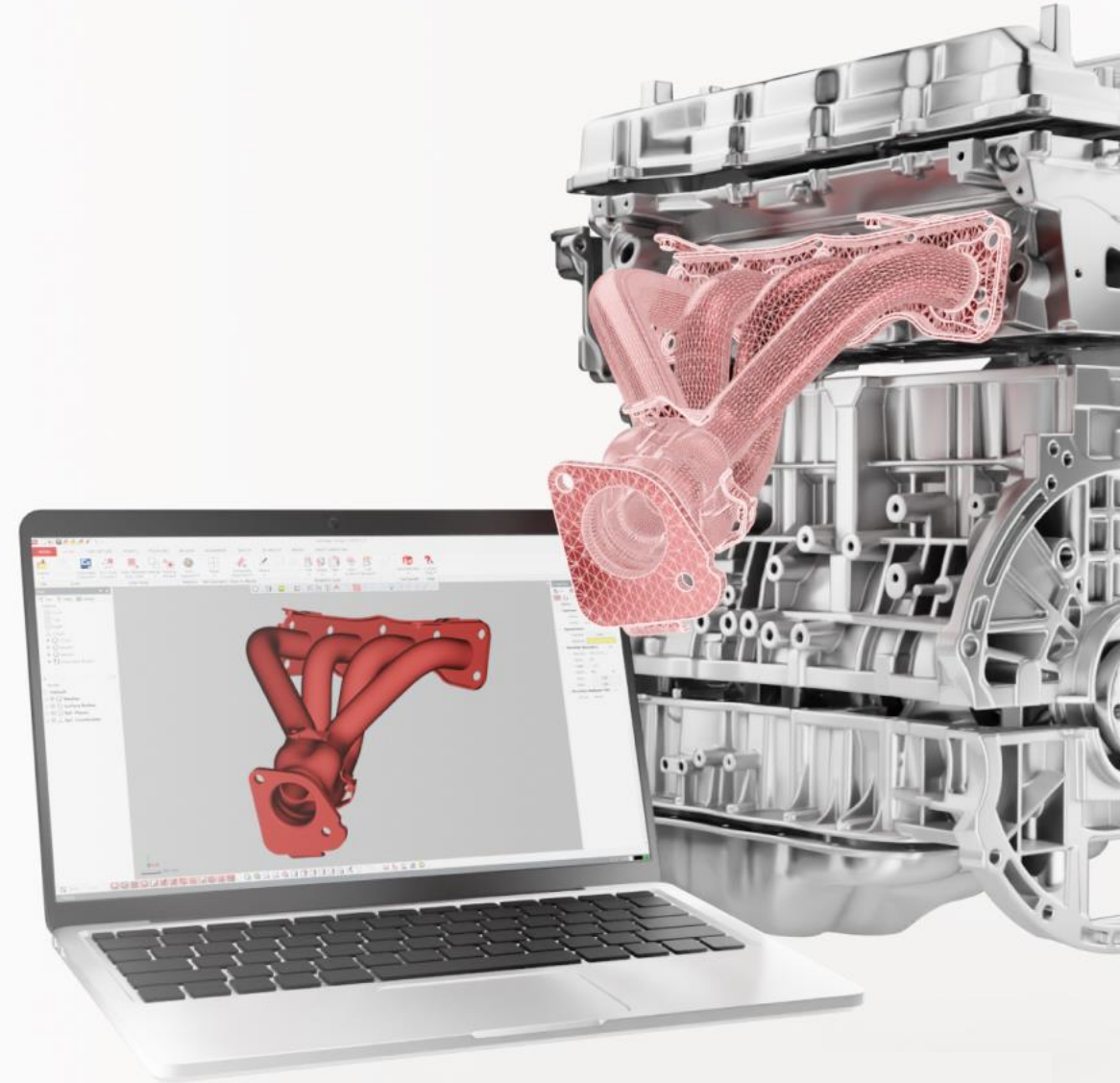




Geomagic Design X
The Ultimate 3D Scan-to-CAD Solution

Modeling Examples





Geomagic Design X

Architecture, Engineering and Construction

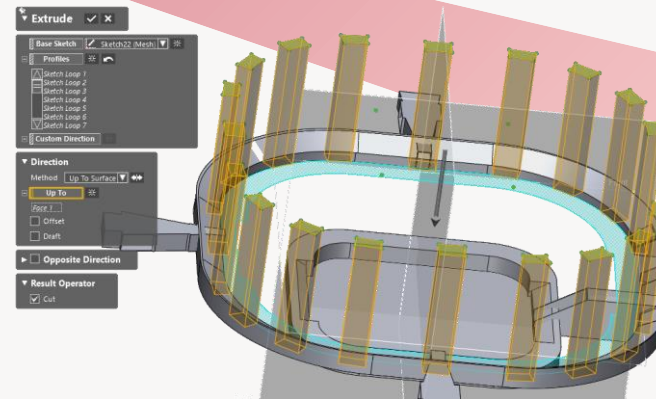
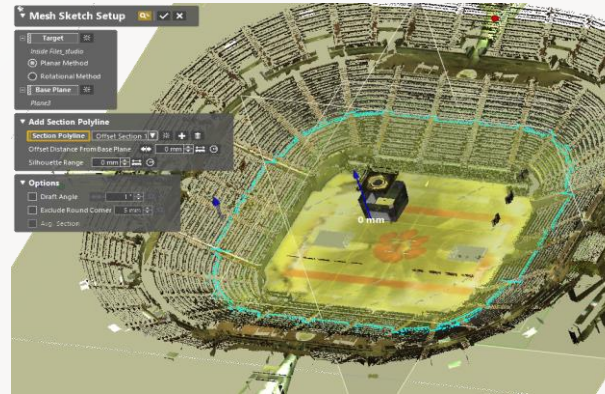
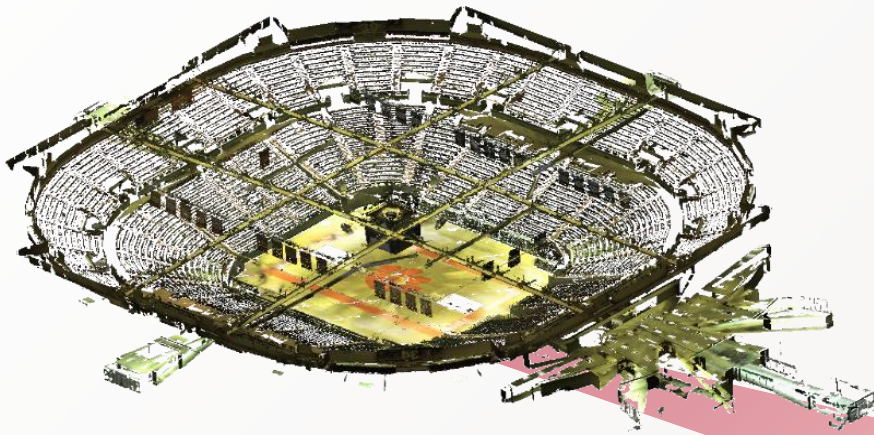
Stadium

As-Built Modeling for 3D Printed Replica

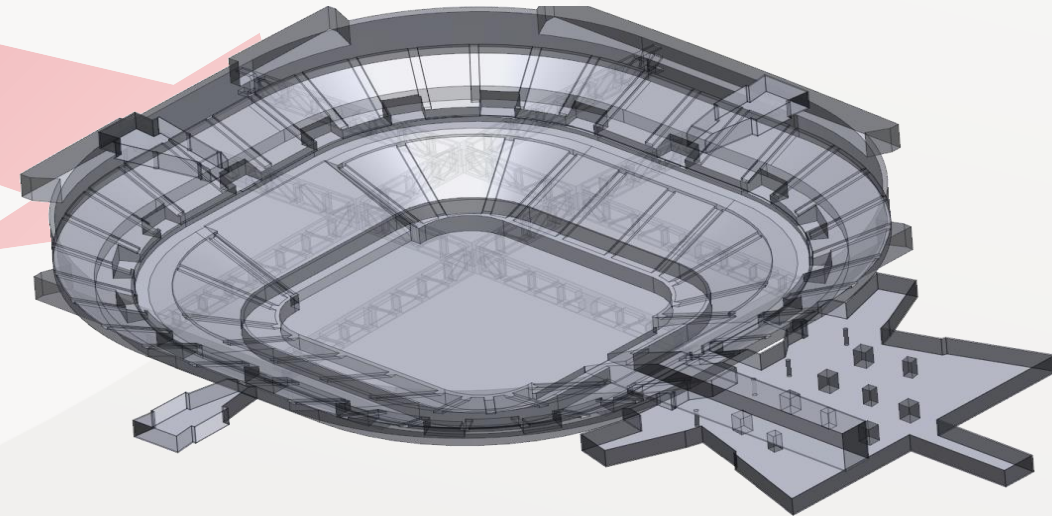
Dx

Why Geomagic Design X?

- Multiple Scan Station Alignment
- Survey Style Point Shaders
- Multiple Options for Mesh Construction on Challenging Data
- Large Scale Modeling
- Large Data Volume Handling
- Support for Target Systems
- Specialized Tools for Long Range Data
- Feature based CAD Modeling
- Downstream CAD Flexibility



Modeling time:
12 hours
Scanner:
Long-Range



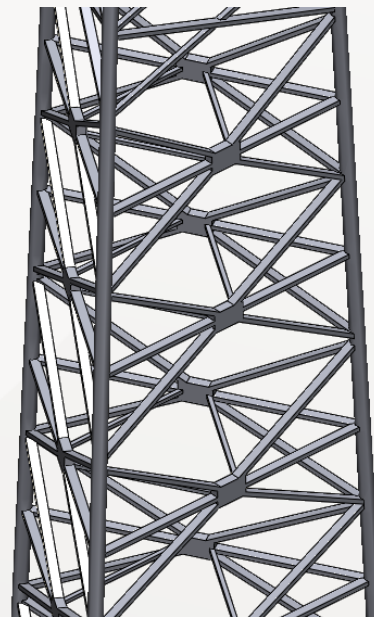
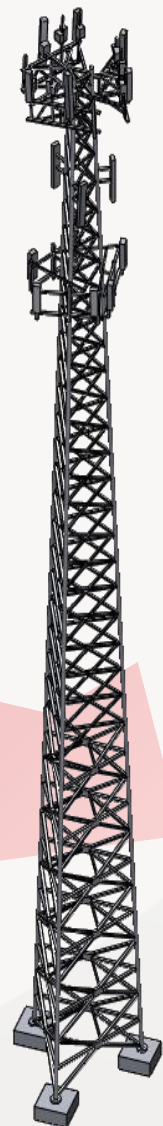
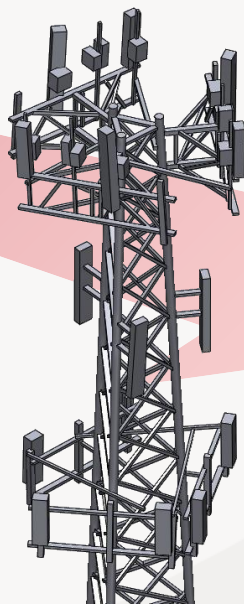
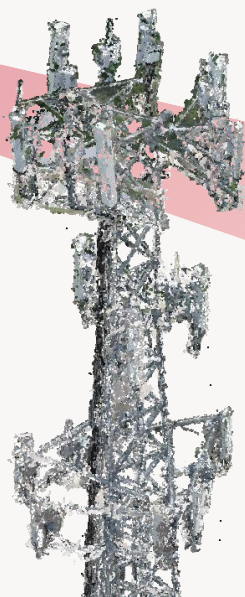
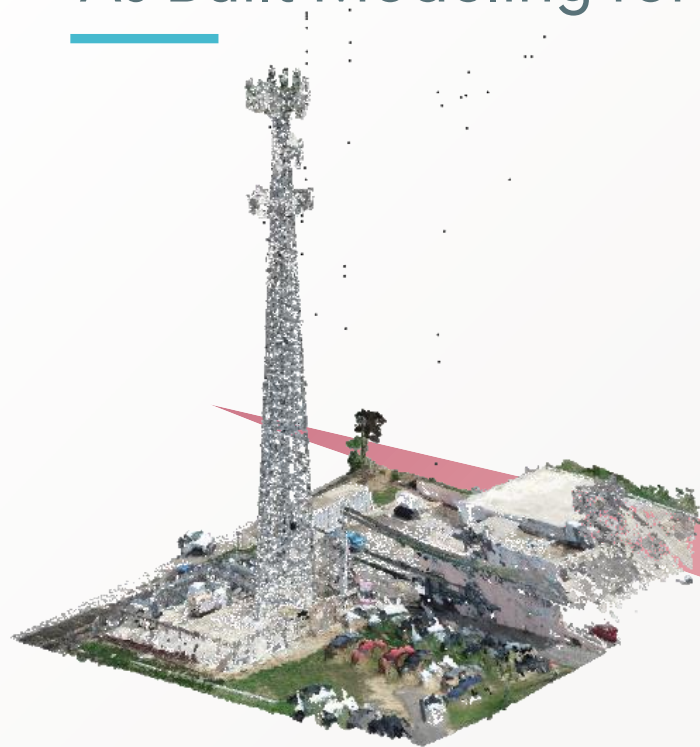
Cell Tower

As Built Modeling for Documentation and Retrofit

Why Geomagic Design X?

Dx

- Multiple Scan Station Alignment
- Survey Style Point Shaders
- Point Normal Recalculation
- Large Scale Modeling
- Large Data Volume Handling
- Specialized Tools for Long Range Data
- Feature based CAD Modeling
- Downstream CAD Flexibility



Modeling time:

7 hours

Scanner:

Drone

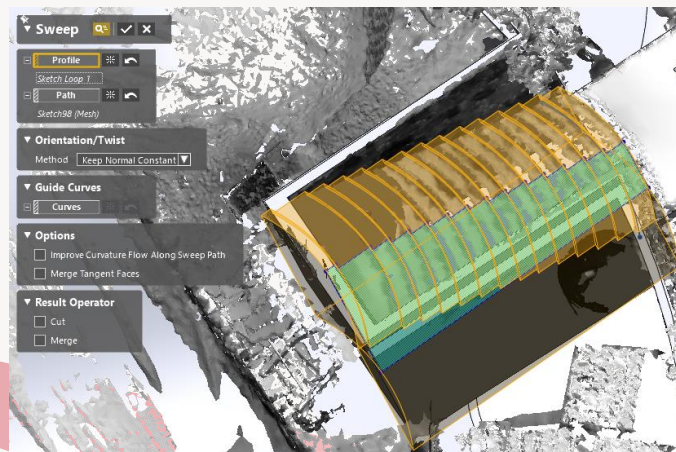
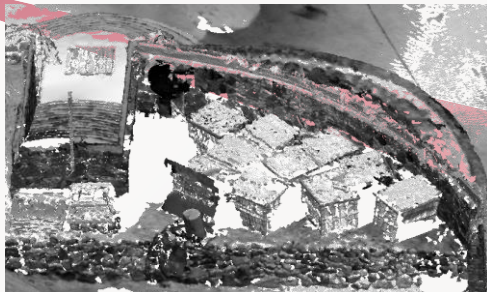
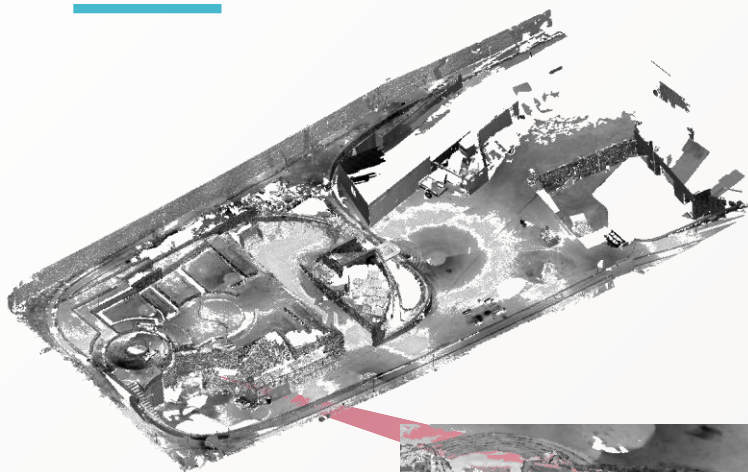
Construction Site – As Built Survey

As-Built Modeling of Landscape and Structures



Why Geomagic Design X?

