

Bridging the Gap Between 2D Inputs and 3D Manufacturing Decisions

Generate 3D meshes from images, drawings, or text in minutes

THE PROBLEM: Early decisions lack usable geometry

Manufacturing teams regularly face:

- RFQs with drawings but no STEP files
- Procurement requests without CAD support
- Sales teams responding to PDF-only inquiries
- Engineering resources unavailable at early stages

Result: Slow RFQs, manual interpretation, and delayed decisions.

THE SOLUTION: AI-Powered geometry generation

3D Spark's 2D-to-mesh capability removes this bottleneck by converting visual, text-based, and 2D inputs into watertight, scalable 3D geometry that integrates directly into manufacturing workflows.

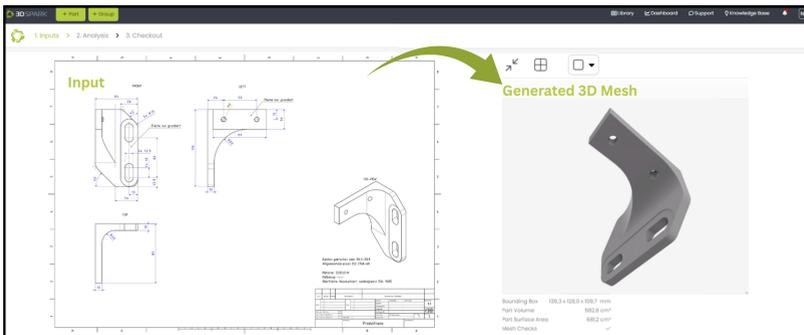


Image 1: Technical drawing to 3D Mesh

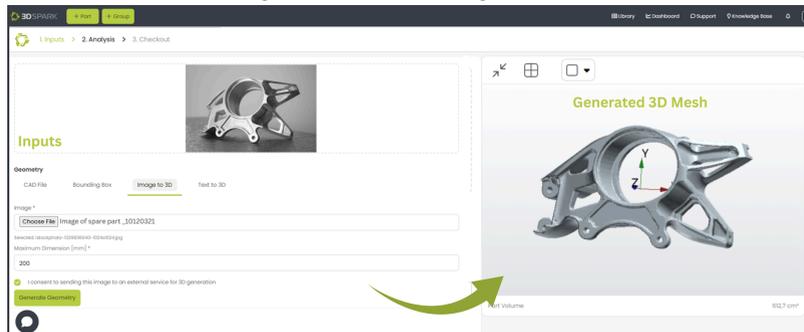


Image 2: Image to 3D Mesh



HOW IT WORKS

Step 1 - Upload

Images, technical drawings, text prompts describing part geometry, and/or optional target dimensions.

Step 2 - Generate

AI creates a watertight mesh (STL, OBJ, PLY) in under 2 minutes.

Step 3 - Analyse

Generated geometry feeds directly into cost calculation, manufacturability checks, and CO₂ estimation workflows for early-stage evaluation



WHAT THE OUTPUT IS DESIGNED FOR

Early-stage evaluation: Generated meshes are intentionally positioned for

Concept
Validation

Cost direction
analysis

Technology
selection

Feasibility
screening



BUSINESS IMPACT

- **Faster time-to-first-mesh:** Accelerates early screening and quoting cycles.
- **Reduced manual interpretation:** Removes dependency on individual engineering judgment for early feasibility.
- **Higher workflow continuity:** Moves from image input to validated production analysis without restarting the process.

From 2D input to manufacturing insight in minutes → [Get in touch to know more!](#)