




Design for 3D printing, simplified.



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 Berlin, Germany

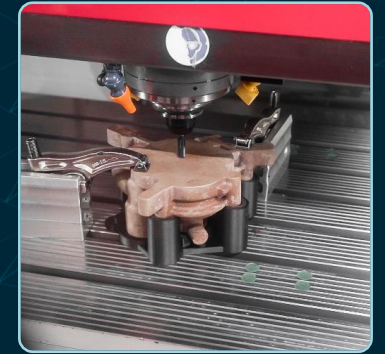
 20+ employees (tech focus)

 Design Automation Software

**Design automation** software by trinckle **transforms** CAD expertise into algorithms, **streamlines the design workflow** for professionals, and **enables all users** to produce high-quality designs.

### Manufacturing

Robotic grippers,  
jigs, fixtures,  
tooling



### Medical

Orthosis, dental,  
prosthetics, implants,  
surgical guides



### Consumer products

Custom eyewear,  
jewelry, wearables,  
interior design



# Fixtures – a definition

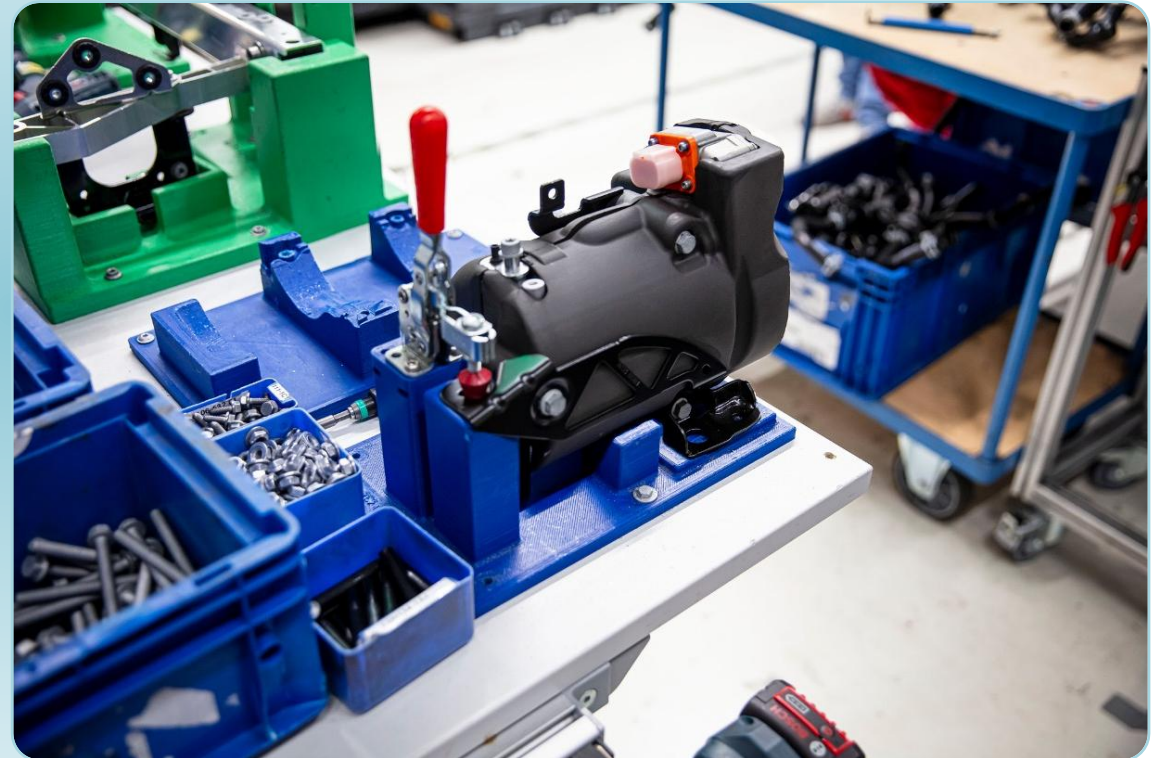
**Fixtures** are custom tools that hold, support, position, or guide a workpiece to make a task easier, faster, and more accurate.