- Multiple Scan Station Alignment
- Survey Style Point Shaders
- Multiple Options for Mesh Construction on Challenging Data
- Large Scale Modeling
- Large Data Volume Handling
- Specialized Tools for Long Range Data
- Feature based CAD Modeling
- Downstream CAD Flexibility

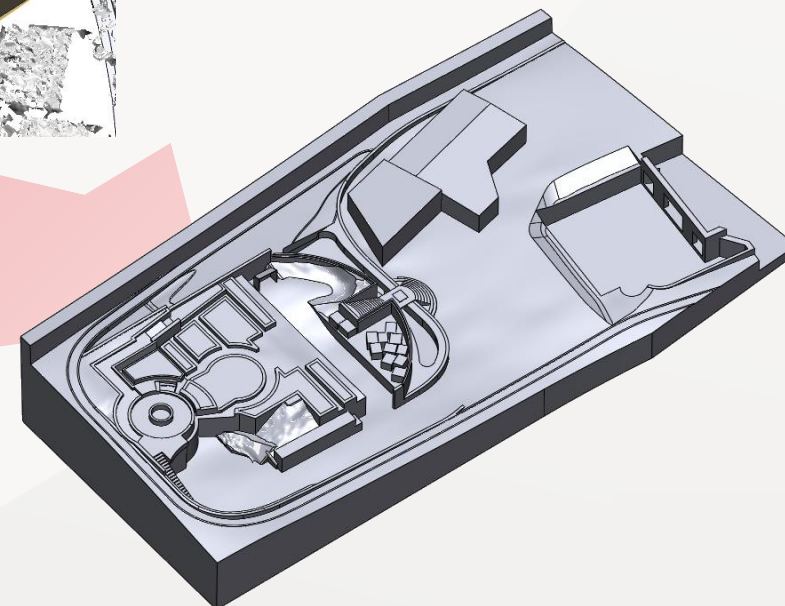


Modeling time:

12.5 hours

Scanner:

Long-Range



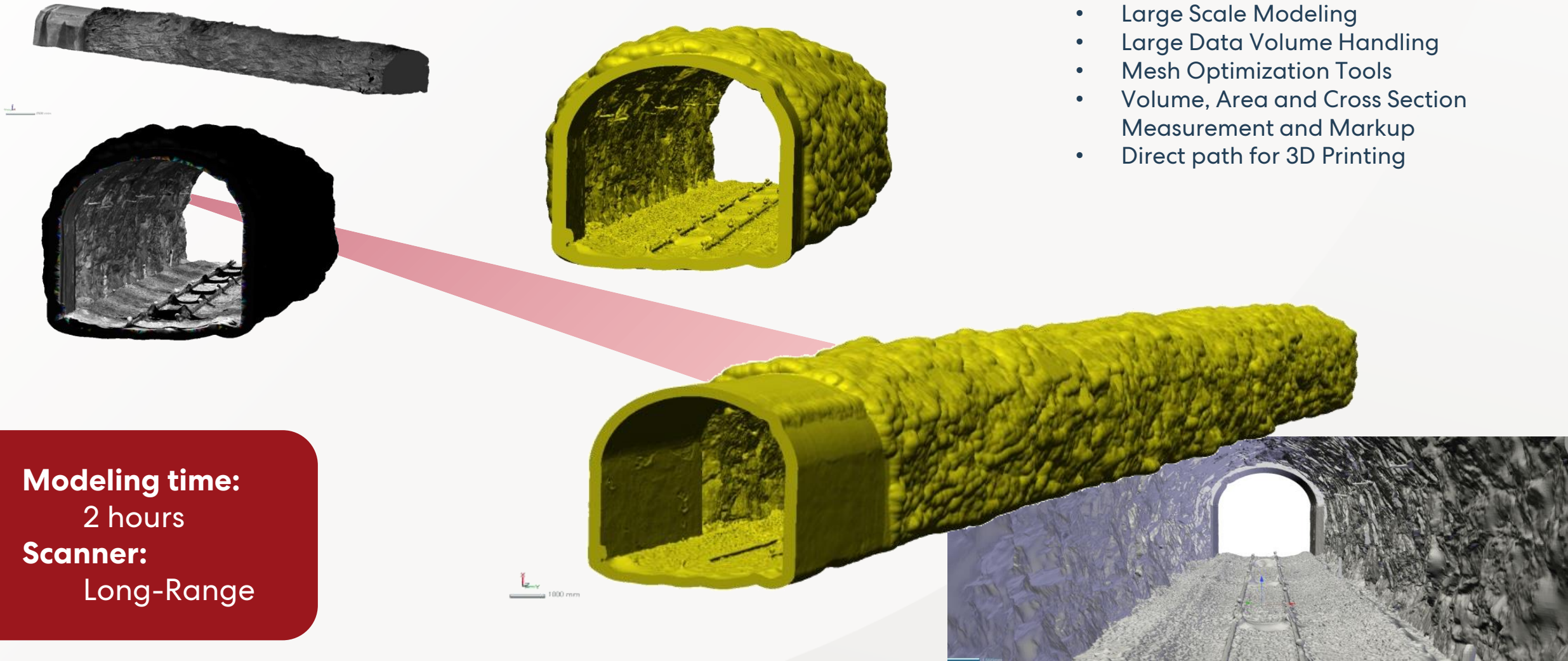
Tunnel

Volume, Area, and Shape Analysis

Why Geomagic Design X?

Dx

- Multiple Scan Station Alignment
- Survey Style Point Shaders
- Multiple Options for Mesh Construction on Challenging Data
- Large Scale Modeling
- Large Data Volume Handling
- Mesh Optimization Tools
- Volume, Area and Cross Section Measurement and Markup
- Direct path for 3D Printing



Modeling time:

2 hours

Scanner:

Long-Range



Geomagic Design X

Defense

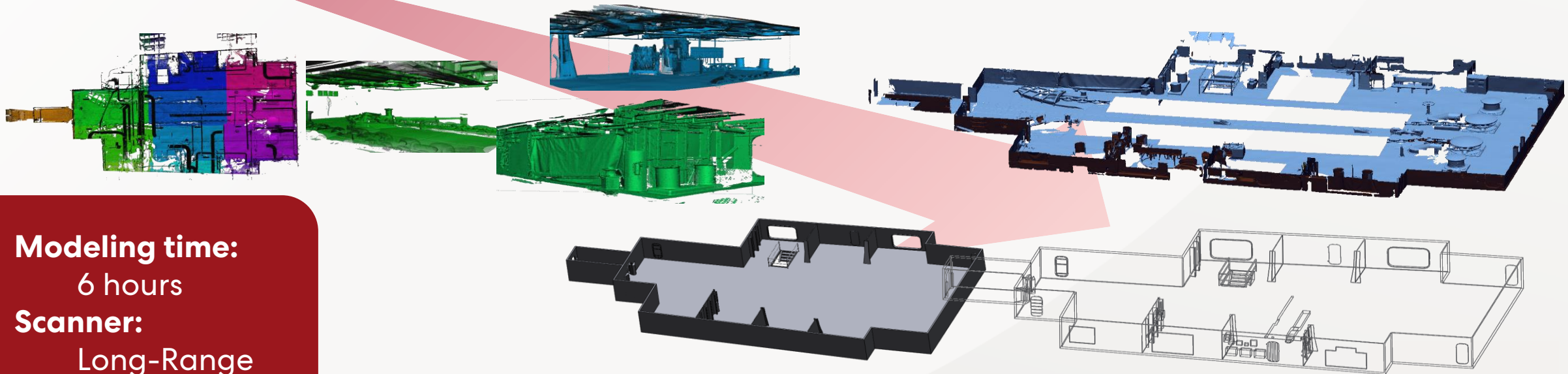
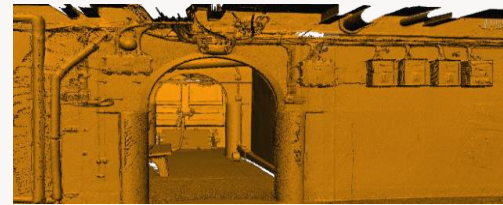
Aircraft Carrier

As Built Modeling for Documentation and Retrofit

Why Geomagic Design X?

Dx

- Multiple Scan Station Alignment
- Rapid, High Quality Mesh Construction
- Large Scale Modeling
- Large Data Volume Handling
- Support for Target Systems
- Specialized Tools for Long Range Data
- Feature based CAD Modeling with Wizards
- Downstream CAD Flexibility



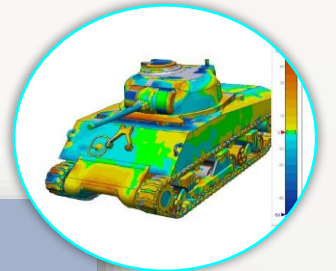
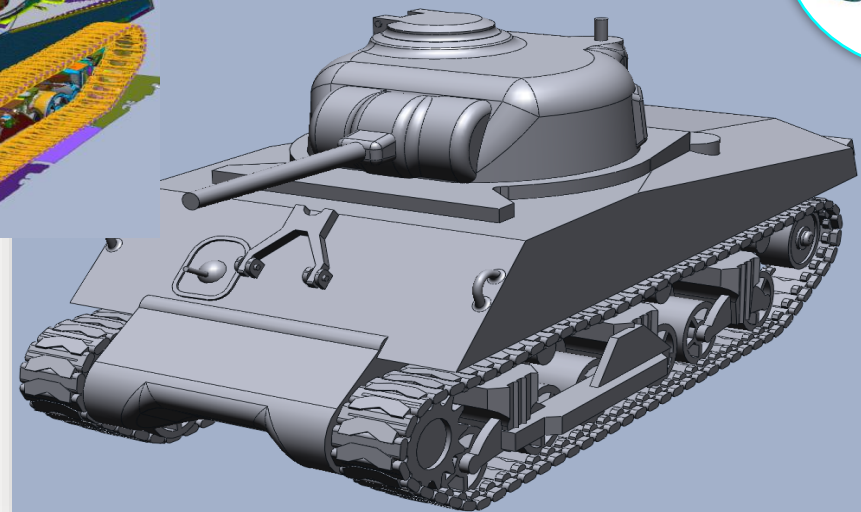
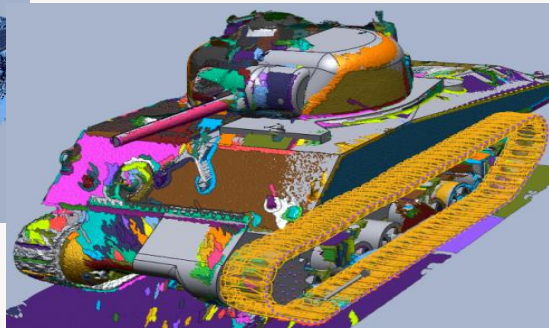
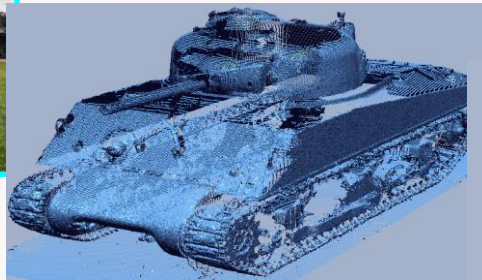
Modeling time:
6 hours
Scanner:
Long-Range

World War 2 Tank

Remodeling for Simulation and CGI

Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Feature Recognition
- Feature Patterns Fitting to Scan Data
- Auto Sketch Based Modeling
- Real Time Accuracy Analyzer
- Large Data Volume Handling
- Design Intent Remodeling
- Parametric Editing
- Feature Based Smart Modeling Wizards
- Accuracy and Shape Confirmation
- Downstream CAD Flexibility



Modeling time:

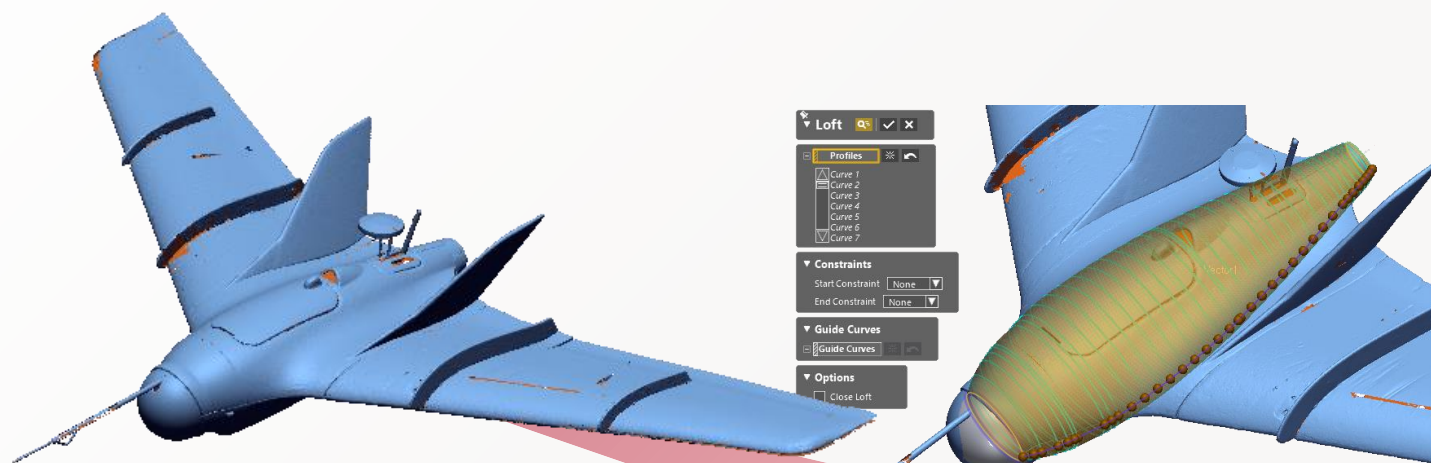
8 hours

Scanner:

Long-Range

Drone

As Built Modeling for Design Modification



Why Geomagic Design X?

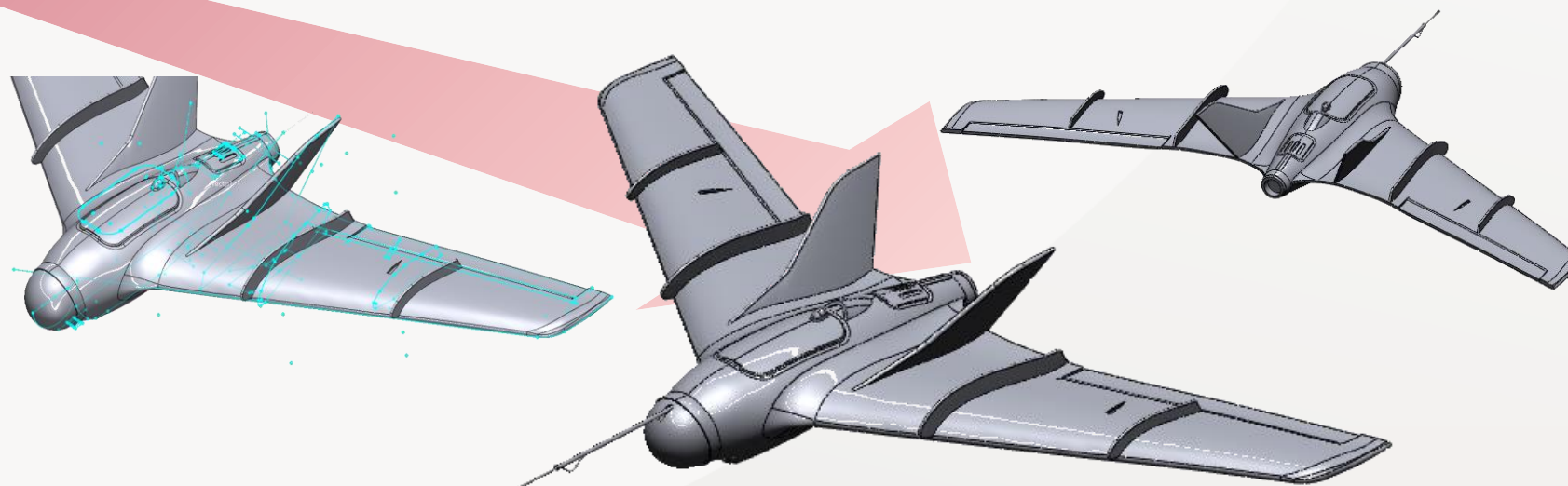
- Rapid, High Quality Mesh Construction
- Comprehensive Suite of Mesh Processing Tools
- Automatic Feature Recognition
- Automatic Sketch and Constraint Extraction for Modeling
- Real Time Accuracy Analyzer
- Design Intent Remodeling
- Solid and Surface Hybrid Modeling
- Parametric Editing
- Feature Based Smart Modeling Wizards
- Accuracy and Shape Confirmation
- Downstream CAD Flexibility

Modeling time:

12 hours

Scanner:

Arm



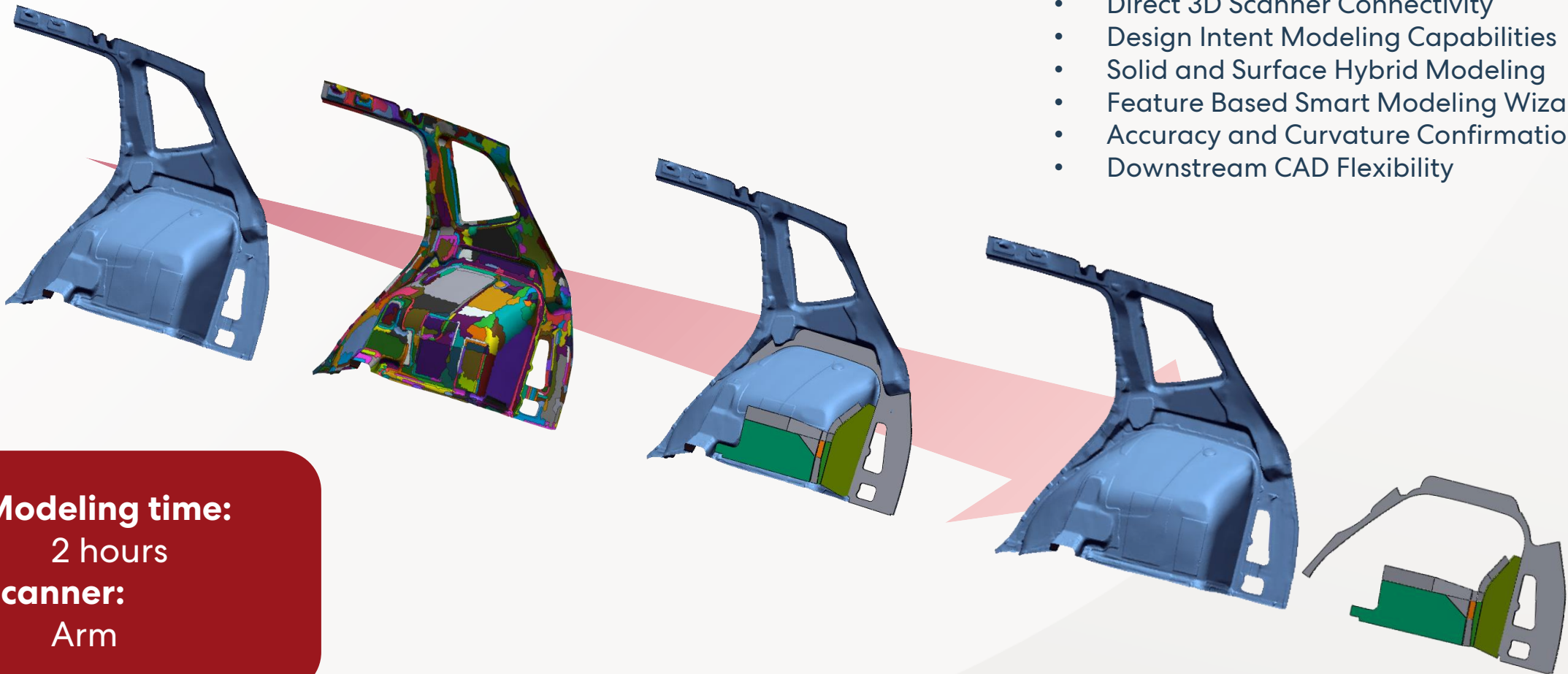
Armor Reinforce for Vehicle

To add thick steel plate for armoring car

Dx

Why Geomagic Design X?

