

Beyond Documentation:

NX as a Creative Tool



Formation Design Group

what we do ...



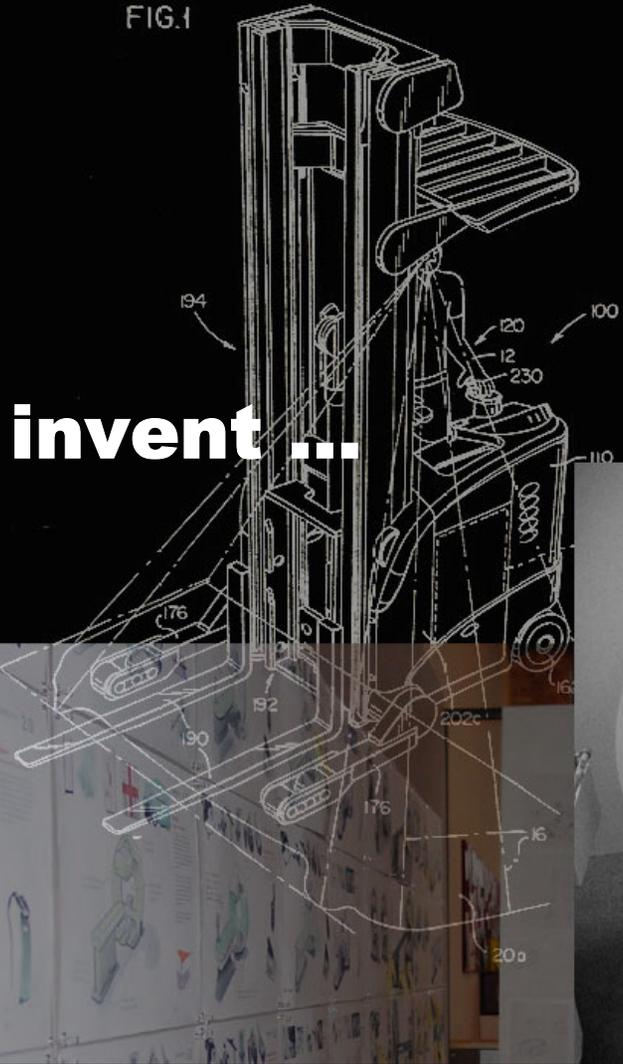


explore ...

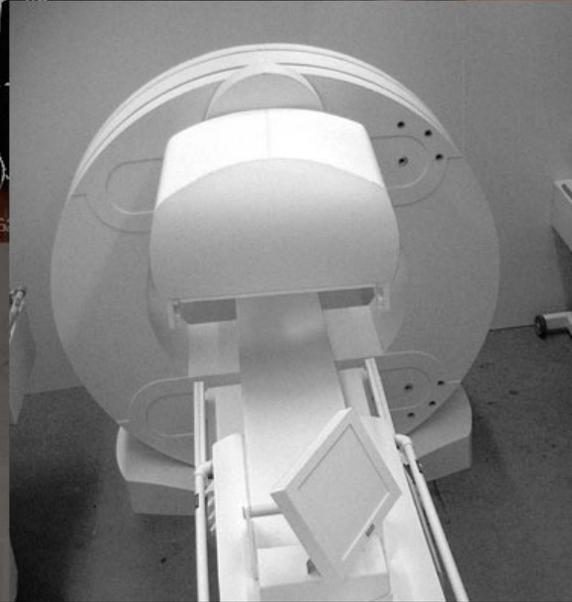
What do they want?
Generation Y



FIG.1



invent ...



QUICK RELEASE UPPER TONGUE
LOWER PANT LEG CATCH



develop ... great products



Case Study:

Sport Motorcycle Boot

Design Goal:

Develop a boot that incorporates most of the functional attributes of a racing boot into a boot more suitable for the urban sport rider.



