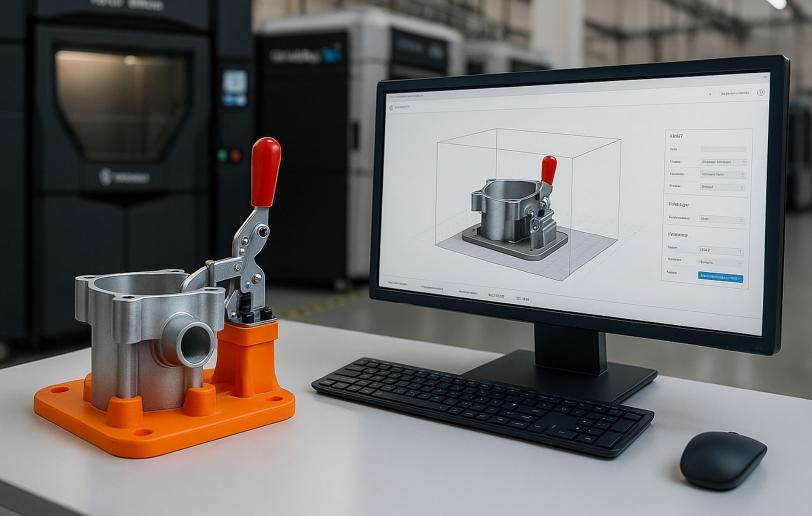
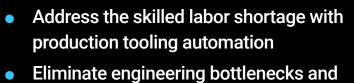


fixturemate by trinckle + GrabCAD Print Pro

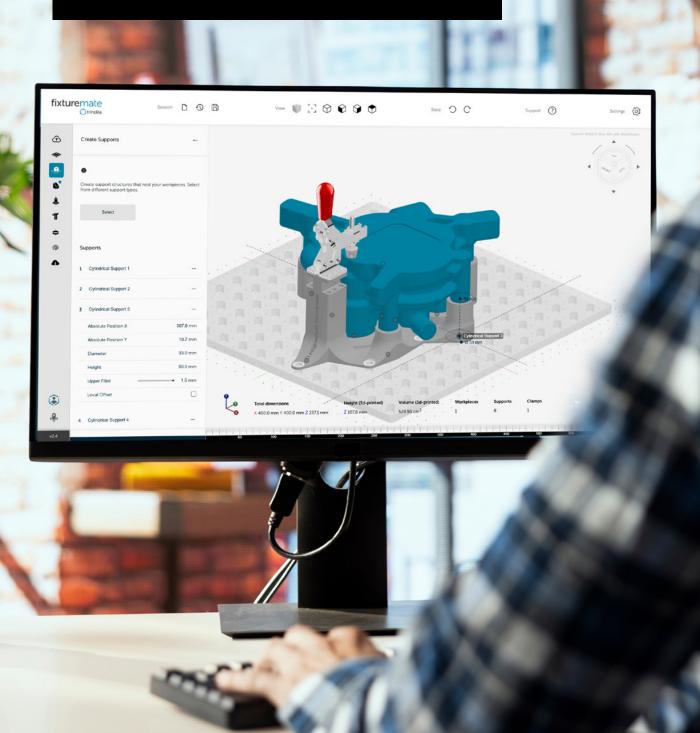
Automated Fixture Design for Manufacturing Operations







 Eliminate engineering bottlenecks and reduce fixture creation time by 80% with automated design tools that enable your AM operators to create professionalgrade fixtures without CAD expertise or expensive software licenses.