- Comprehensive Suit of Mesh Processing Tools
- Smart Feature Recognition
- Auto Sketch Based Modeling
- Curve Driven NURBS Surfacing
- Real Time Accuracy Analyzer
- Direct 3D Scanner Connectivity
- Design Intent Modeling Capabilities
- Solid and Surface Hybrid Modeling
- Feature Based Smart Modeling Wizards
- Accuracy and Curvature Confirmation
- Downstream CAD Flexibility



Modeling time:

2 hours

Scanner:

Arm

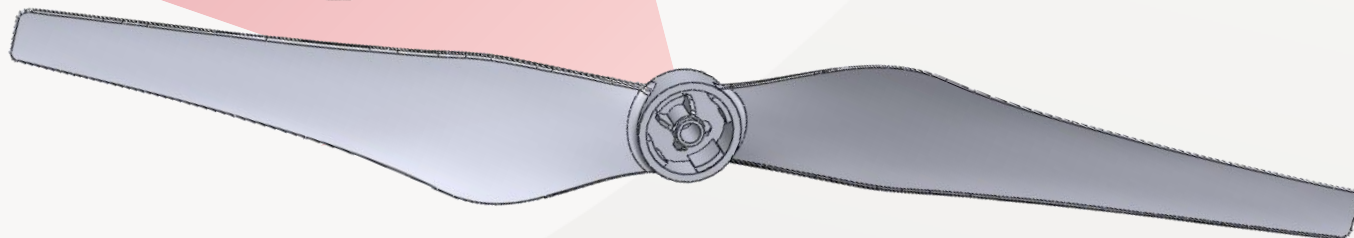
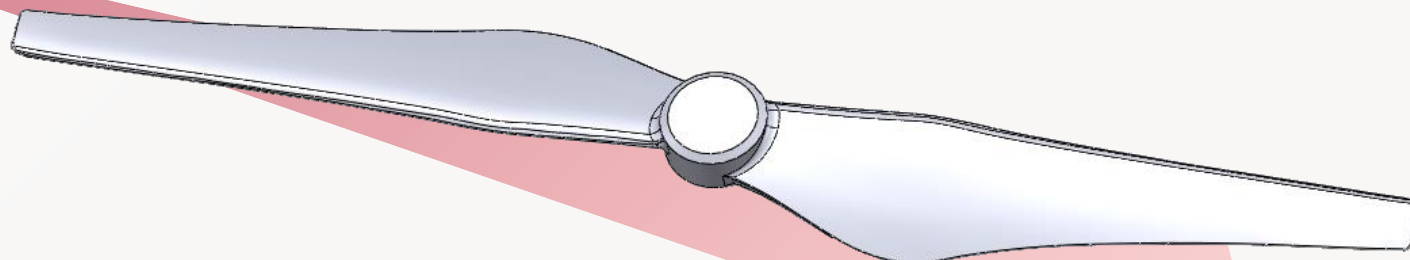
Drone Propeller

Design Intent for Simulation and Analysis



Why Geomagic Design X?

- Comprehensive Suit of Mesh Processing Tools
- Smart Feature Recognition
- Auto Sketch Based Modeling
- Curve Driven NURBS Surfacing
- Real Time Accuracy Analyzer
- Direct 3D Scanner Connectivity
- Design Intent Modeling Capabilities
- Solid and Surface Hybrid Modeling
- Feature Based Smart Modeling Wizards
- Accuracy and Curvature Confirmation
- Downstream CAD Flexibility



Modeling time:

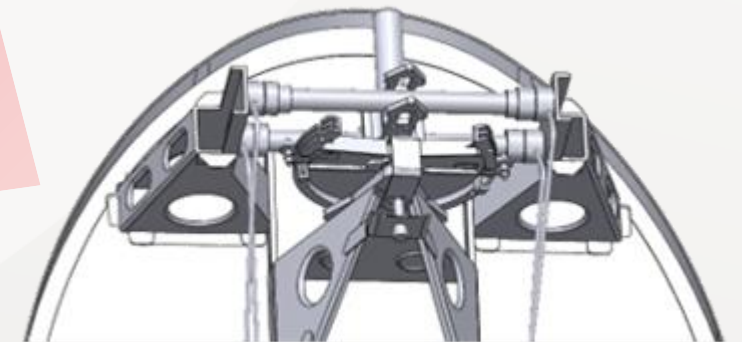
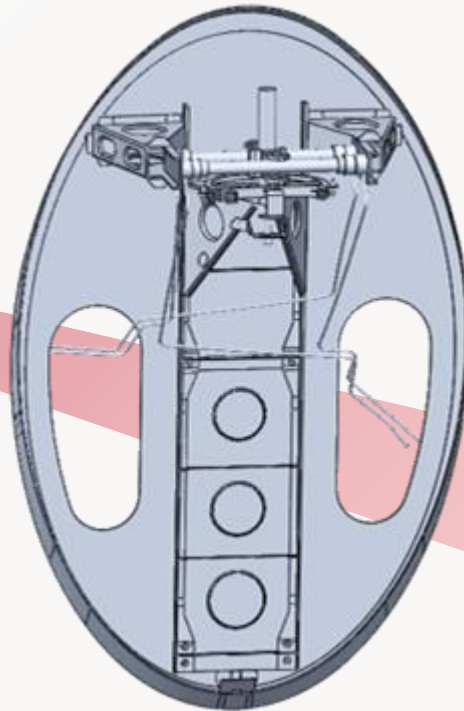
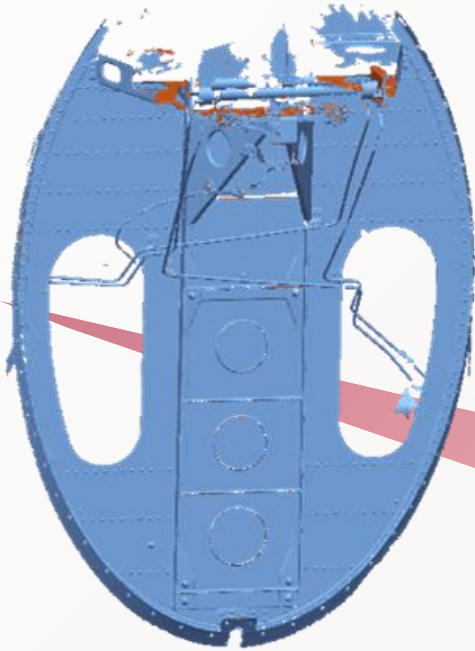
3 hours

Scanner:

Arm

Airplane Bulkhead

As Built Modeling for Design Modification



Modeling time:

8 hours

Scanner:

Hand-held

Why Geomagic Design X?

Dx

- Rapid, High Quality Mesh Construction
- Comprehensive Suite of Mesh Processing Tools
- Automatic Feature Recognition
- Automatic Sketch and Constraint Extraction for Modeling
- Real Time Accuracy Analyzer
- Design Intent Remodeling
- Solid and Surface Hybrid Modeling
- Parametric Editing
- Feature Based Smart Modeling Wizards
- Accuracy and Shape Confirmation
- Downstream CAD Flexibility

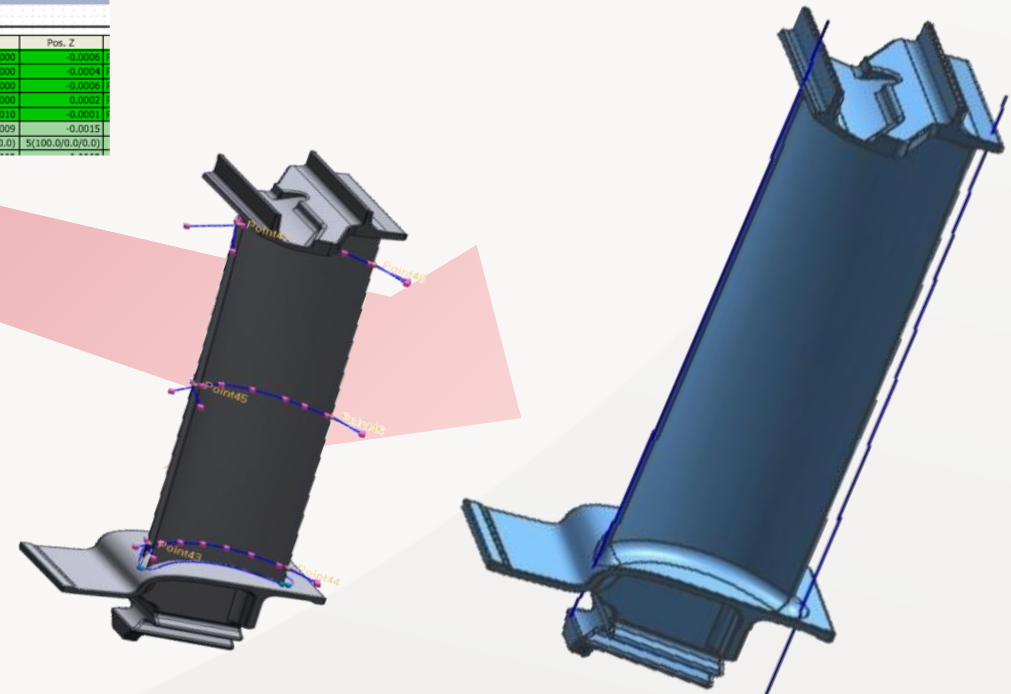
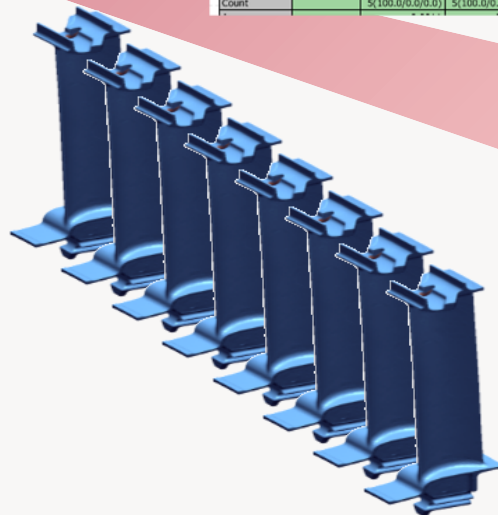
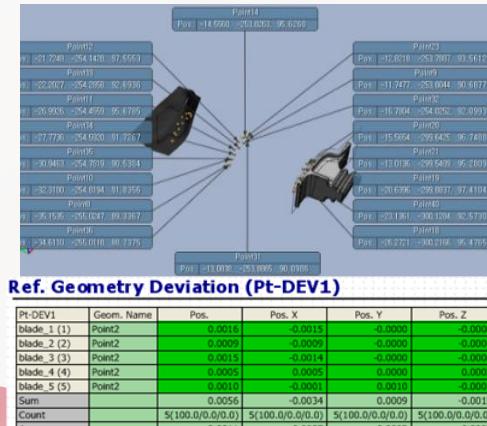
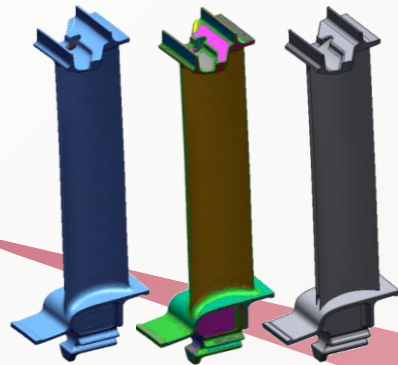


Geomagic Design X

Aerospace

Turbofan - Golden Blade Modeling

Remodeling for Simulation and Analysis



Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Average Mesh
- Region Based Feature Recognition
- Intelligent Loft Surface Extraction
- Auto Sketch Based Modeling
- Design Intent Modeling Capabilities
- Feature Based Smart Modeling Wizards
- Node-Point Modification to Build Master
- Accuracy and Iso-line Confirmation
- Downstream CAD Flexibility

Modeling time:

3 hours

Scanner:

Structured light

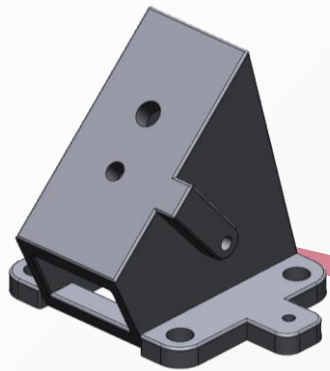
Topology Optimized Bracket

Mesh generation from FEM

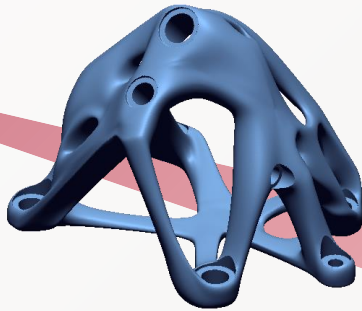
Dx

Why Geomagic Design X?

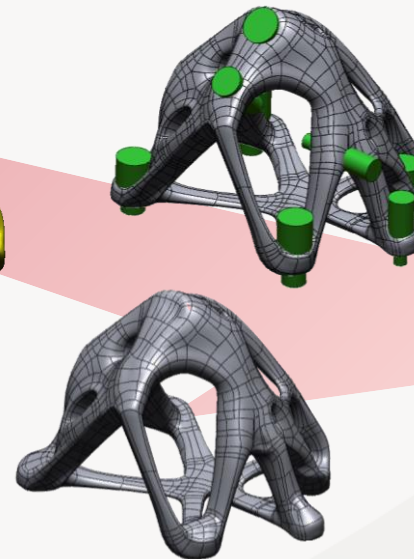
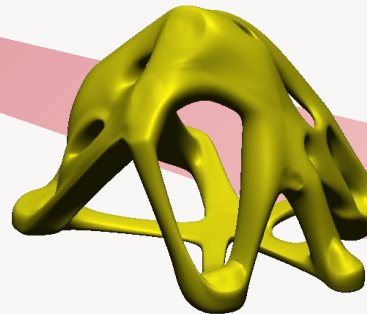
- Comprehensive Suite of Mesh Processing Tools
- Prismatic Feature Modeling with Wizards
- Feature Following Automatic NURBS Surfacing
- Boolean Merging
- Continuous Blend Creation between Features and Surface
- Automated NURBS Surfacing
- Parametric Steps for Modification
- Accuracy Confirmation
- Downstream Export Flexibility



Typical
original part



Topology
optimized
Mesh result



Auto Surfacing



Lightweight Result

Modeling time:

2 hours

Scanner:

FEA Mesh

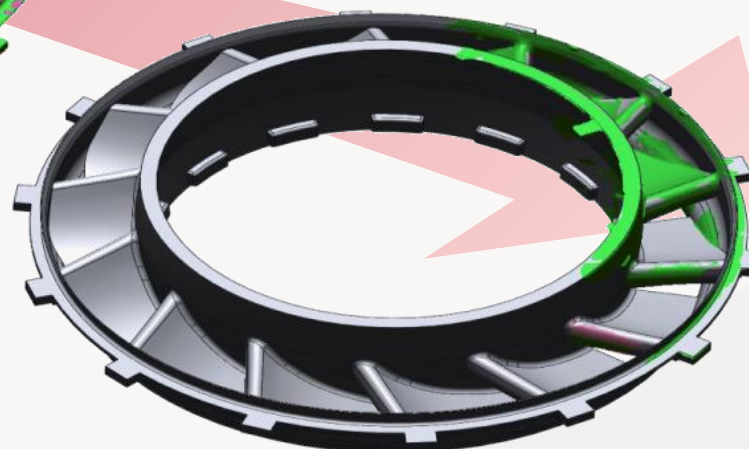
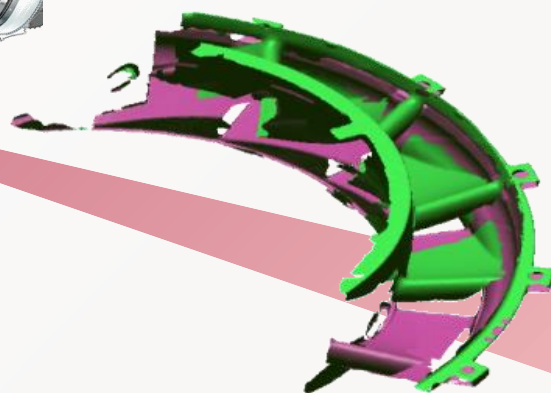
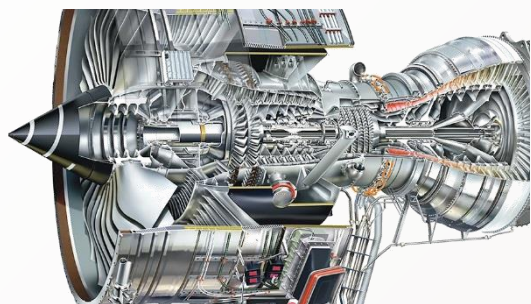
Nozzle of Jet Engine

