



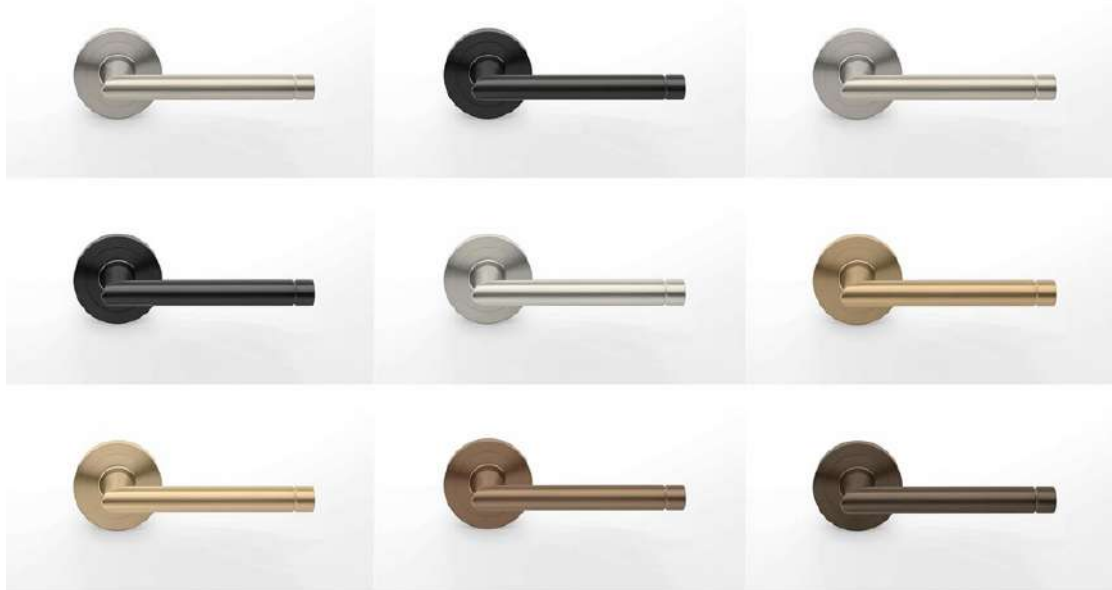
# 3D Product Modeling & STEP to GLB Conversion for Architectural Hardware

(3D Product Modeling, STEP to GLB Conversion, and Material & Finish Application Services)

CASE STUDY



TECHTURE



**Client** : Hardware/  
Product Manufacturer

**Team Size** : 2 No.s (BIM Engineer & BIM Coordinator)

**Disciplines** : -

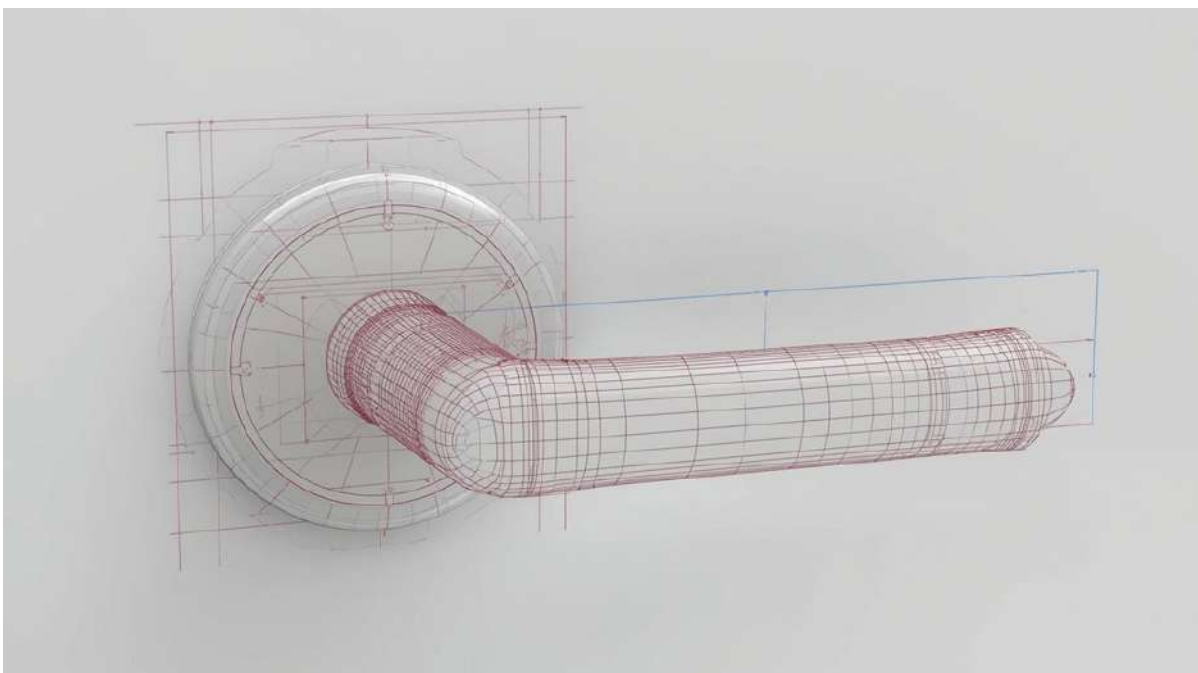
**Duration** : 2 Weeks

**Scale** : -

**Software** : Autodesk Inventor

**Type** : Commercial

**Location** : Stepney, South Australia



## Project Overview

Techture delivered 3D product modeling and file conversion services for architectural hardware components using Autodesk Inventor. The project involved processing and enhancing 35 product models, followed by conversion from STEP to GLB formats for visualization and digital use. Custom materials and finishes were developed to accurately represent product aesthetics. The final outputs enabled seamless integration across design, visualization, and web-based platforms.

## Scope & Deliverables

- 📦 Convert 35 product files from STEP to STEP & GLB formats.
- 📦 Perform 3D model updates and refinements within Autodesk Inventor.
- 📦 Create and apply custom materials and finishes as per specifications.
- 📦 Develop finishes including Berlin Smooth Nickel, Nero, Polished Chrome, Brushed Champagne PVD, Bone, and Patinated Bronze.
- 📦 Ensure outputs are aligned with input file quality and format constraints.

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## Challenges

- 📦 Maintaining geometry accuracy during format conversion.
- 📦 Developing consistent material finishes across multiple products.
- 📦 Managing file compatibility for downstream visualization platforms.

## Techture Approach

- Utilized Autodesk Inventor for precise model refinement and format conversion.
- Created custom material libraries to match specified finishes.
- Standardized workflows for batch processing of multiple product files.
- Ensured quality checks for geometry integrity and visual consistency.

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## Benefits

- High-quality GLB-ready models for real-time visualization.
- Consistent and accurate product finish representation.
- Improved cross-platform compatibility and usability.
- Streamlined digital assets for design and marketing use.