Manufacturing Challenge:

Engineering Bottleneck

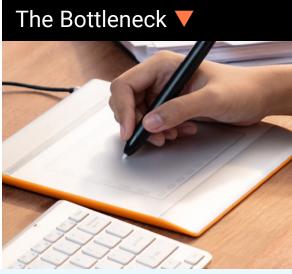
The Problem:

- Skilled labor shortage affects 80% of manufacturers
- 2-3 day wait times for routine fixture design
- CAD expertise required for simple tooling needs
- Engineering resources tied up on low-value tasks
- Multiple software licenses increase operational costs

The Solution:

Wizard-style fixture design integrated directly into GrabCAD Print Pro







Proven Manufacturing Results

Automotive Supplier Case Study:

Before: Manufacturing engineer required 2-3 days for custom

inspection fixture

After: AM operator completes fixture design in 2-3 hours using fixturemate

Result: 80% time reduction, eliminated engineering dependency

CMM Inspection Operations:

Before: CMM setup using traditional blocks took 1+ hours **After:** fixturemate-designed fixtures reduce setup to minutes

Result: Dramatically improved inspection throughput

Production Tooling:

Before: 3-hour setup times for fixture deployment

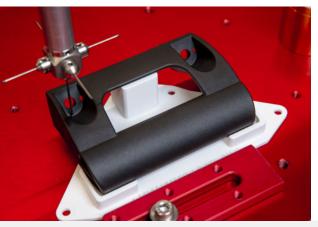
After: 20-minute setup with fixturemate-designed fixtures

Result: 85% reduction in fixture deployment time









Complete Fixture Design Capabilities

Production Tooling Applications:

- Assembly Fixtures Consistent component positioning for production lines
- Welding Fixtures Repeatable part alignment for quality welds
- Inspection Gauges Custom go/no-go gauges for quality control
- Machining Fixtures Secure workholding for CNC operations
- Measuring Fixtures Dimensional inspection and CMM setup
- Carrier Trays Component transport and organization

Design Time:

Under 20 minutes from concept to print-ready

No CAD Required:

Wizard-style interface for manufacturing technicians

ROI Analysis for

Manufacturing Operations

Labor Cost Savings:

- Eliminate engineering time for routine fixture design
- Reduce fixture lead times from days to hours
- Free up skilled engineers for higher-value design work
- Enable cross-training of AM operators on tooling design

Operational Efficiency:

- Faster production setup with optimized fixture design
- Reduced downtime waiting for custom tooling
- Improved part quality with precision fixture positioning
- Scalable tooling production for varying batch sizes

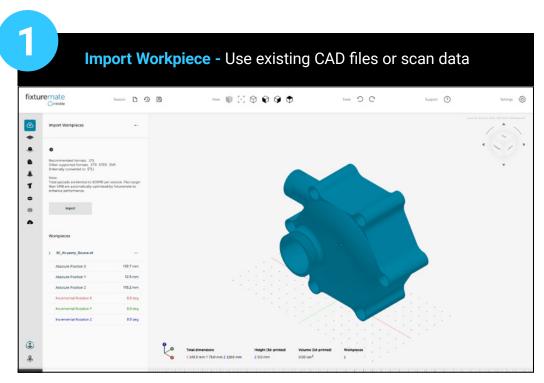
Cost Structure Impact:

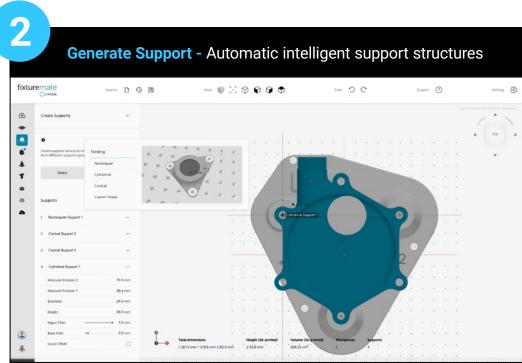
- No additional software licensing included with GrabCAD Print Pro
- Reduced CAD software needs for routine tooling
- Lower training costs with intuitive interface
- Faster ROI through immediate productivity gains