Remodeling of Part for Pattern Creation



Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Region Based Feature Recognition
- Intelligent Loft Surface Extraction
- Auto Sketch Based Modeling
- Feature Patterning Fit to Scan Data
- Design Intent Modeling from Partial Scans
- Feature Based Smart Modeling Wizards
- Accuracy and Iso-line Confirmation
- Downstream CAD Flexibility



Modeling time:

3 hours

Scanner:

Structured light

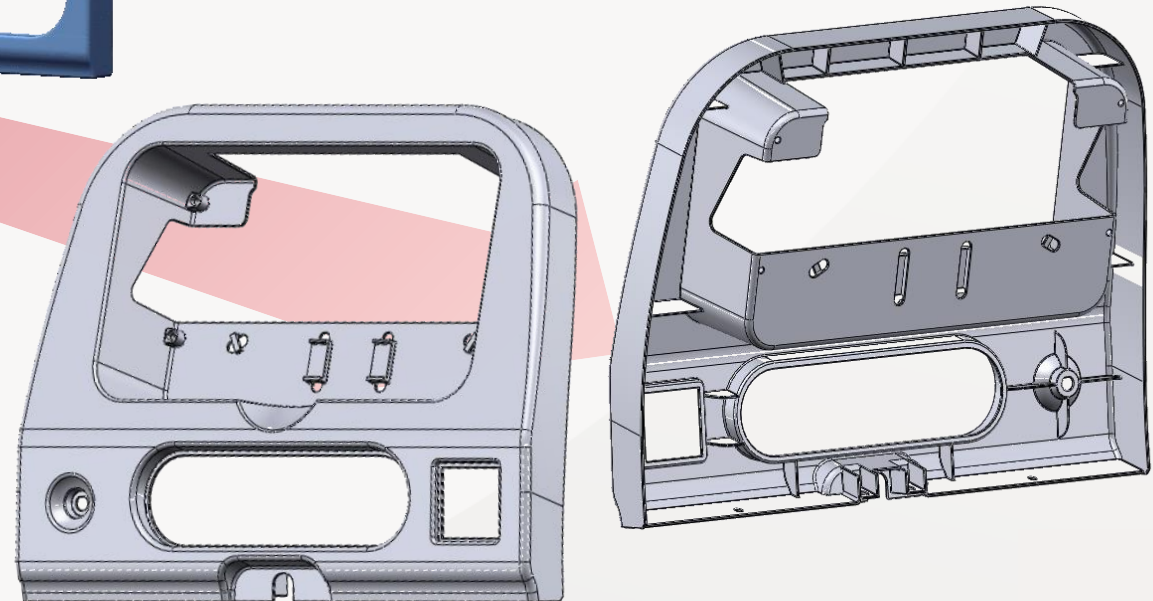
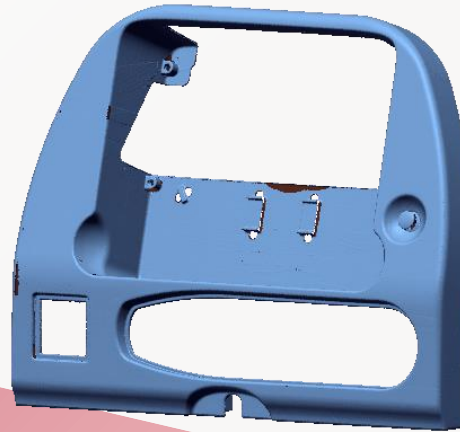
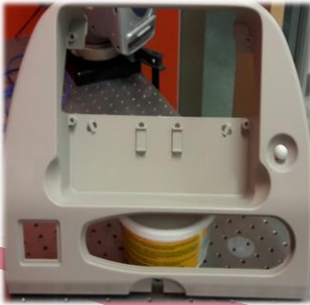
777 Seatback Headrest Component

Remodeling of Part for Pattern Creation

Dx

Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Region Based Feature Recognition
- Intelligent Loft Surface Extraction
- Auto Sketch Based Modeling
- Feature Patterning Fit to Scan Data
- Design Intent Modeling from Partial Scans
- Feature Based Smart Modeling Wizards
- Accuracy and Iso-line Confirmation
- Downstream CAD Flexibility



Modeling time:

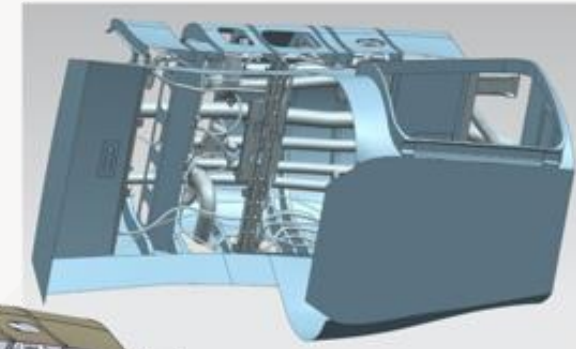
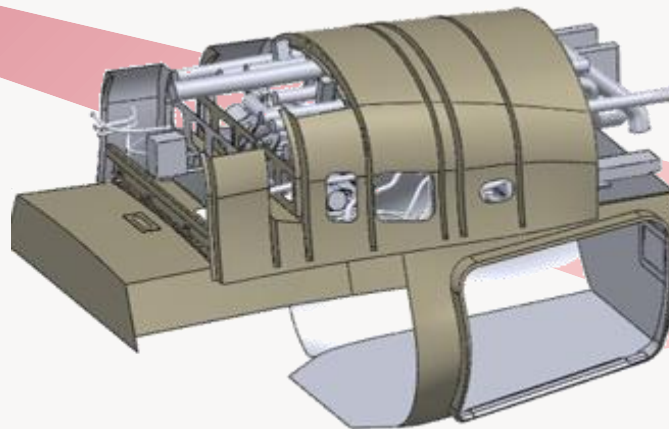
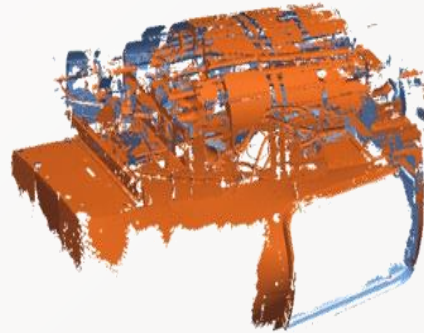
5 hours

Scanner:

Arm

Aircraft Open Space Modeling

As-Built Modeling to Capture Design Envelope



LiveTransfer to **NX**
SIEMENS

Modeling time:
24 hours
Scanner:
Hand-held

Why Geomagic Design X?

- Rapid, High Quality Mesh Construction
- Comprehensive Suite of Mesh Processing Tools
- Scan Based Modeling of Surfaces and Solids
- Automatic Sketch and Constraint Extraction
- Mesh-Sketch Based Modeling
- Large Data Volume Handling
- 3D Scanner Connectivity
- Feature based CAD Modeling with Wizards
- Downstream CAD Flexibility

Modeling in Design X

Dx

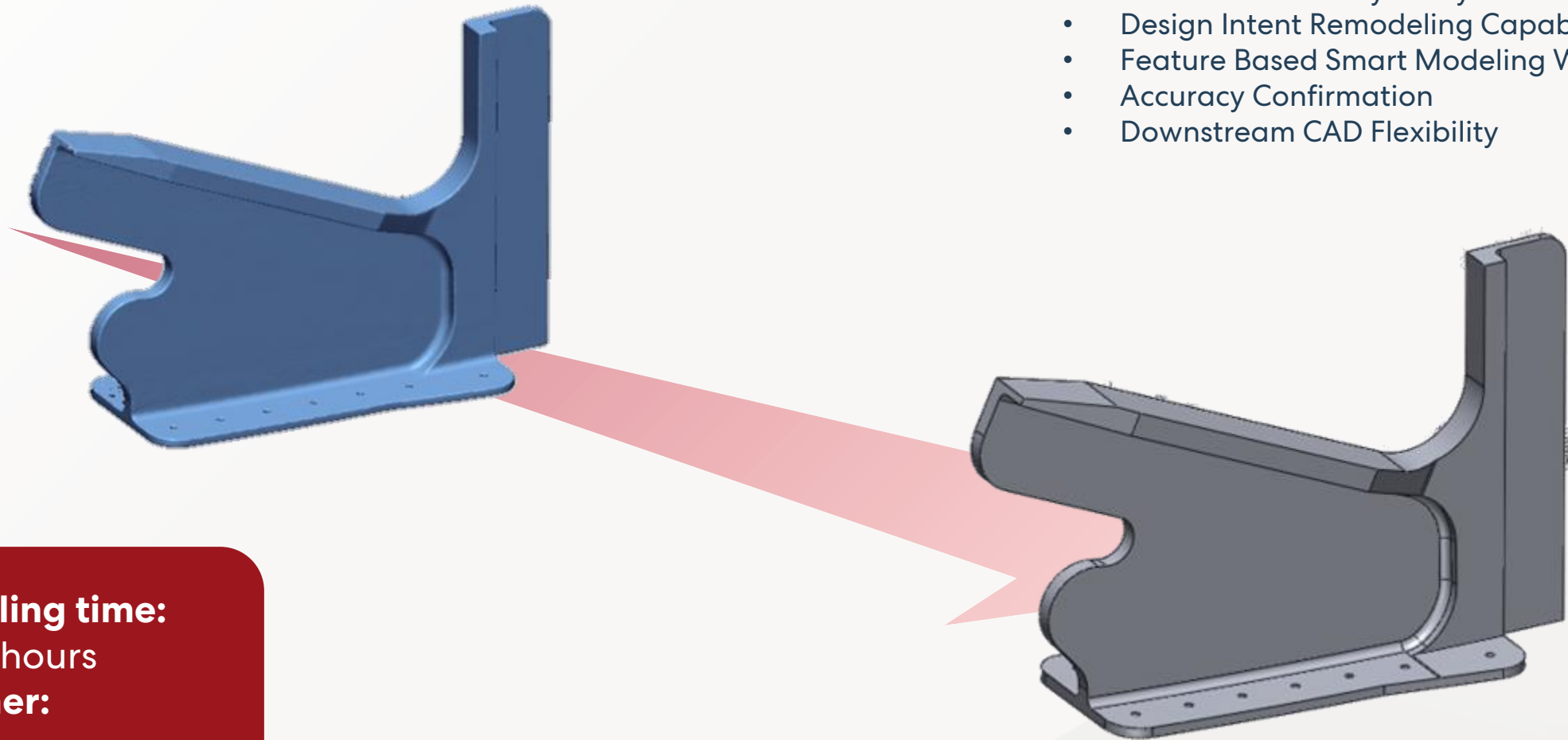
Bracket

Remodeling of Part for Remanufacture

Dx

Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Region Based Feature Recognition
- Hybrid Surface & Solid Scan Based Modeling
- Real Time Accuracy Analyzer
- Design Intent Remodeling Capabilities
- Feature Based Smart Modeling Wizards
- Accuracy Confirmation
- Downstream CAD Flexibility



Modeling time:

2 hours

Scanner:

Arm

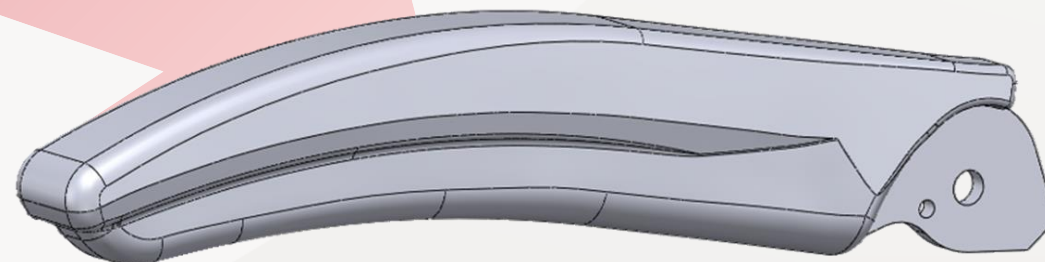
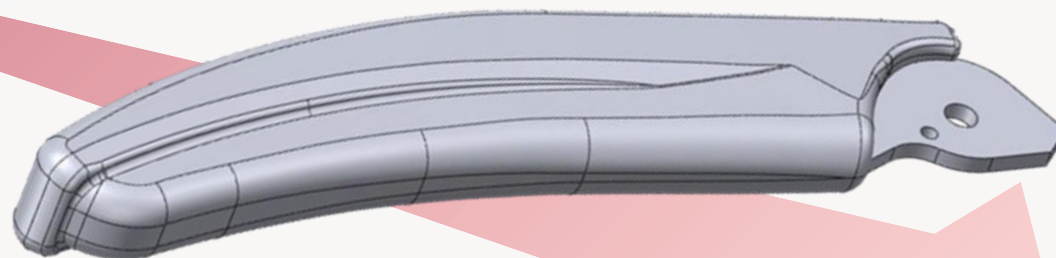
Seat Arm Rest

Remodeling of Part for Remanufacture



Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Region Based Feature Recognition
- Hybrid Surface & Solid Scan Based Modeling
- Real Time Accuracy Analyzer
- Design Intent Remodeling Capabilities
- Feature Based Smart Modeling Wizards
- Accuracy Confirmation
- Downstream CAD Flexibility



Modeling time:

2 hours

Scanner:

Arm



Geomagic Design X

Consumer Products

Ring

CAD Creation for Production Readiness



Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Region Based Feature Recognition
- CAD Correct Mesh Based Feature Patterning
- Real Time Accuracy Analyzer
- Design Intent Modeling Capabilities
- Feature Based Smart Modeling Wizards
- Accuracy Confirmation
- Downstream CAD Flexibility



Modeling time:

15 hours

Scanner:

Hand-held

Guitar

Modeling for Production Readiness



Modeling time:

5 hours

Scanner:

Arm

Why Geomagic Design X?



- Comprehensive Suite of Mesh Processing Tools
- Region Based Feature Recognition
- Intelligent Loft Surface Extraction
- Mesh-Based Parametric Modeling
- Real Time Accuracy Analyzer
- Design Intent Modeling Capabilities
- Feature Based Smart Modeling Wizards
- Accuracy and Curvature Confirmation
- Downstream CAD Flexibility for Modification

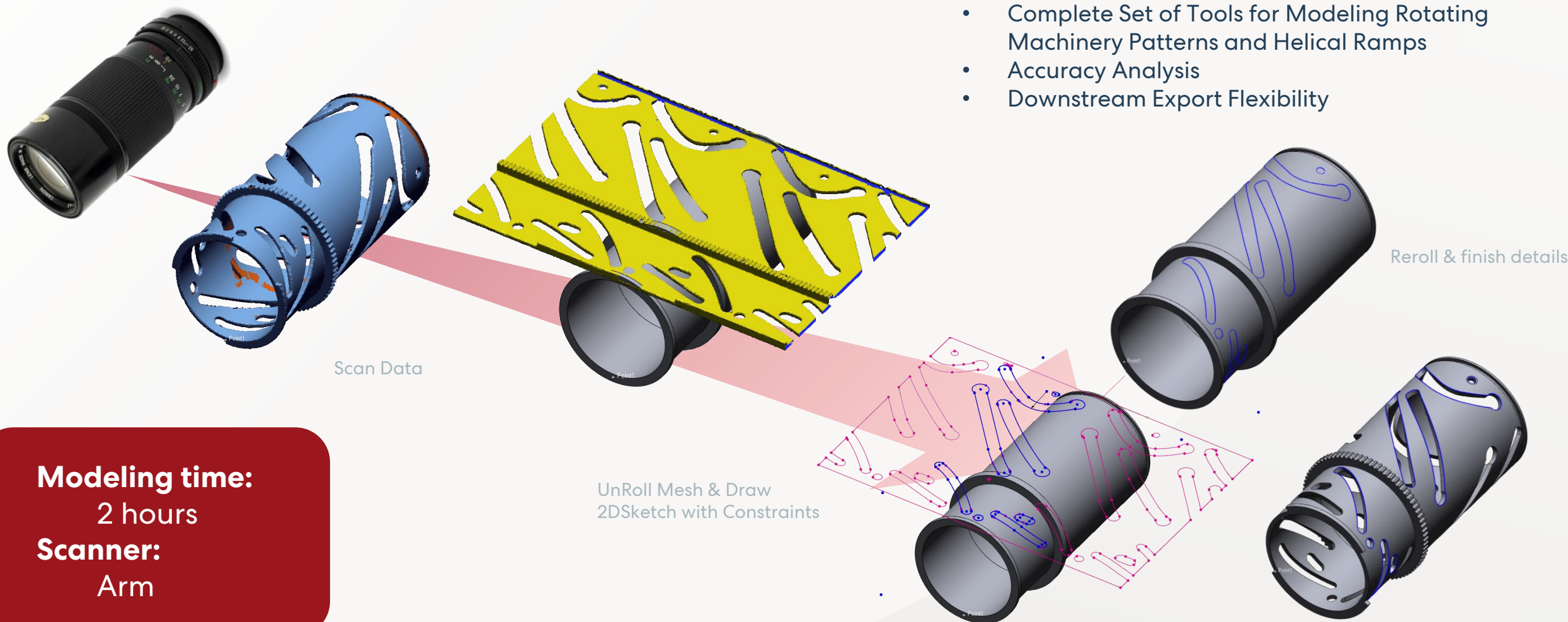
Camera Lens Assembly

Design for New Product Creation



Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Unroll Mesh for Precise Design Intent Extraction
- Mesh-Based Parametric Sketching
- Re-Roll Sketch for Forward Engineering
- Complete Set of Tools for Modeling Rotating Machinery Patterns and Helical Ramps
- Accuracy Analysis
- Downstream Export Flexibility



