in the plaster mould so when the wax was heated it could run out easily.

After all the wax had flowed out, heated liquid bronze was poured into these forms

When the bronze model had cooled, its surface was manipulated by hand to become smooth and shiny. Various acids were used as weathering agents and applied to the surface of the finished model.