Whether you call them fixtures, jigs, holders, or tooling, they all serve the same **purpose**: controlling how a part is positioned and worked on.



# Why 3D Printing

- **Significant Cost Savings**  
No tooling, less waste, no expensive setups
- **Lead Time Cut from Weeks to Days**  
Even overnight production
- **Custom & Complex Shapes**  
Tailored to any part or surface
- **Lightweight & Ergonomic**  
Safer, easier handling
- **On-Demand Production**  
Digital designs, instant manufacturing



The way we produce jigs, fixtures, and tooling has changed.

We 3D print them now.\*

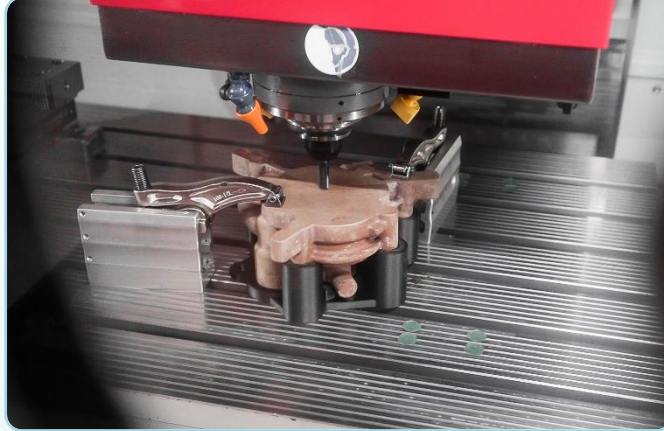
\*58% of companies with AM experience use the technology for tooling, jigs and fixtures (JABIL REPORT, 2023)

# Empower every department on the production floor

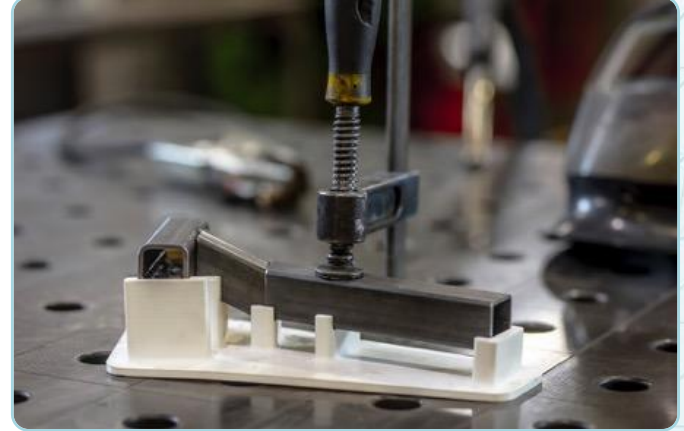
fixturemate lets each team create custom AM fixtures without CAD expertise



Assembly fixtures



CNC fixtures



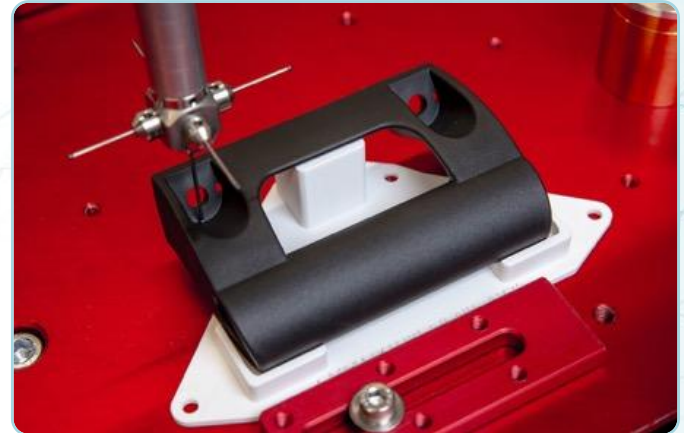
Bonding and welding fixtures



Inspection fixtures



CT Scan fixtures



CMM fixtures



However, some key challenges remain...