Modeling time:

2 hours

Scanner:

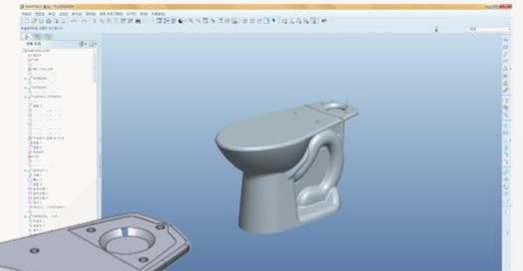
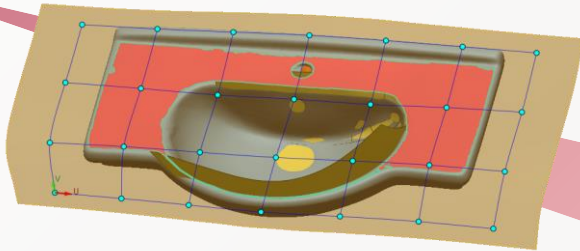
Arm

Plumbing Fixtures

Modeling of Part for Design Modification

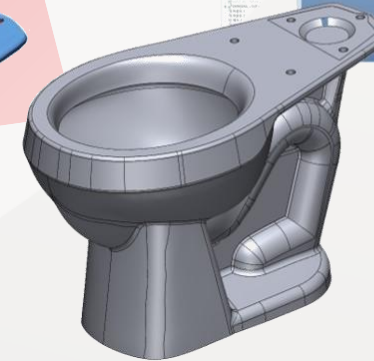
Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Feature Recognition
- Automatic Mesh-Based Sketching
- Curve Driven NURBS Surfacing
- Real Time Accuracy Analyzer
- Design Intent Modeling Capabilities
- Hybrid Modeling Capabilities
- Feature Based Smart Modeling Wizards
- Accuracy Analysis of Curvature and Solid
- Downstream CAD Flexibility for Modification



Modeling time:
14 hours (2 parts)

Scanner:
Arm



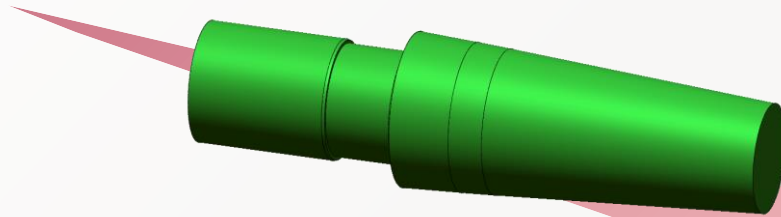
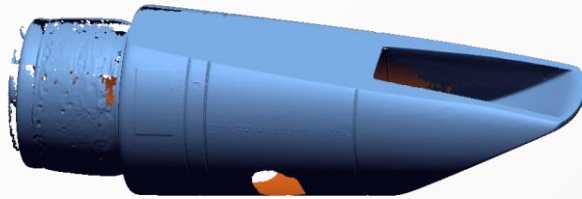
Clarinet Mouthpiece

Modeling for Production Readiness

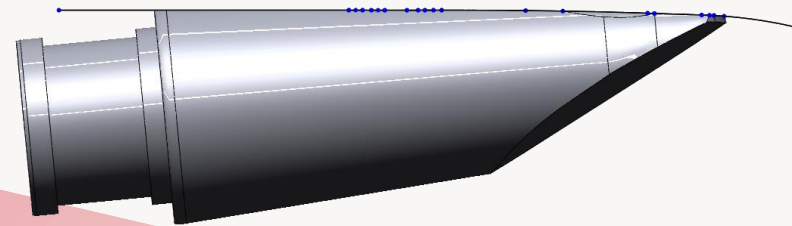
Dx

Why Geomagic Design X?

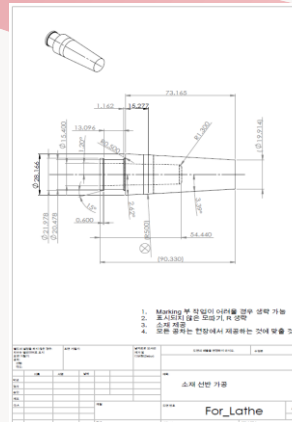
- Comprehensive Suite of Mesh Processing Tools
- Region Based Feature Recognition
- Auto Sketch Based Modeling
- Mesh-Based Parametric Modeling
- Real Time Accuracy Analyzer
- Design Intent Modeling Capabilities
- Feature Based Smart Modeling Wizards
- Accuracy and Curvature Confirmation
- Downstream CAD Flexibility for Machining



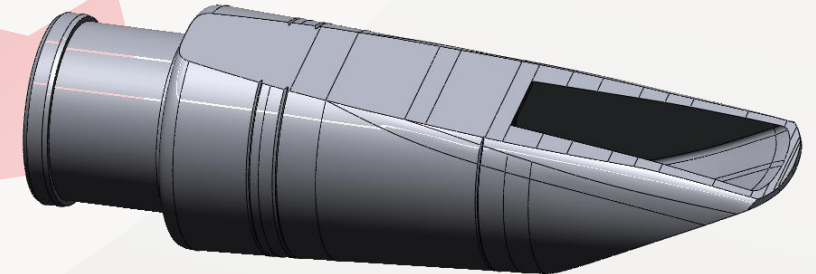
Extract curves to dxf format: Secondary machining



Creating Dummy & 2D drawing for the lathe : Primary machining



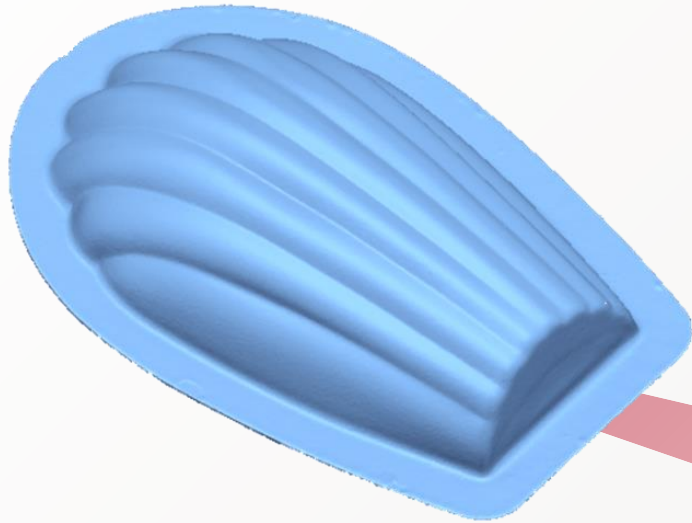
Full modeling for machining: 3rd machining



Modeling time:
6 hours
Scanner:
Arm

Baking Mold

Modeling of Part for Remanufacture

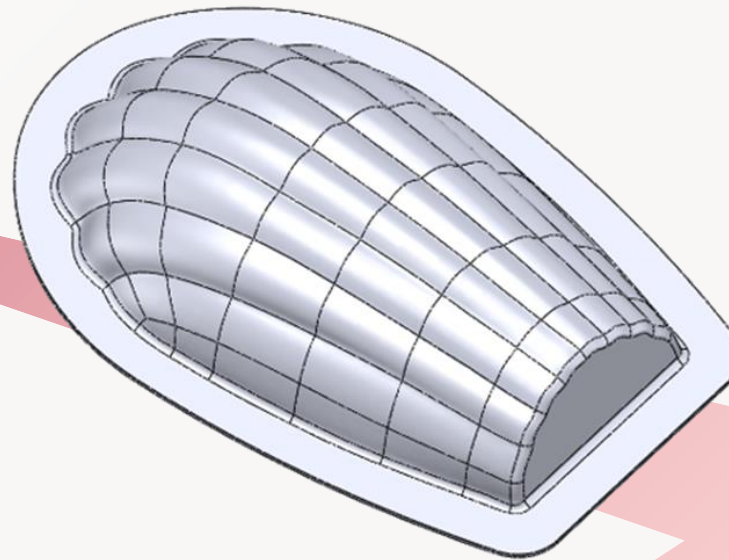


Modeling time:

2 hours

Scanner:

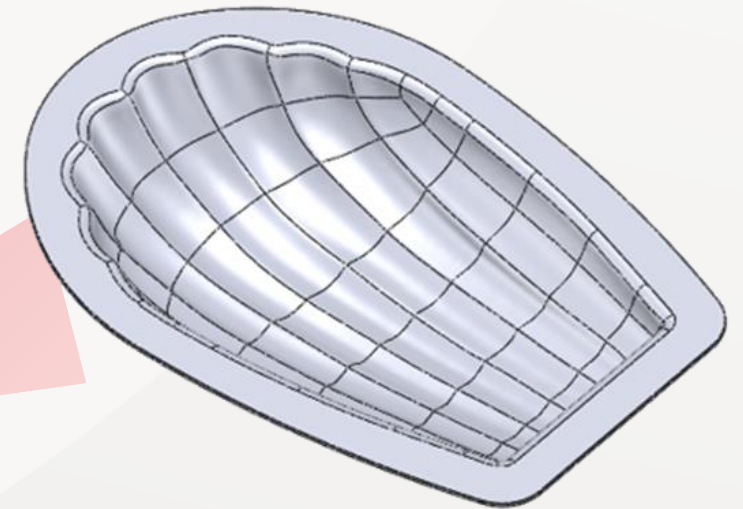
Structured light



Why Geomagic Design X?

Dx

- Comprehensive Suite of Mesh Processing Tools
- Feature Recognition
- Automatic Mesh-Based Sketching
- Curve Driven NURBS Surfacing
- Real Time Accuracy Analyzer
- Design Intent Modeling Capabilities
- Hybrid Modeling Capabilities
- Feature Based Smart Modeling Wizards
- Accuracy Analysis of Curvature and Solid
- Downstream CAD Flexibility for Modification



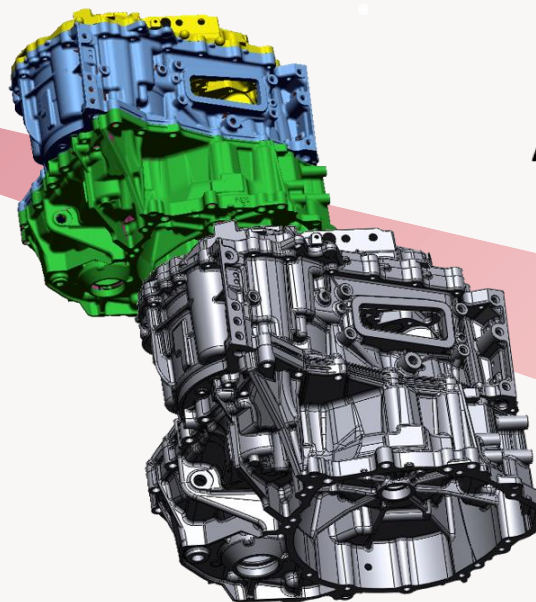
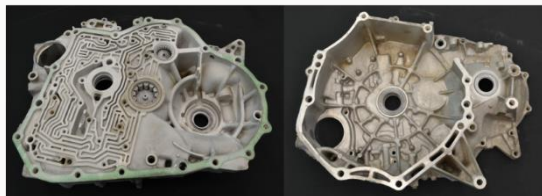


Geomagic Design X

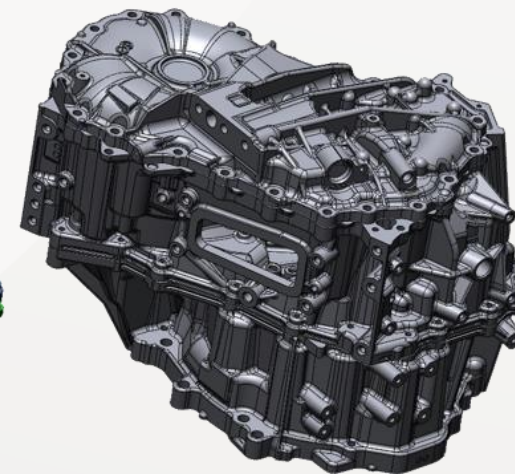
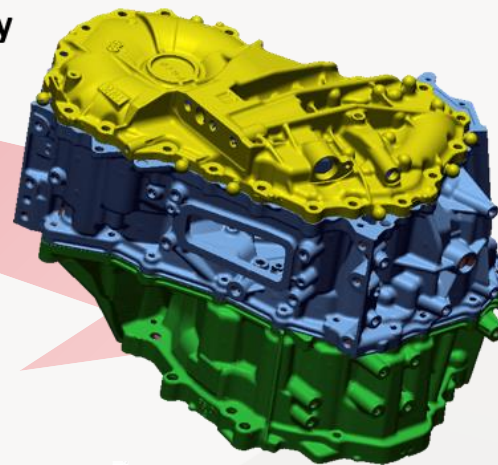
Automotive

Transmission Cases - DCT

Remodeling of Parts for Design Modification



Assy



Modeling time:

48 hours

Scanner:

Arm

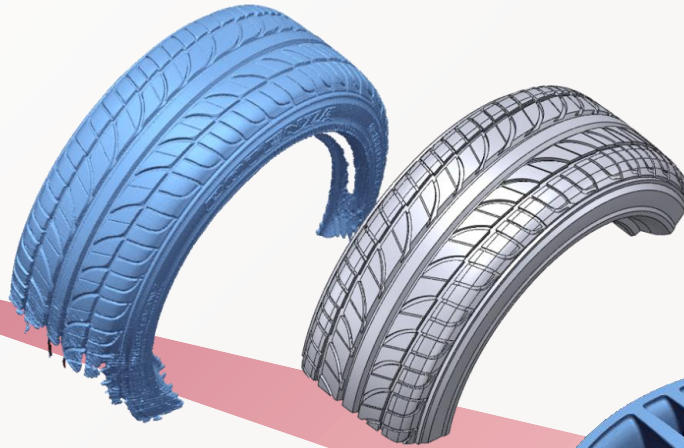
Why Geomagic Design X?

- Comprehensive Suite of Point and Mesh Processing Tools
- Feature Recognition
- Auto Sketch Mesh-Based Modeling
- CMM Hard Probing
- Real Time Accuracy Analyzer
- Direct Portable CMM Connectivity
- As-Built Modeling Capabilities
- Feature Based Smart Modeling Wizards
- Accuracy Confirmation
- Downstream CAD Flexibility



Wheel & Tire

Modeling for Simulation and Analysis



Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Intelligent Feature Recognition
- Auto Sketch Mesh-Based Modeling
- Real Time Accuracy Analyzer
- Design Intent Remodeling Capabilities
- Feature Based Smart Modeling Wizards
- Accuracy Confirmation
- Downstream CAD Flexibility

Modeling time:
9 hours (2 parts)
Scanner:
Arm

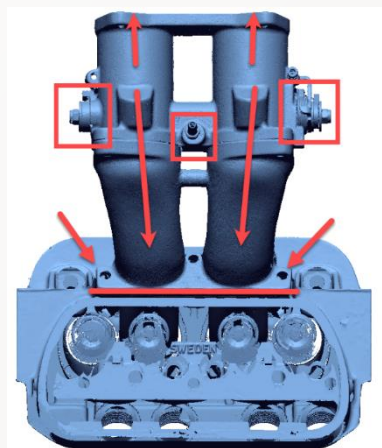
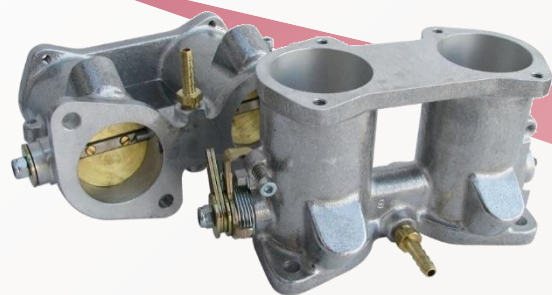
Dx

Intake Manifold

Redesign for Mass Reduction with AM



Existing part



Version 1



Why Geomagic Design X?