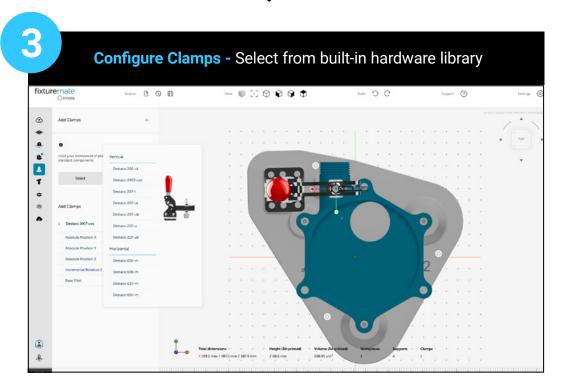
Technical Integration & Workflow

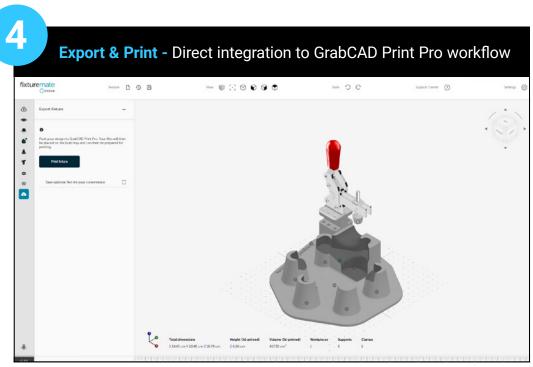
Simple 4-Step Process:











Manufacturing Environment Features:

- Offline Operation No cloud connectivity required for IP security
- Local Installation Runs entirely on your manufacturing computers
- Multi-Language Support Available in English, German, Simplified Chinese
- Enterprise Security Integrated with GrabCAD Print Pro security features





Material & Technology Compatibility

Industrial-Grade Materials:

- ABS-CF10 Carbon fiber reinforced for high-strength applications
- Nylon 12 CF Chemical resistance and dimensional stability
- TPU 92A Flexible fixtures for delicate components
- PolyJet Resins Smooth finish for precision applications

Production Technology Support:

- FDM Proven reliability for manufacturing tooling
- SAF High-throughput production of fixture components
- P3 DLP Precision fixtures with excellent surface finish
- PolyJet Multi-material fixtures with varying properties

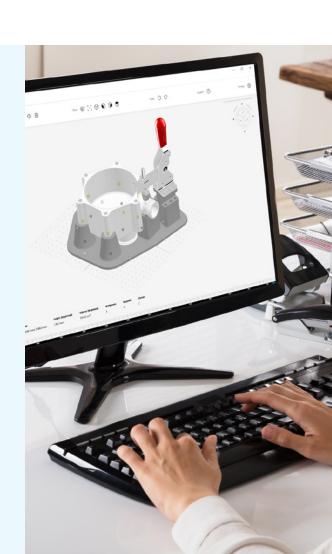
Implementation & Support

Getting Started:

- Included with GrabCAD Print Pro No additional licensing costs
- 30-day free trial Full feature evaluation (available Q3 2025)
- Direct technical support GrabCAD Print customer success team
- Training resources Complete documentation and video tutorials

Transition Planning:

- Existing trinckle customers: Contact Stratasys for transition support
- New implementations: Seamless integration with existing workflows
- Team training: Intuitive interface requires minimal CAD knowledge







Next Steps for

Manufacturing Teams?

Ready to eliminate fixture design bottlenecks and address skilled labor shortages?

Evaluate fixturemate:

<u>Join our Monthly Office Hours</u> - See real fixture design in under 20 minutes <u>Start GrabCAD Print Pro Trial</u> - Full access including fixturemate (Q3 2025)



Questions?

Technical Support: print@grabcad.com

Manufacturing Consulting: Contact your Stratasys representative

fixturemate integration available Q3 2025 with GrabCAD Print Pro trinckle empowers automotive, manufacturing, and medical industries with advanced design automation



stratasys.com ISO 9001:2015 Certified





HEADQUARTERS

3-4 Innovation Way, North Staffs Business Park, Stoke-On-Trent, ST6 4BF www.tritech3d.co.uk | info@tritech3d.co.uk | 01782 814551

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