## Challenges

Designing fixtures usually needs CAD skills – but not everyone has them.





## Challenges

Designing fixtures in CAD pulls experts away from higher-priority projects.

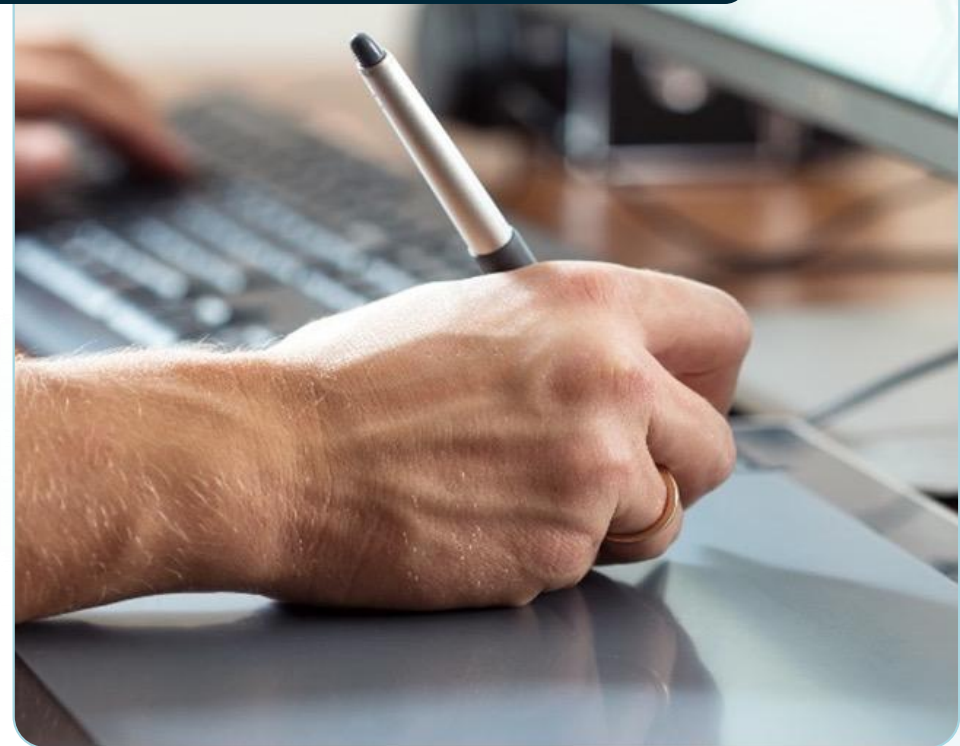


## The potential

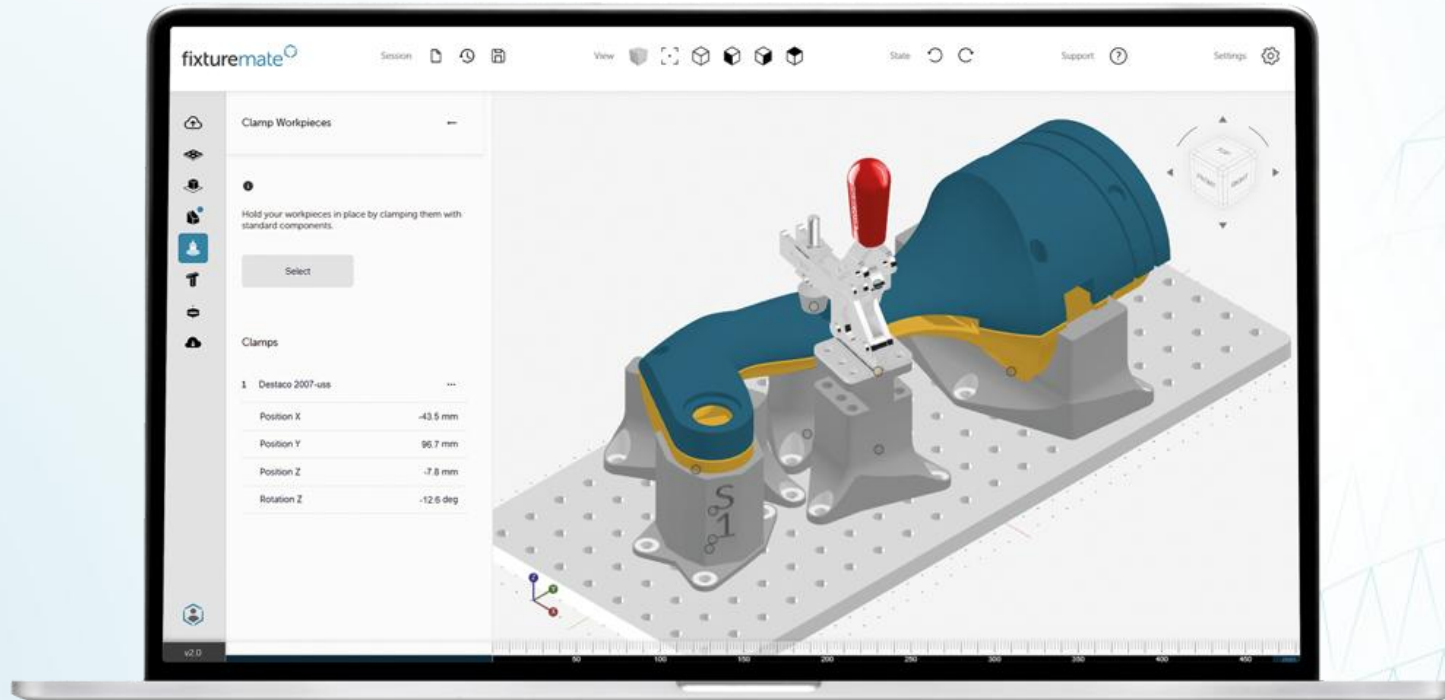