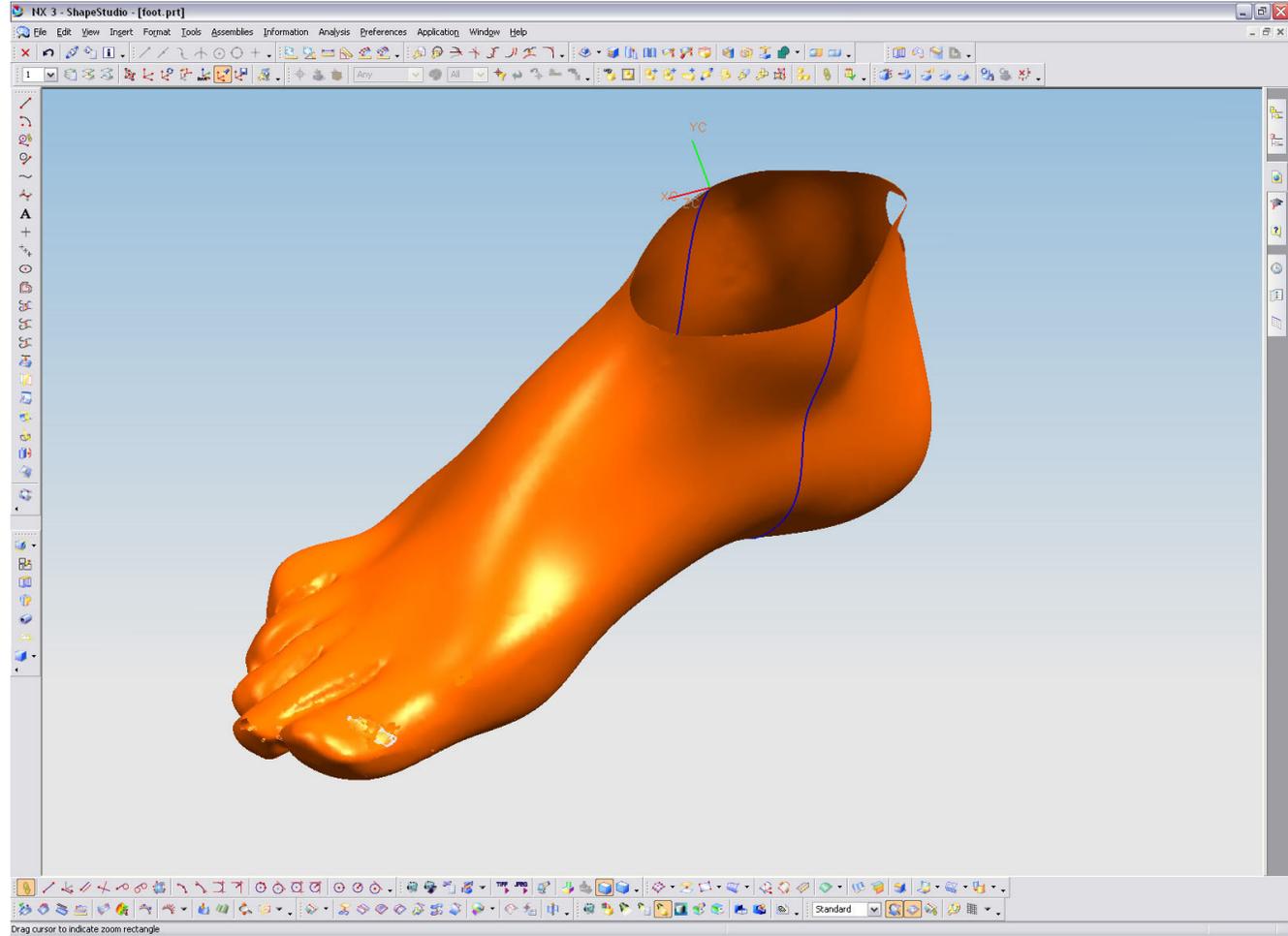
Research:

The first phase of the process is the collection of market info. This includes evaluating existing product offerings as well as looking for inspiration outside of the motorcycle boot market.