- Comprehensive Suite of Mesh Processing Tools
- Scan-Based Sketch Creation
- Accuracy Analysis
- Design Intent Modeling for Redesign
- Parametric Steps for Design Modifications
- Accuracy Confirmation
- Downstream Export Flexibility

Version 2



Modeling time:

8 hours

Scanner:

Arm

Steering Knuckle

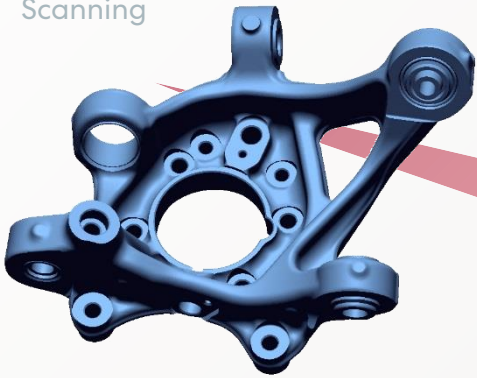
Modification for Casting Pattern

Dx

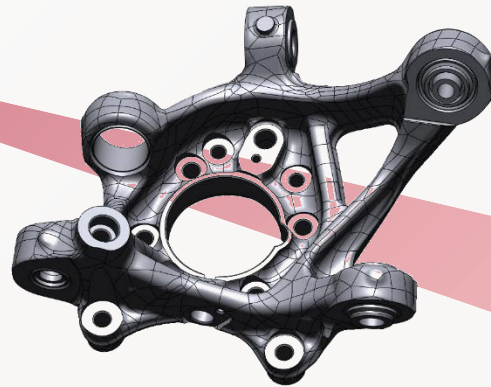
Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Automatic Exact Surfacing
- Mesh Modifying Commands
- Automated NURBS Surfacing
- Accuracy Confirmation
- Downstream Export Flexibility

Scanning



DX modeling



Modeling time:

5 hours

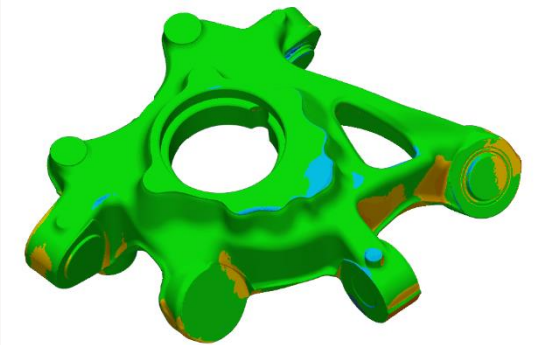
Scanner:

Arm

Wax Printing



Wax Pattern Verification



De-feature & add material
for post cast CNC machining

Final Cast



Boat Hull

Modeling of Part for Remanufacture



Why Geomagic Design X?

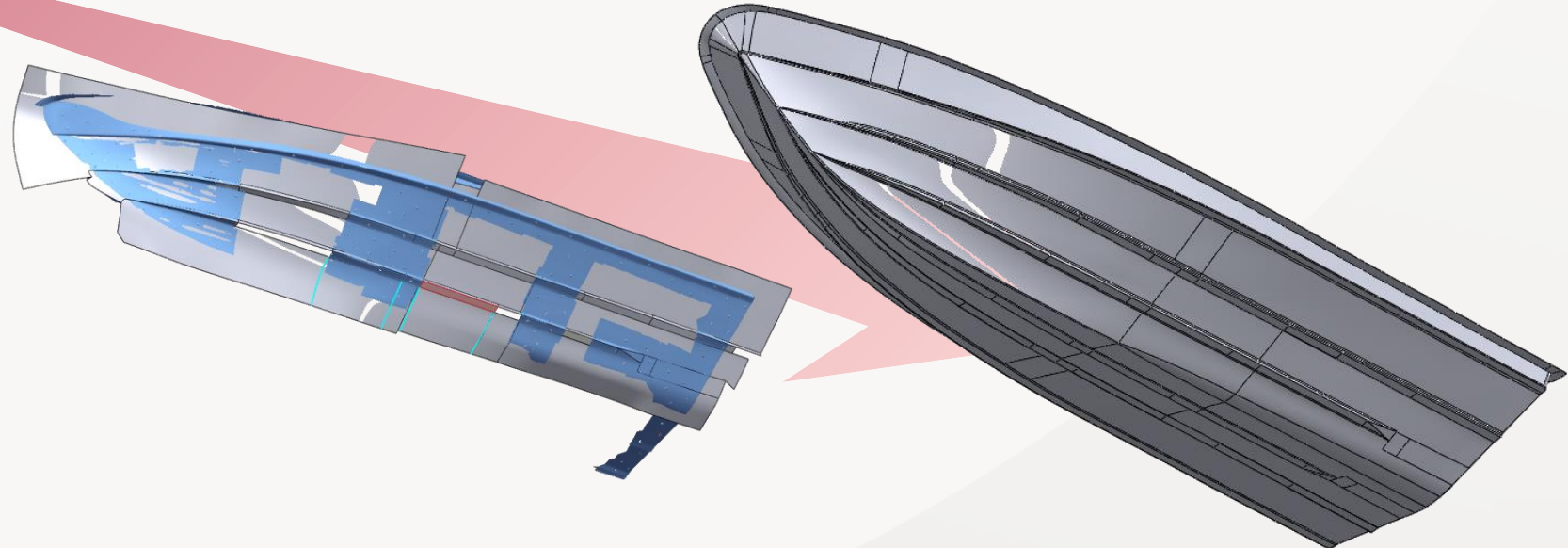
- Multiple Scan Station Alignment
- Rapid, High Quality Mesh Construction
- Large Scale Modeling
- Intelligent Loft Surface Extraction
- Auto Sketch Based Modeling
- Real Time Accuracy Analyzer
- Large Data Volume Handling
- Specialized Tools for Long Range Data
- Robust Alignment Tools
- Feature based CAD Modeling with Wizards
- Accuracy Confirmation of Surfaces
- Downstream CAD Flexibility

Modeling time:

9 hours

Scanner:

Long range



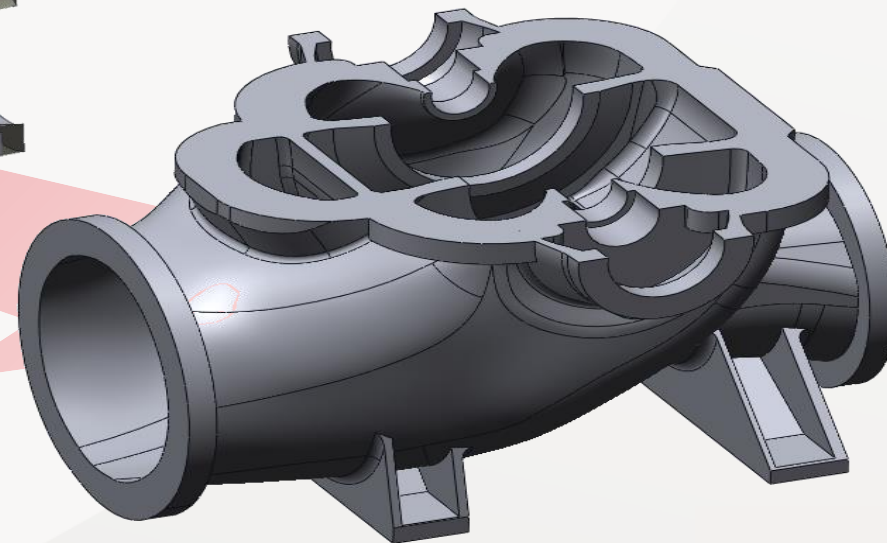
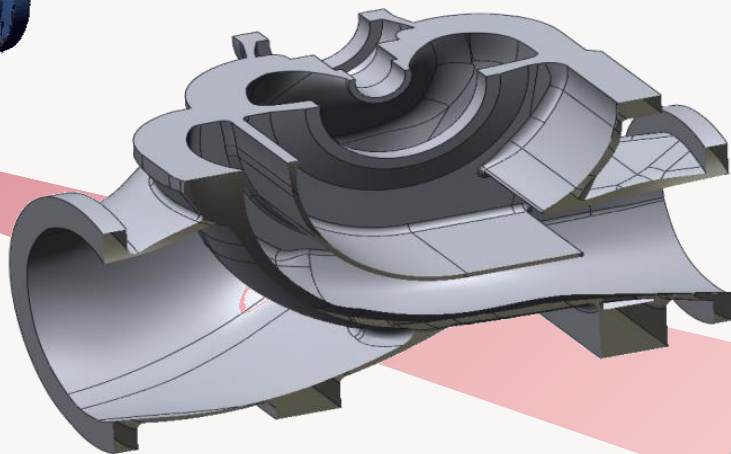
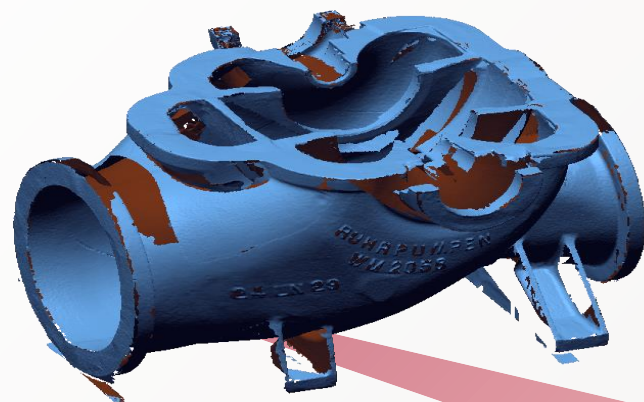


Geomagic Design X

Heavy Industry & Mining

Pump Housing

Modeling of Part for Pattern Creation



Modeling time:

9 hours

Scanner:

Arm

Why Geomagic Design X?

- Comprehensive Suite of Point and Mesh Processing Tools
- Feature Recognition
- Intelligent Loft Surface Extraction
- Auto Sketch Scan-Based Modeling
- Real Time Accuracy Analyzer
- Design Intent Modeling Capabilities
- Feature Based Smart Modeling Wizards
- History Based Modeling for Downstream Modification
- Accuracy Confirmation
- Downstream CAD Flexibility



Pelton Wheel

Modeling of Part for Maintenance

Dx

Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Feature Recognition
- Curve Driven NURBS Surfacing
- Auto Sketch Scan-Based Modeling
- Real Time Accuracy Analyzer
- Design Intent Modeling Capabilities
- Feature Based Smart Modeling Wizards
- Parametric Steps for Design Modifications
- Accuracy Confirmation
- Downstream CAD Flexibility



Modeling time:

4 hours

Scanner:

Hand-held

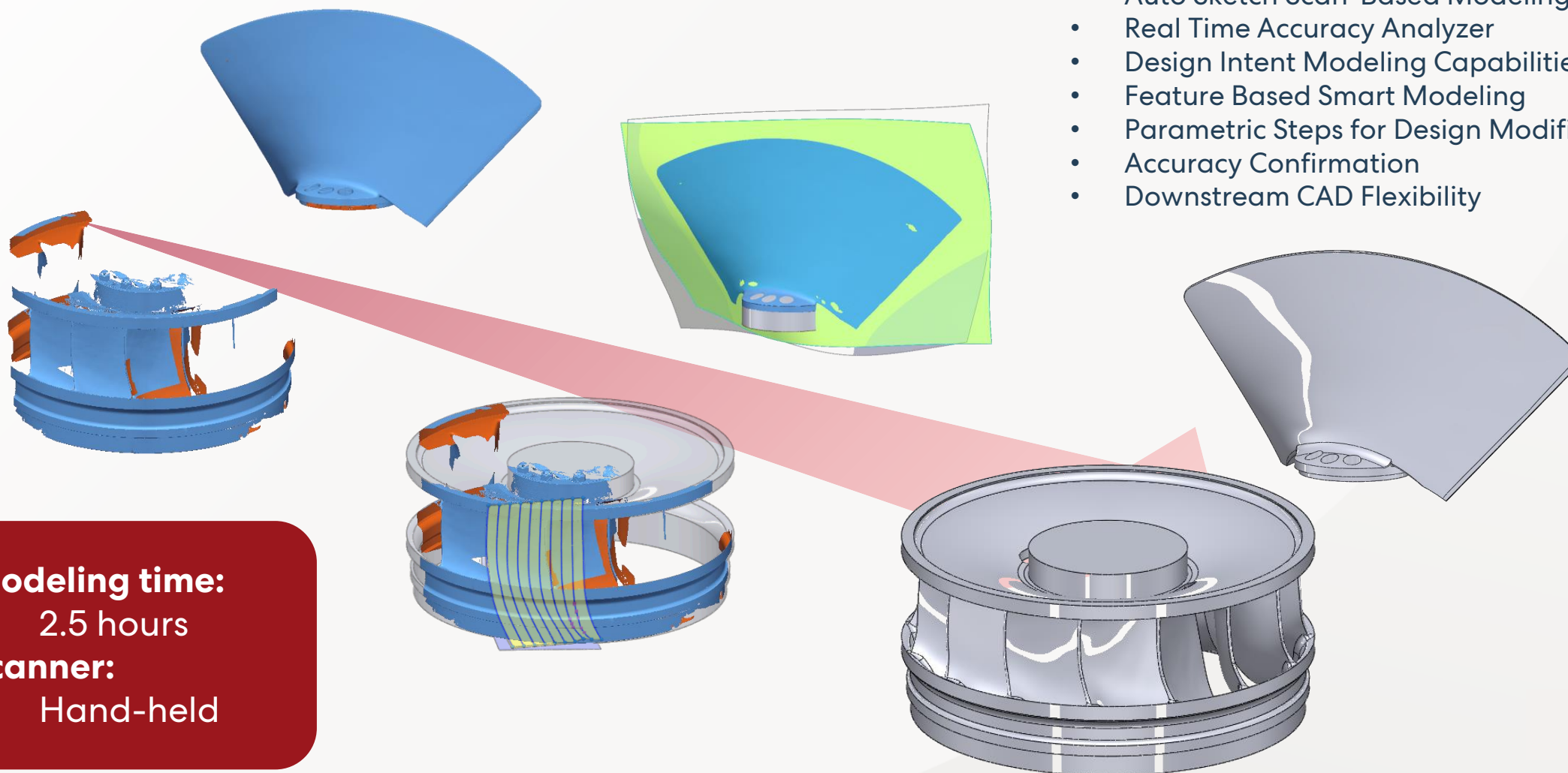
Hydroelectric Turbine Runner

Modeling of Part for Maintenance



Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Feature Recognition
- Intelligent Loft Surface Extraction
- Auto Sketch Scan-Based Modeling
- Real Time Accuracy Analyzer
- Design Intent Modeling Capabilities
- Feature Based Smart Modeling
- Parametric Steps for Design Modifications
- Accuracy Confirmation
- Downstream CAD Flexibility



Modeling time:

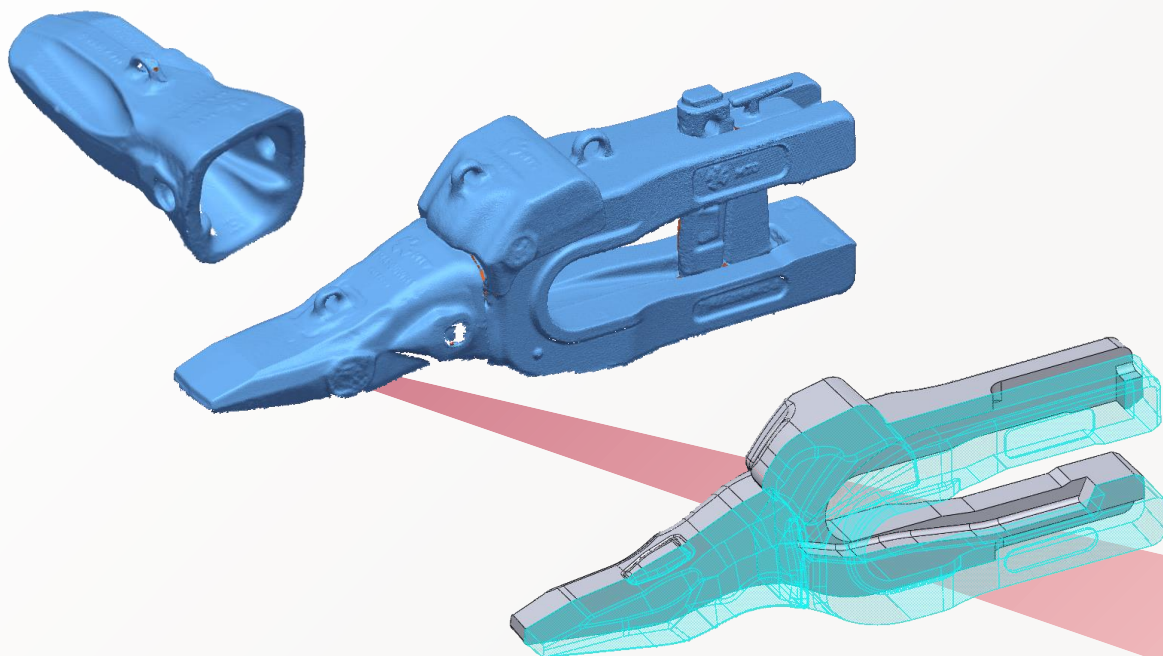
2.5 hours

Scanner:

Hand-held

Bucket Tooth Casting - Mining

Modeling of Part for Pattern Creation

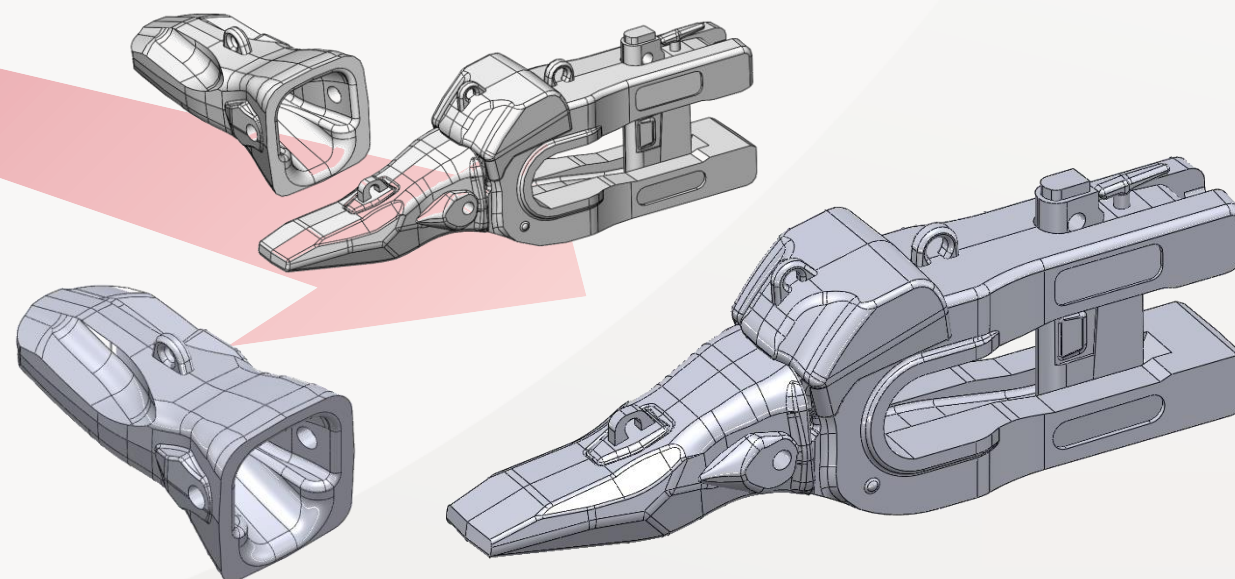


Modeling time:
10 hours/part
Scanner:
Arm

Why Geomagic Design X?