Additive manufacturing can produce jigs, fixtures, and tools at low cost.

## The bottleneck



Manual design for AM is time-consuming and costly – slowing down production.



fixturemate

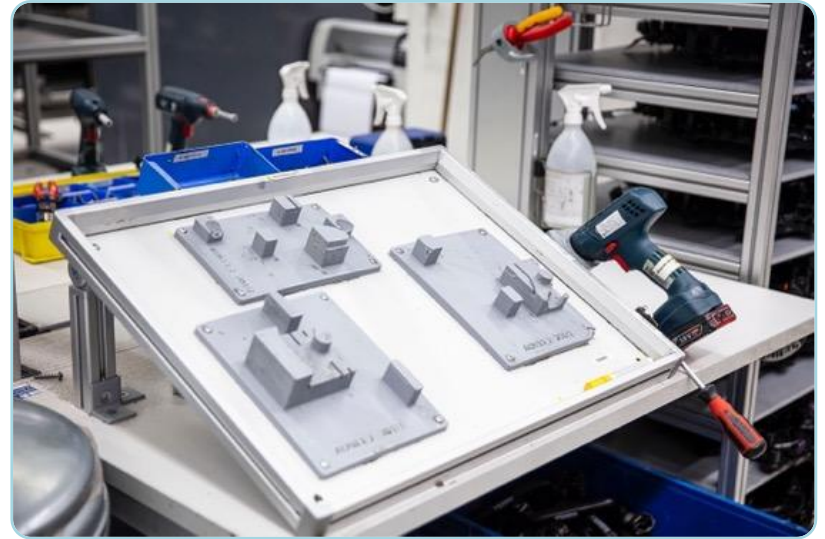
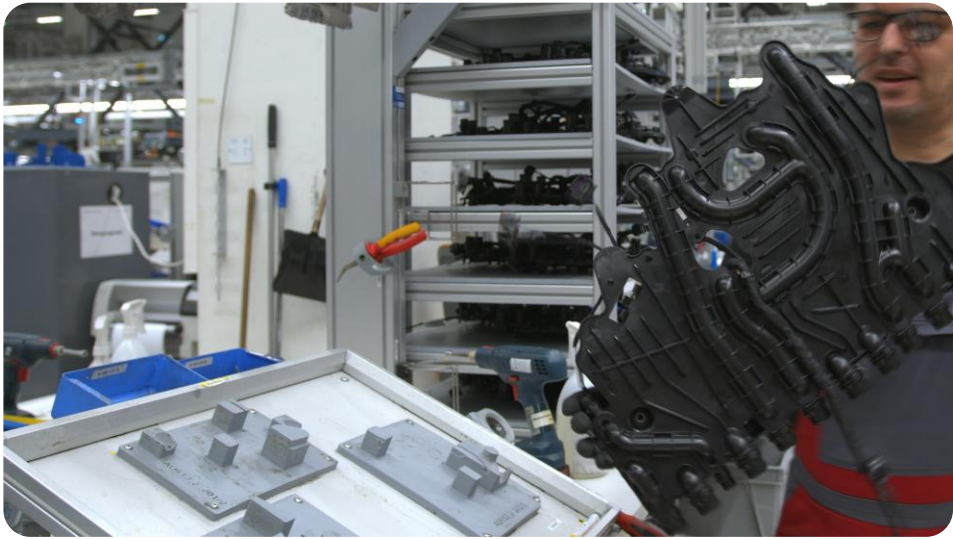