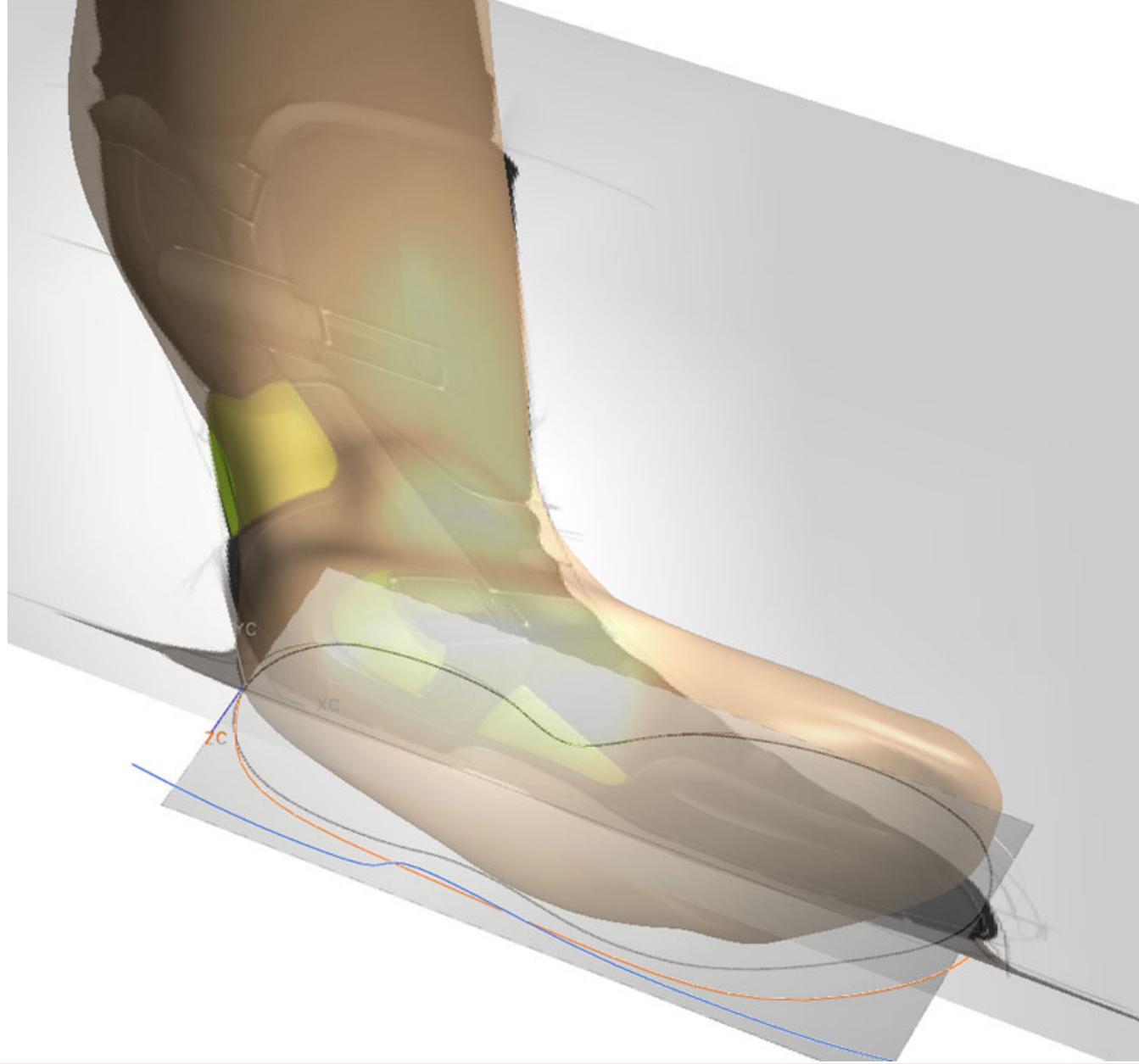
Research:

The second phase of the research is to define detailed design criteria including the ergonomic reference data for the shape of the foot. This data was created via a 3D scanning system and imported into NX as a .stl file.