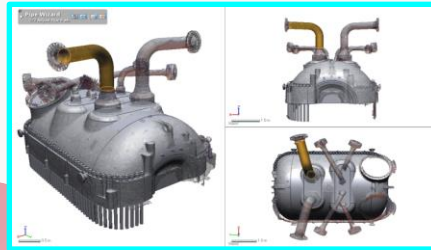
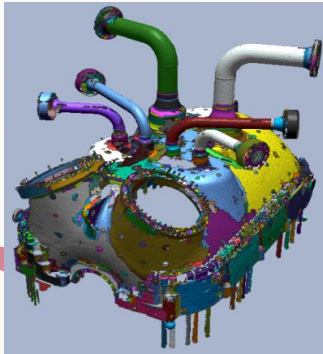


- Comprehensive Suite of Point and Mesh Processing Tools
- Feature Recognition
- Intelligent Loft Surface Creation
- Automatic Scan-Based Sketching and Constraint Extraction
- Real Time Accuracy Analyzer
- Design Intent Modeling Capabilities
- Feature Based Smart Modeling Wizards
- History Based Modeling for Downstream Modification
- Accuracy Confirmation
- Downstream CAD Flexibility



Industrial Boiler

Part Documentation & Maintenance



Modeling time:

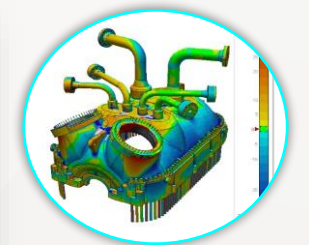
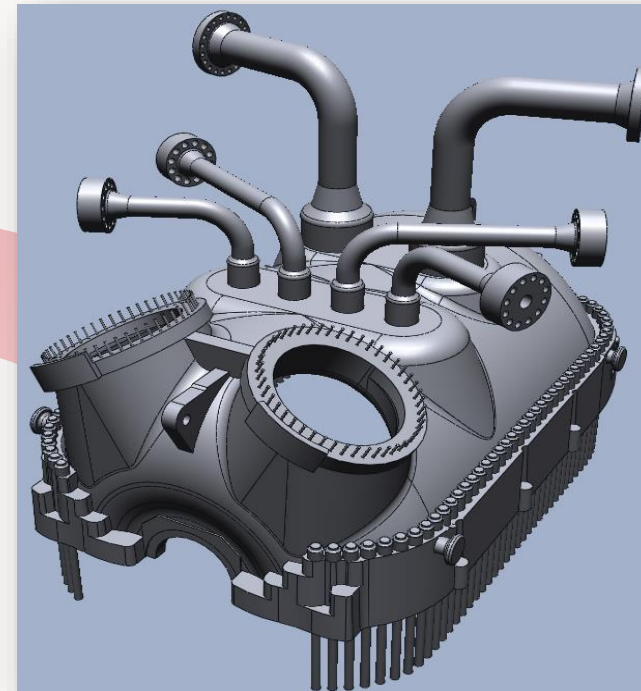
10 hours

Scanner:

Long-range

Why Geomagic Design X?

- Rapid, High Quality Mesh Construction
- Feature Recognition
- Intelligent Surface Extraction
- Automatic Scan-Based Sketching
- Real Time Accuracy Analyzer
- Design Intent As-Built Modeling Capabilities
- Feature Based Smart Modeling Wizards
- Parametric Steps for Future Modifications
- Accuracy Confirmation
- Downstream CAD Flexibility





Geomagic Design X

Medical

Ventilator

As-Built & Design Intent Modeling

Dx

Why Geomagic Design X?

- Automated Feature Recognition on External & Internal Part Surfaces
- Scan-Based Sketching
- Real Time Accuracy Analyzer
- Feature based CAD Modeling with Wizards
- Parametric Modeling Steps for Modifications
- Accuracy Confirmation
- Downstream CAD Flexibility

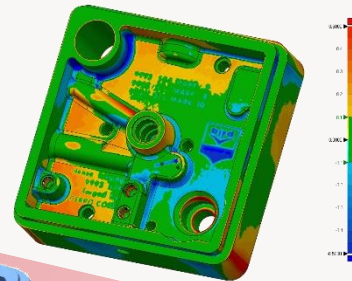
1960's era Bird Mark Ventilator



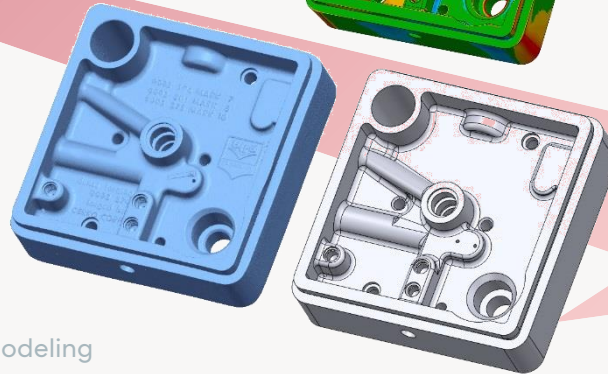
CT Scan



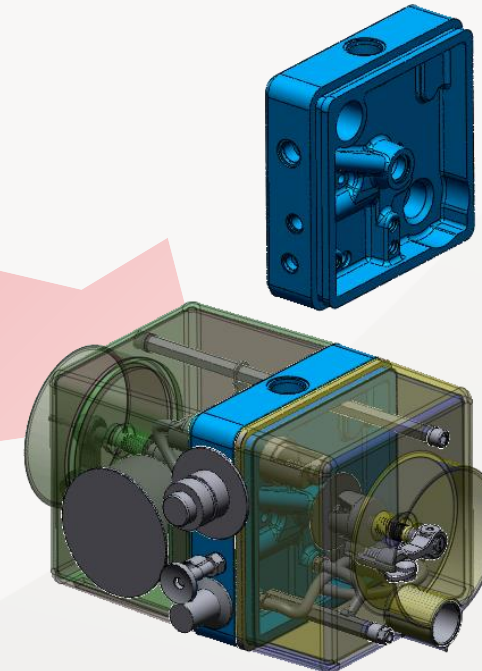
Accuracy Check



DX Modeling



Completed Device CAD



Modeling time:

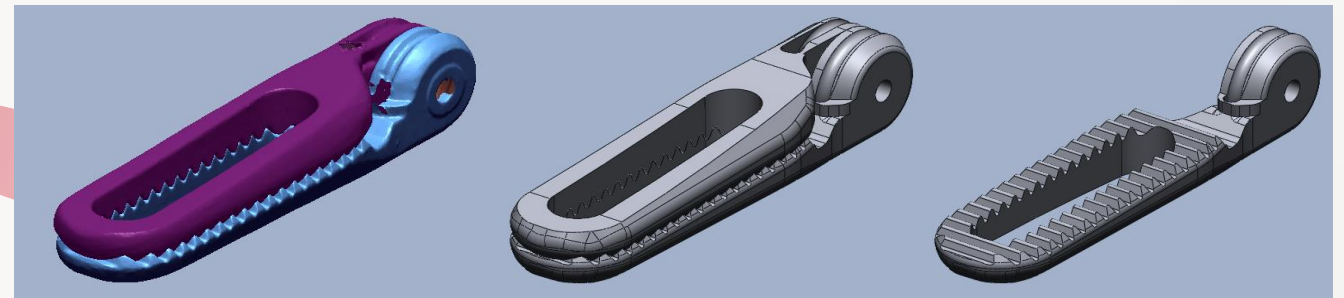
3 hours

Scanner:

CT &
Photogrammetry

Surgical Tool

Modeling of Part for Design Modification

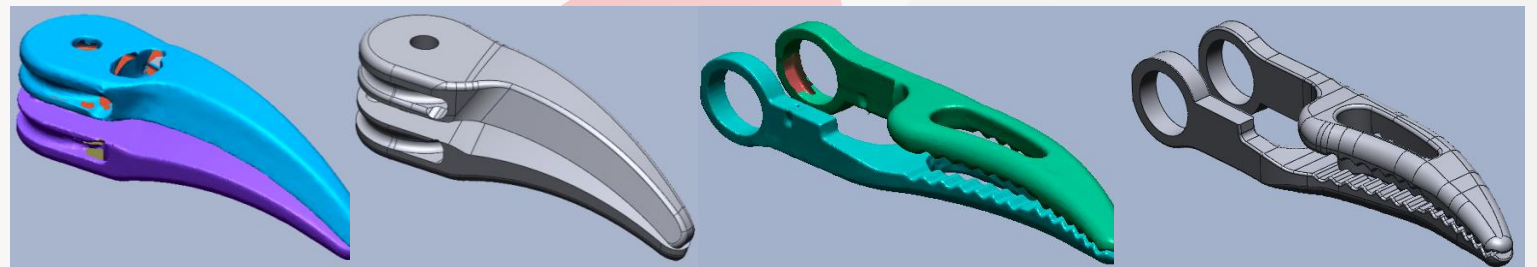


Modeling time:

8 hours

Scanner:

Structured light



Why Geomagic Design X?

Dx

- Comprehensive Suite of Mesh Processing Tools
- Feature Recognition
- Automatic Scan-Based Sketch and Constraint Extraction
- Curve Driven Lofted Surfaces
- Real Time Accuracy Analyzer
- Design Intent Modeling Capabilities
- Feature Based Smart Modeling Wizards
- Parametric Modeling for Design Modification
- Accuracy Confirmation
- Downstream CAD Flexibility

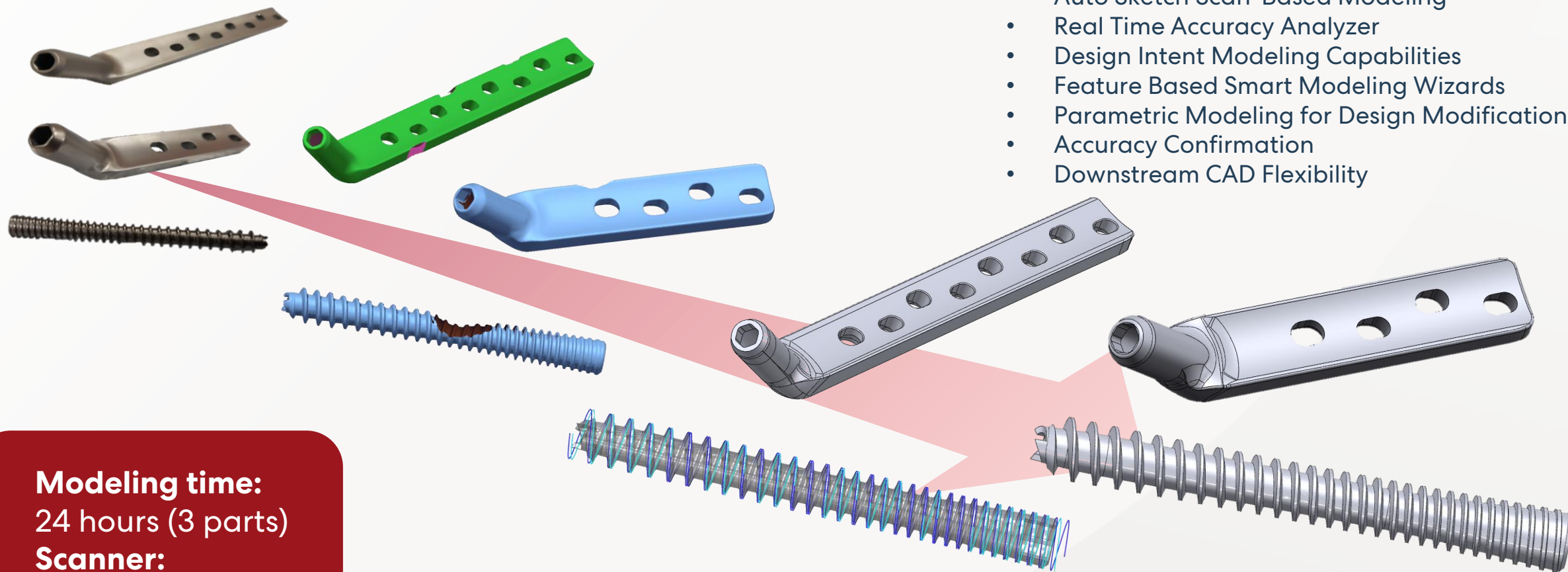
Surgical Plates & Screws

Modeling of Part for Design Modification



Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Feature Recognition
- Curve Driven NURBS Surfacing
- Scan-Based Helix Generation
- Auto Sketch Scan-Based Modeling
- Real Time Accuracy Analyzer
- Design Intent Modeling Capabilities
- Feature Based Smart Modeling Wizards
- Parametric Modeling for Design Modification
- Accuracy Confirmation
- Downstream CAD Flexibility



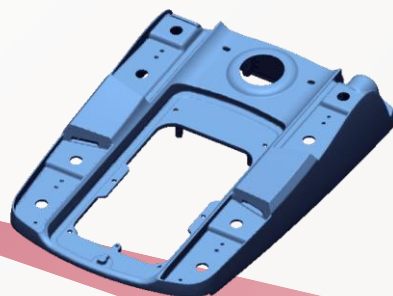
Modeling time:
24 hours (3 parts)
Scanner:
CT

Surgical Equipment Foot Pedal

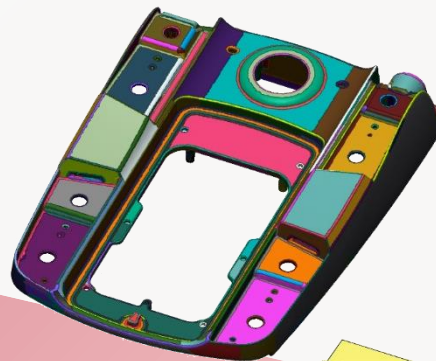
Redesign for New Supplier



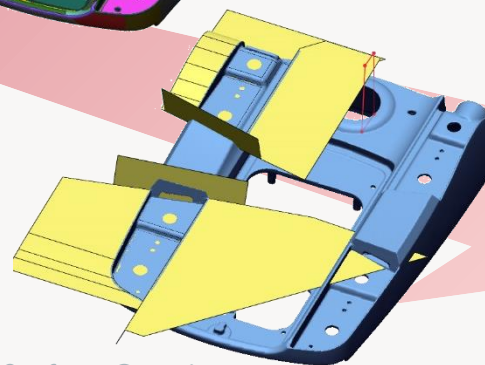
Foot Pedal



Scan Data



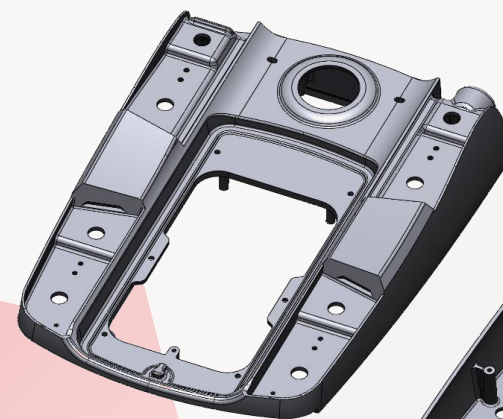
Feature
Recognition



Surface Creation

Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Automatic Feature Recognition
- Auto Scan-Based Sketch Generation
- Precise Surface Modeling Wizards
- Real time Accuracy Analysis
- Robust Alignment Tools
- Automatic Model Creation with Wizards
- Parametric Modeling for Modifications
- Accuracy Confirmation
- Downstream Process Flexibility



Modeling time:

8 hours

Scanner:

Structured light

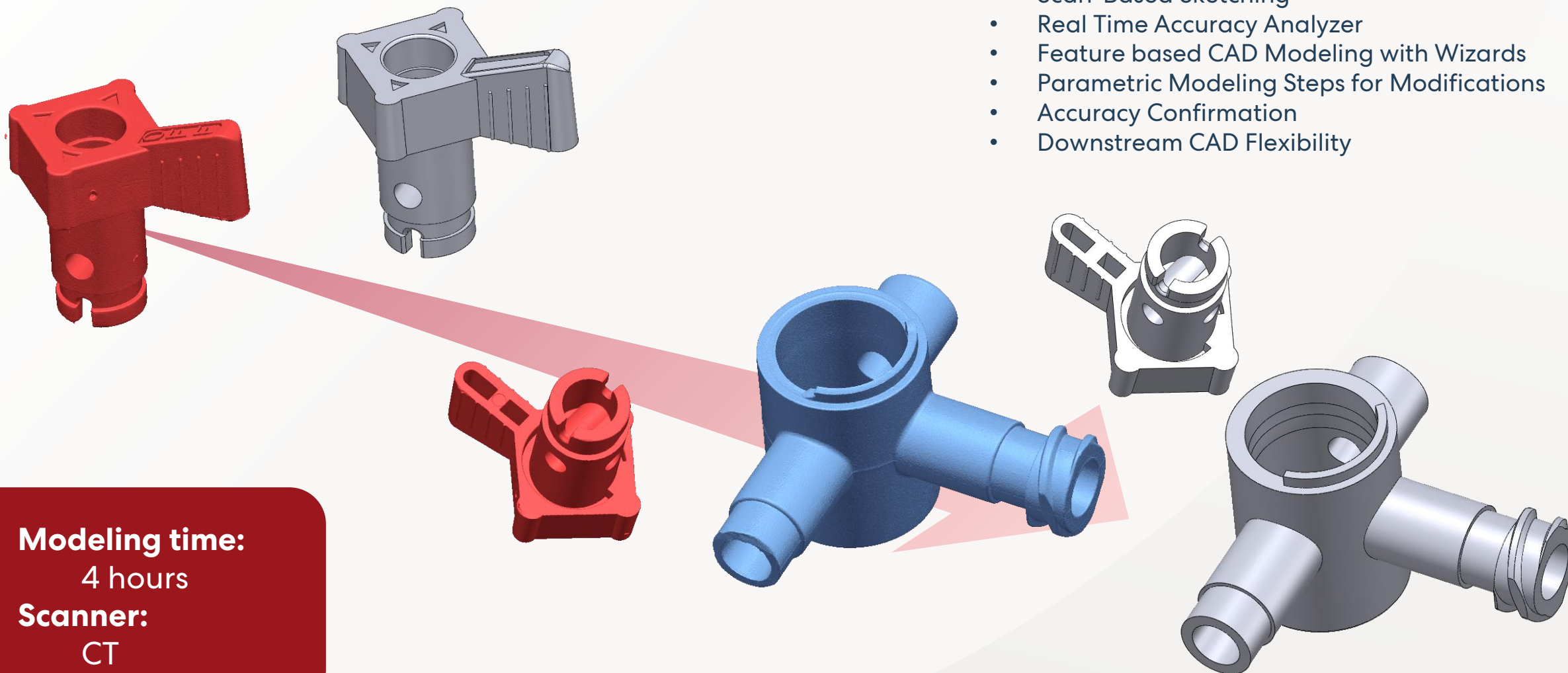
Medical Valve – Device Recreation

As-Built and Design Intent Modeling



Why Geomagic Design X?

- Automated Feature Recognition on External & Internal Part Surfaces
- Scan-Based Sketching
- Real Time Accuracy Analyzer
- Feature based CAD Modeling with Wizards
- Parametric Modeling Steps for Modifications
- Accuracy Confirmation
- Downstream CAD Flexibility



Modeling time:

4 hours

Scanner:

CT



Geomagic Design X

Tool & Die

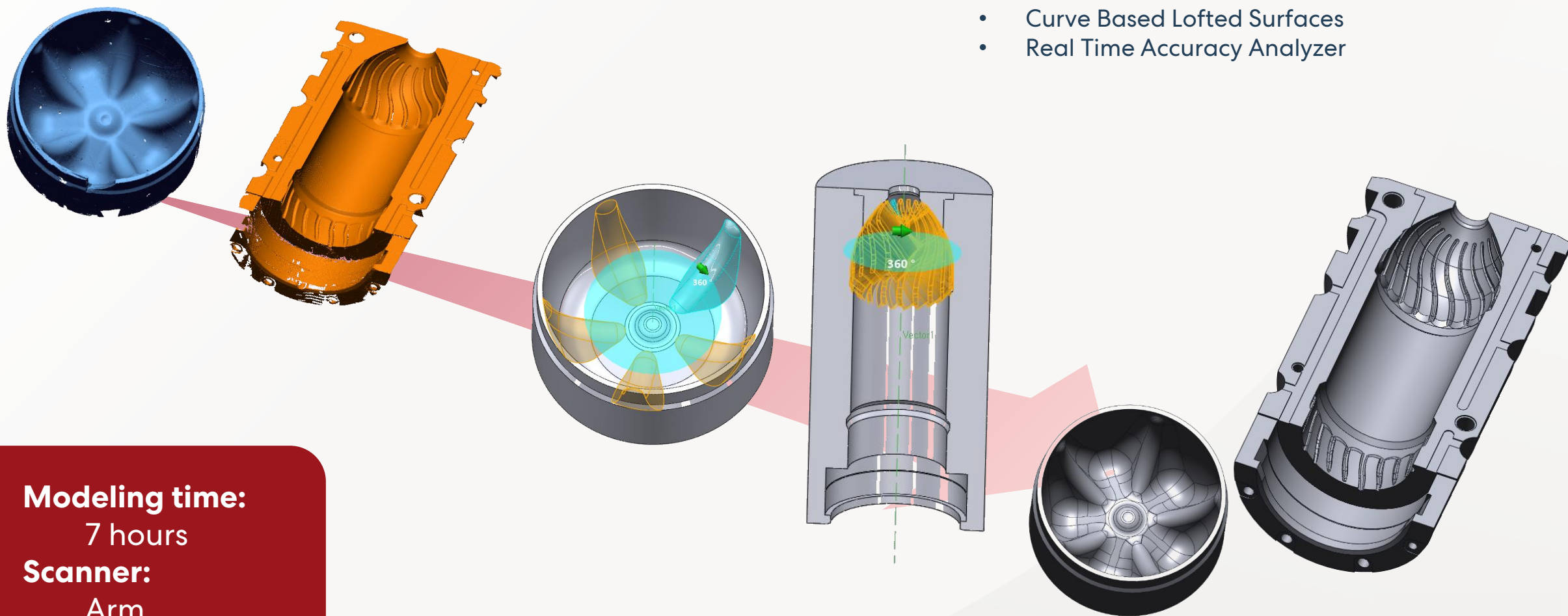
Plastic Blow Molds

Modeling for Tool Design



Why Geomagic Design X?

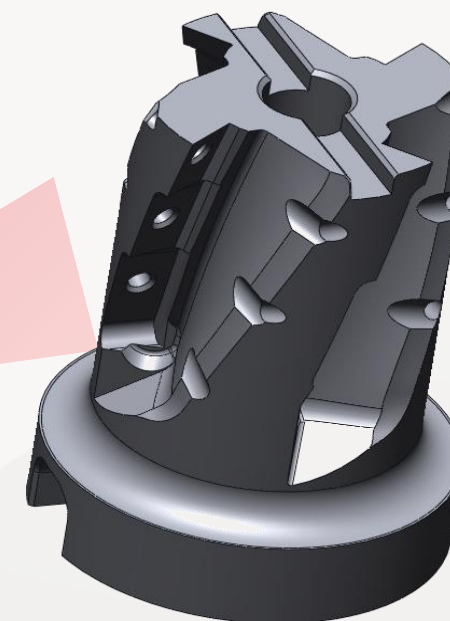
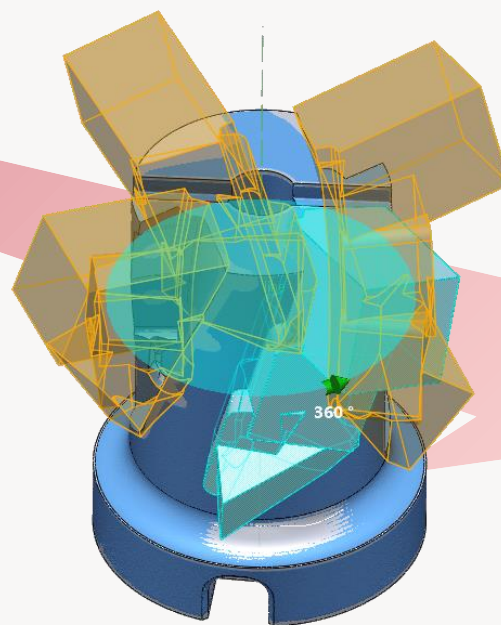
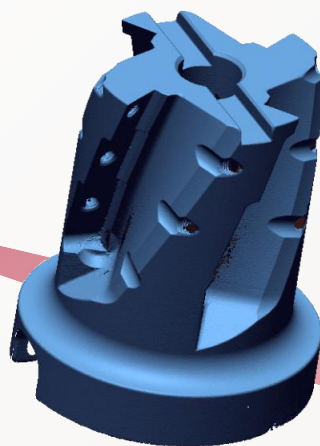
- Comprehensive Suite of Mesh Processing Tools
- Intelligent Feature Recognition
- Automatic Scan-Based Sketch and Constraint Extraction
- Curve Based Lofted Surfaces
- Real Time Accuracy Analyzer



Modeling time:
7 hours
Scanner:
Arm

Machining Tool

Remodeling for Design Modification



Modeling time:

6 hours

Scanner:

Structured light

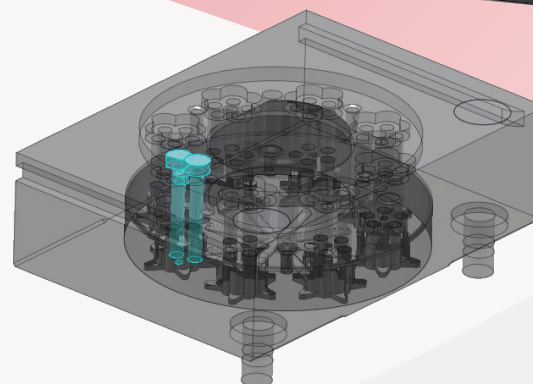
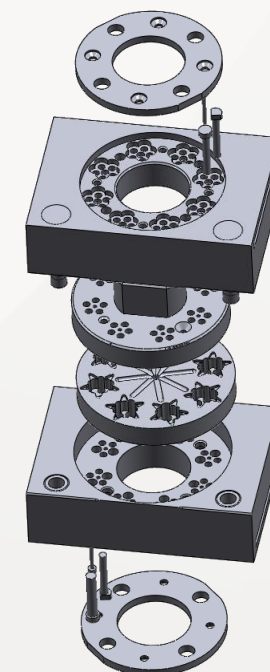
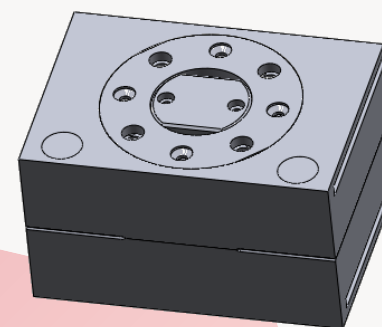
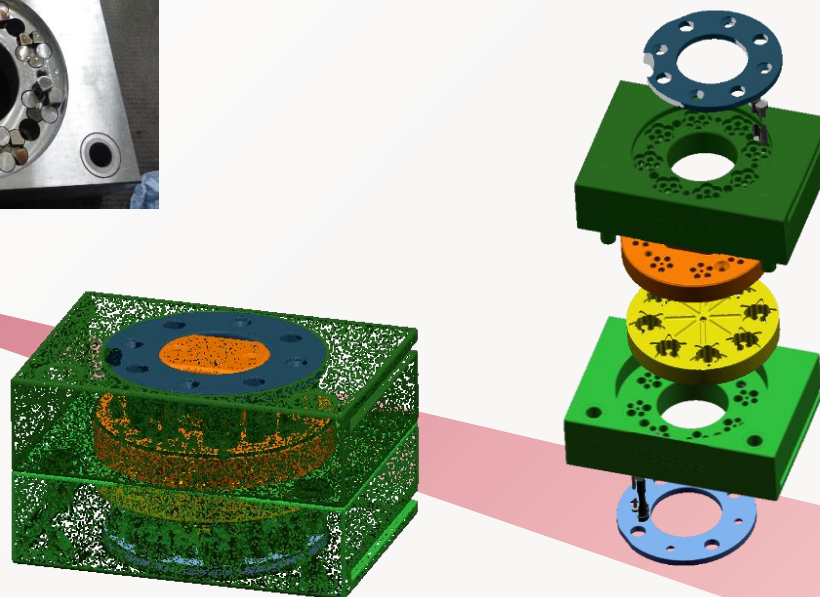
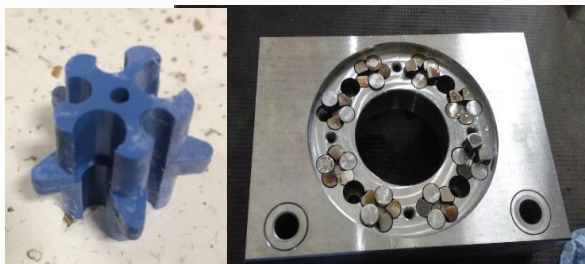
Why Geomagic Design X?



- Comprehensive Suite of Mesh Processing Tools
- Intelligent Feature Recognition
- Curve Driven Scan-Based Surfacing
- Auto Sketch Scan-Based Modeling
- Real Time Accuracy Analyzer
- Design Intent Modeling Capabilities
- Feature Based Smart Modeling Wizards
- Parametric Steps for Modifications
- Accuracy Confirmation
- Downstream CAD Flexibility

Injection Mold Assembly

Tool Redesign and Modification



Modeling time:
8 hours
Scanner:
Arm

Why Geomagic Design X?



- Comprehensive Suite of Mesh Processing Tools
- Intelligent Feature Recognition
- Scan-Based Sketching
- Real Time Accuracy Analyzer
- Direct 3D Scanner Connectivity
- Design Intent Modeling Capabilities
- Parametric Modeling for Modification
- Feature Based Smart Modeling Wizards
- Accuracy Confirmation
- Downstream CAD Flexibility

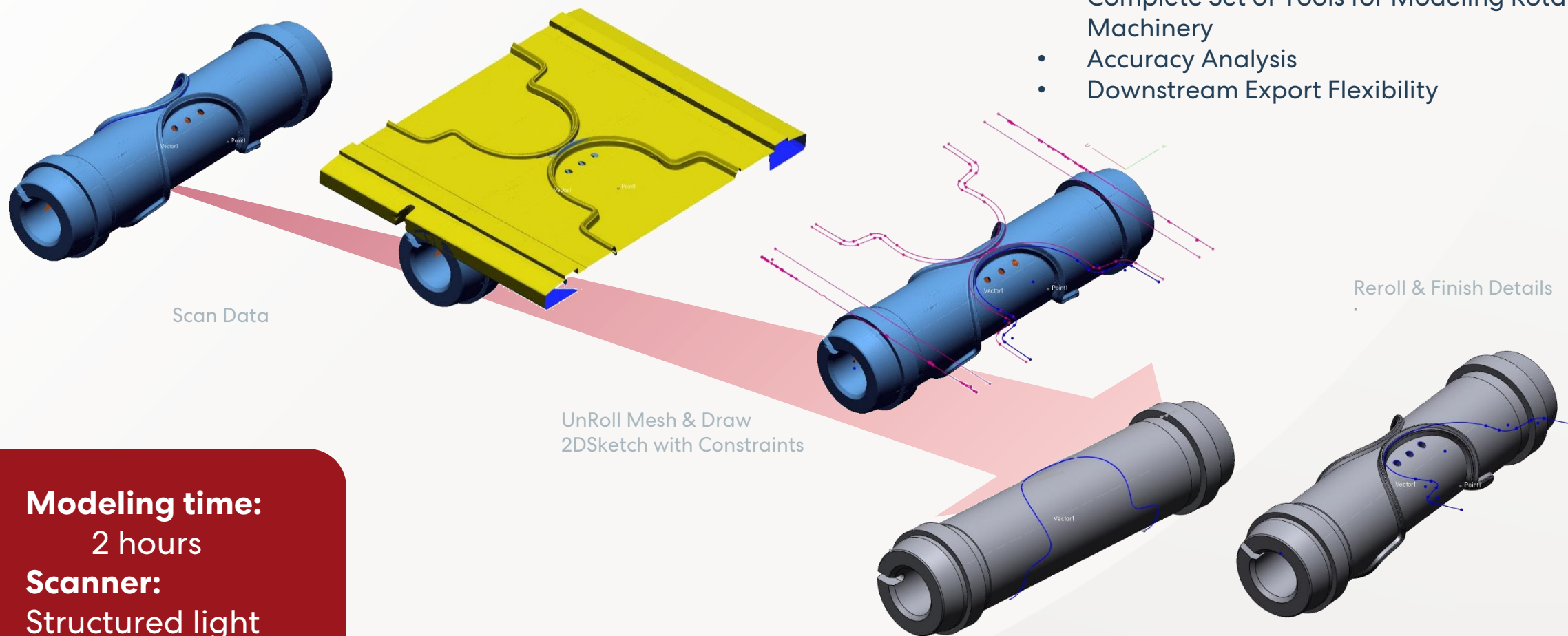
Roll Cutter

Design for Remanufacture



Why Geomagic Design X?

- Comprehensive Suite of Mesh Processing Tools
- Unroll Mesh for Precise Design Intent Extraction
- Auto Scan-Based Sketch Generation
- Re-Roll Sketch for Tool Path
- Complete Set of Tools for Modeling Rotating Machinery
- Accuracy Analysis
- Downstream Export Flexibility



Modeling time:

2 hours

Scanner:

Structured light