Reference from the industry



**Audi Sport**

Designing fixtures in  
minutes for 3D  
printing



# Audi Sport

Free up time from CAD Experts to reduce design cost and delivery times.

## Challenge:

Designing fixtures, jigs, and tools manually with CAD software consumes significant time and resources from specialized engineers.

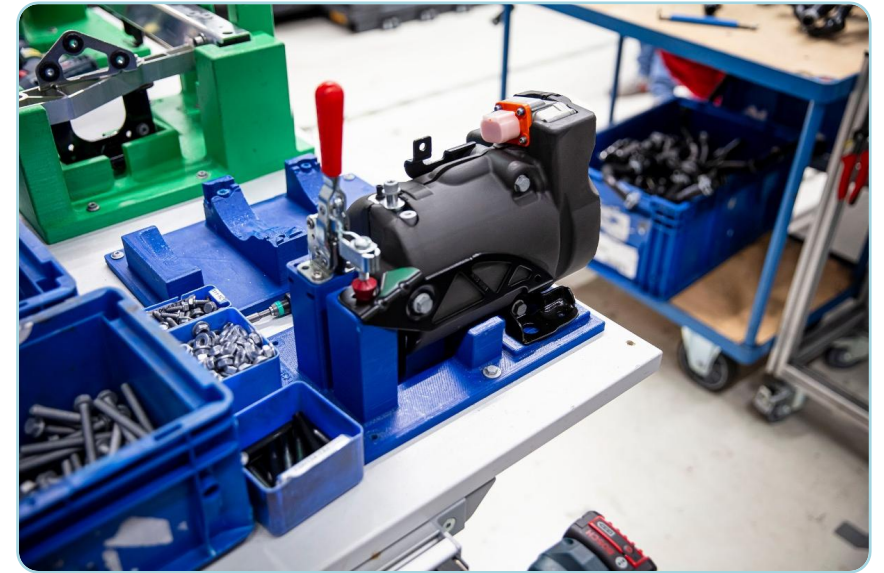
## Outcome:

**92%** reduced design time

What took 2-4 hours in CAD now be done in 20 minutes or less using fixturemate

**80%** reduced part costs

A combination of fixturemate and 3D printing enabled Audi Sport to produce fixtures faster and cheaper



Industry

Automotive

Size (Employee No.)