Last Construction:

Using the scanned foot data and lower leg data for Jack, a parametric model of the last was built.



Sole Reference Data:

Sole outlines were traced & scanned. The scans contain X & Y reference dimensions.

The scans are brought into Shape Studio as tiff using the X & Y references to properly scale the soles relative to the last.



Last Construction:

With the last constructed, sketches are developed with export jpegs out of NX used as underlays.

This assures that the proportions of the sketches are accurate.



Concept Sketching:

Jpegs from NX serve as the sketch underlays during the concept phase.

Sketches are created digitally with Corel Painter software and Wacom Cintiq LCD tablets on the same machine running NX.



Concept Sketching:

Jpegs from NX serve as the sketch underlays during the concept phase.

Sketches are created digitally with Corel Painter software and Wacom Cintiq LCD tablets on the same machine running NX.



Concept Sketching:

Jpegs from NX serve as the sketch underlays during the concept phase.

Sketches are created digitally with Corel Painter software and Wacom Cintiq LCD tablets on the same machine running NX.



Concept Sketching:

Jpegs from NX serve as the sketch underlays during the concept phase.

Sketches are created digitally with Corel Painter software and Wacom Cintiq LCD tablets on the same machine running NX.



Concept Sketching:

Jpegs from NX serve as the sketch underlays during the concept phase.

Sketches are created digitally with Corel Painter software and Wacom Cintiq LCD tablets on the same machine running NX.



Concept Sketching:

Jpegs from NX serve as the sketch underlays during the concept phase.

Sketches are created digitally with Corel Painter software and Wacom Cintiq LCD tablets on the same machine running NX.



Concept Sketching:

Jpegs from NX serve as the sketch underlays during the concept phase.

Sketches are created digitally with Corel Painter software and Wacom Cintiq LCD tablets on the same machine running NX.



Concept Sketching:

Jpegs from NX serve as the sketch underlays during the concept phase.

Sketches are created digitally with Corel Painter software and Wacom Cintiq LCD tablets on the same machine running NX.



Concept Sketching:

Jpegs from NX serve as the sketch underlays during the concept phase.

Sketches are created digitally with Corel Painter software and Wacom Cintiq LCD tablets on the same machine running NX.

EXOSKELETAL DESIGN



*STRETCH WRAP
2-3 TIMES AROUND
TIGHTEN W/ LOOP
QUICK PANT LEG CATCH*



Concept Sketching:

Jpegs from NX serve as the sketch underlays during the concept phase.

