

## EXPERT

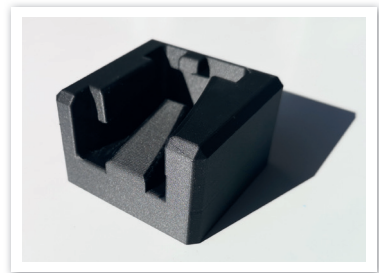
**CUSTOMER**  
**PART**  
**APPLICATION**  
**AM TECHNOLOGY**

Expert Tooling and Automation Ltd  
In-house assembly fixture  
Assembly Jig  
FFF / CFF, Markforged Mark Two

### PROCESS

Expert Tooling and Automation (EXTA) require a number of custom jigs and fixtures for in-house assembly line applications. Prior to using additive manufacturing, EXTA would have outsourced the fabrication of this assembly jig on a 3-axis CNC machine. The part would have been produced in four separate segments, assembled using screws and dowels.

Since adopting 3D printers, EXTA now design with additive manufacturing in mind. For conventional machining, the design team would have to redesign this part, as well produce technical drawings and manufacturing guidelines. They have not only saved on costs but have significantly reduced lead times.



“Using 3D printing significantly reduces lead time from design to final part, minimising the need to involve internal purchasing and goods-in departments, as well as outsourced fabricators. As we design for additive manufacturing, it also allows us to produce a better fit and functioning part than required, so we save hours by not having to create 2D drawings”.

**Richard Gardiner,**  
**Project Manager**

### RETURN ON INVESTMENT

<b>TRADITIONAL FABRICATION</b>	COST OF £300 PER PART, USING CNC MACHINING
<b>3D PRINTING</b>	COST OF £10.07 PER PART
<b>COST SAVING</b>	96% COST SAVING
<b>TIME SAVING</b>	LEAD TIME REDUCTION FROM 3 WEEKS TO 10 HOURS (98%)

### ABOUT EXPERT TOOLING AND AUTOMATION

EXTA is a prime solution provider for bespoke tooling and automation systems. Established in 1972, EXTA has earned its position as a highly respected engineering supplier to customers across the globe, working within fields of Assembly Tooling, Special Purpose Machinery and Automation Products to the automotive, aerospace, machine tool and transport industries.

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