1.500

Users

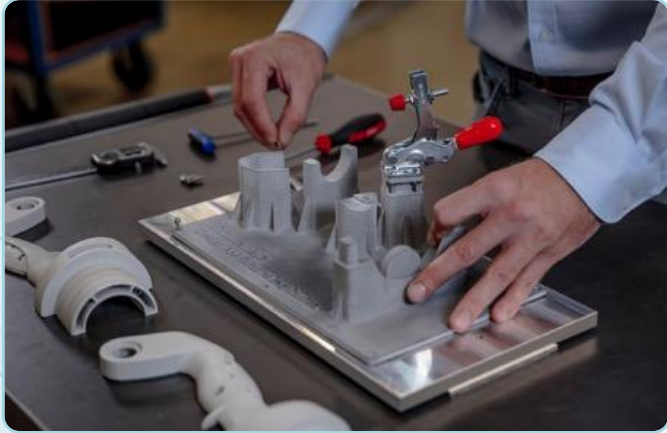
Trainees, Process /  
Production engineers

Average design time

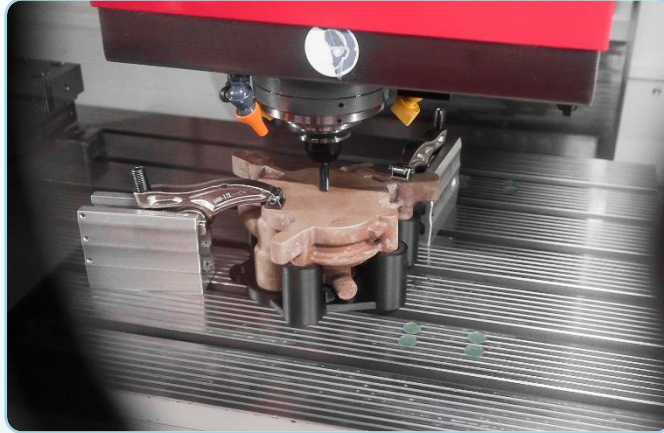
15 Mins

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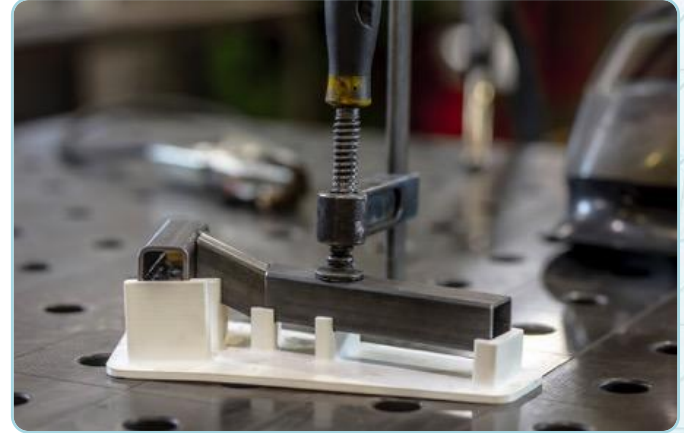
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Assembly fixtures



CNC fixtures



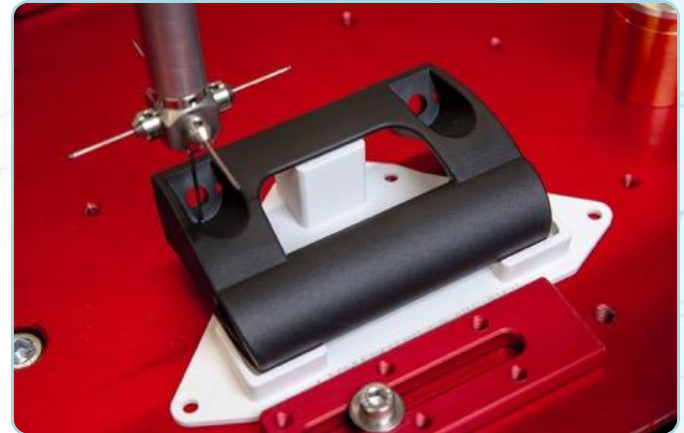
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Inspection fixtures