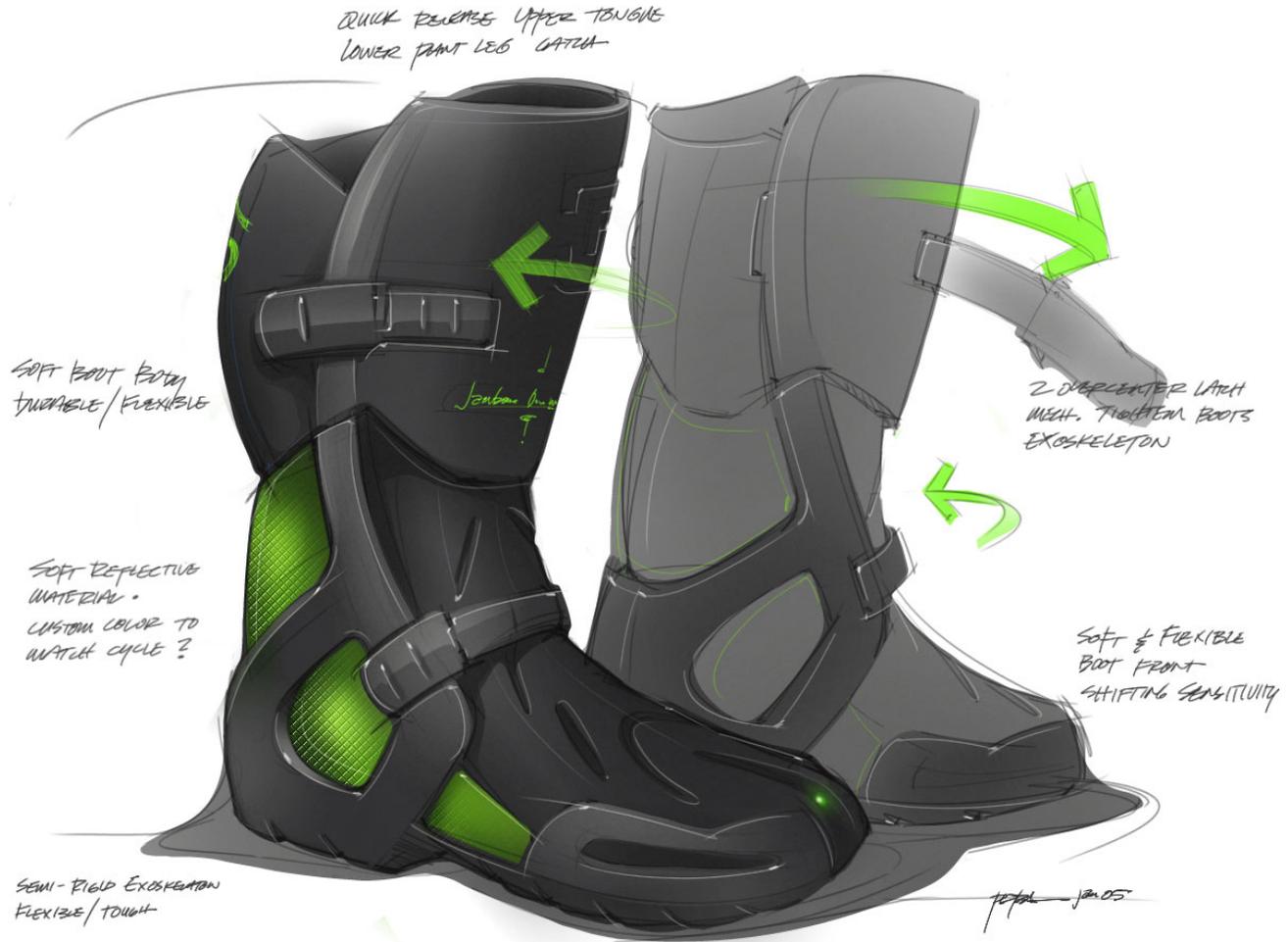
Sketches are created digitally with Corel Painter software and Wacom Cintiq LCD tablets on the same machine running NX.



Concept Sketching:

Jpegs from NX serve as the sketch underlays during the concept phase.

Sketches are created digitally with Corel Painter software and Wacom Cintiq LCD tablets on the same machine running NX.



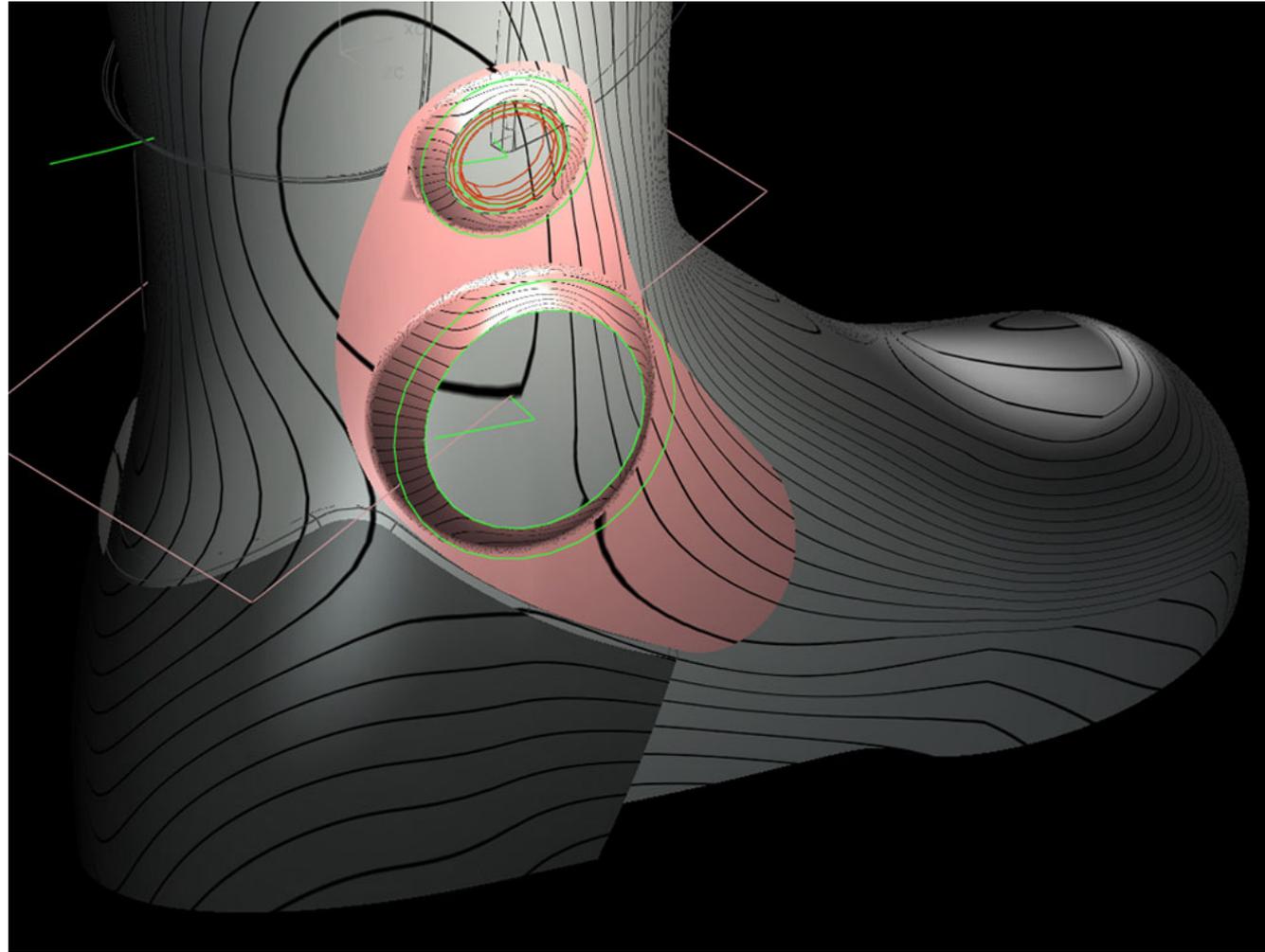
NX Modeling:

Painter sketches are imported into NX Shape Studio and become the starting point for curve development.