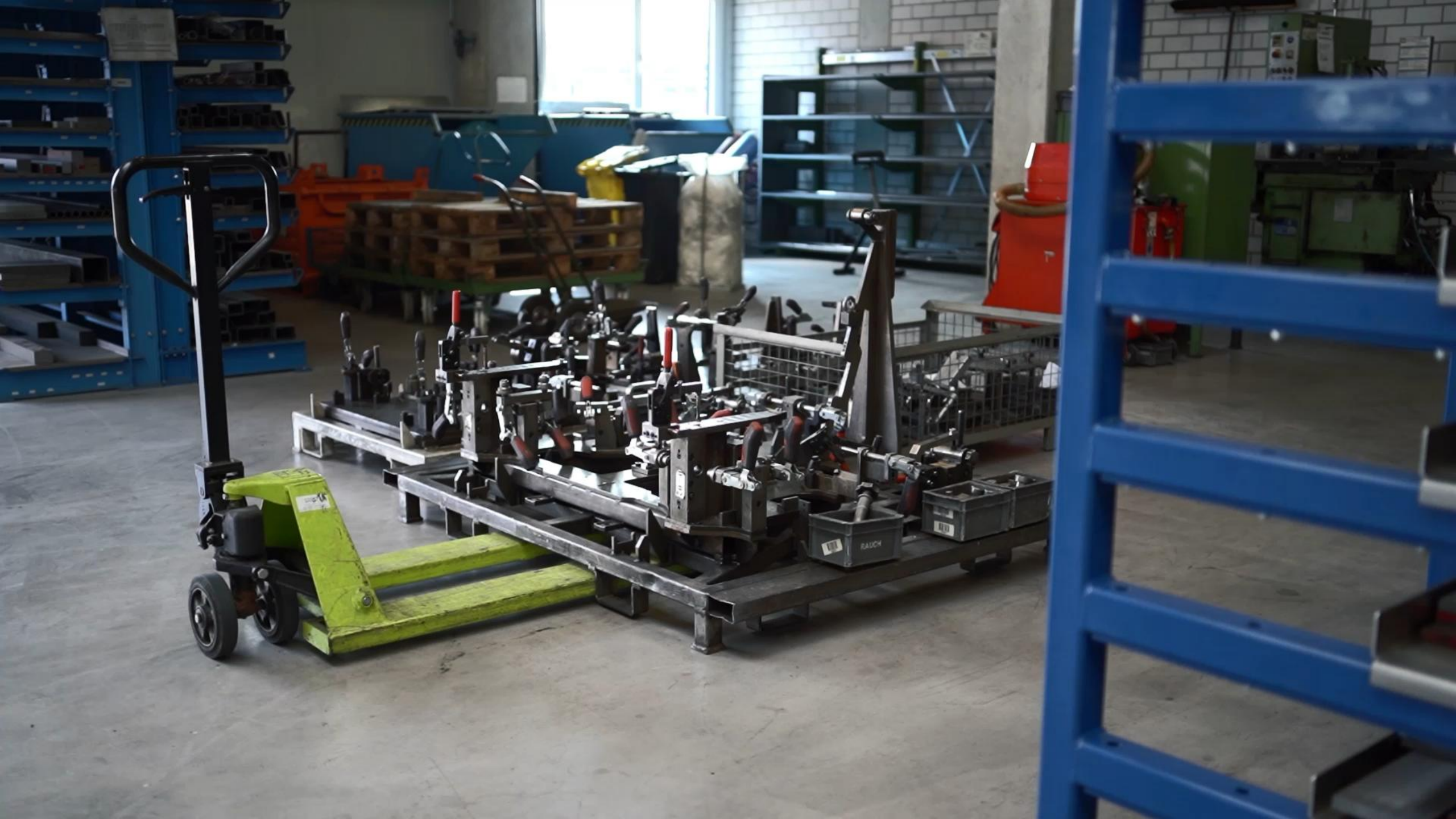


CT Scan fixtures



CMM fixtures





# Let's see the fixturemate & GrabCAD Print Pro™ integration – in action