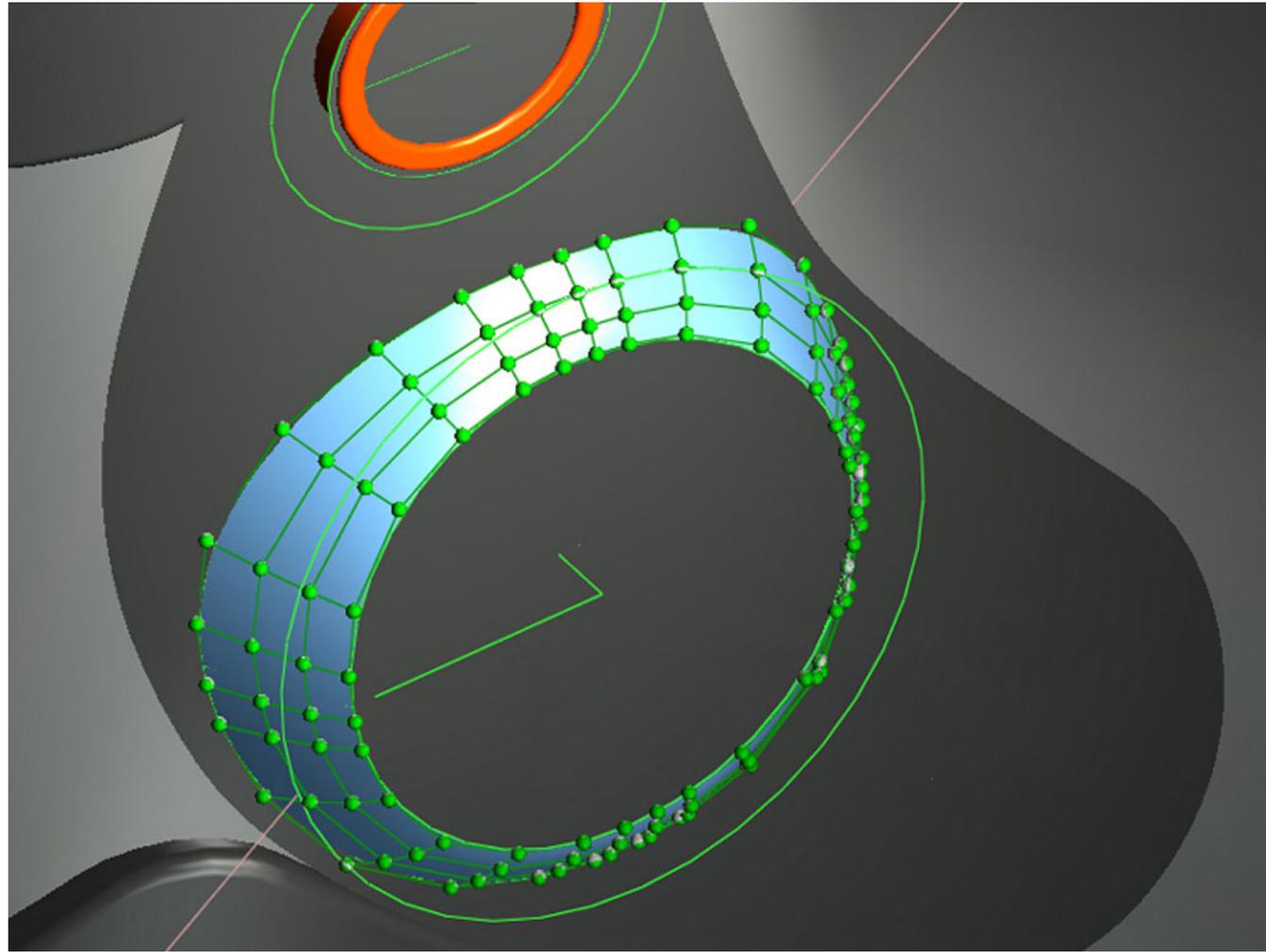
NX Modeling:

Painter sketches are imported into NX Shape Studio and become the starting point for curve development.



NX Modeling:

Surfaces manipulated
with NX Shape Studio
X-Form tool.



NX Modeling:

In process model rendered in NX Shape Studio. Throughout the development renderings such as this is brought into painter for further detail concept sketching.



NX Modeling:

In process model rendered in NX Shape Studio. Throughout the development renderings such as this is brought into painter for further detail concept sketching.



NX Modeling:

In process model rendered in NX Shape Studio. Throughout the development renderings such as this is brought into painter for further detail concept sketching.





NX Renderings:



NX Renderings:



NX Renderings:



Thank You

