

Mecmesin

FORCE & TORQUE TEST SOLUTIONS

CUSTOMER
PART
APPLICATION
AM TECHNOLOGY

Mecmesin Ltd
Bellow Assembly Nutplate
3D printed stock parts
FFF / CFF, Markforged Mark Two

PROCESS

The Bellow Assembly Nutplate is used in Mecmesin's smaller testing stands. The production parts are now 3D printed using Onyx material (Nylon with micro Carbon Fibre). Prior to additive manufacturing, the parts were originally fabricated in sheet steel.

3D printing the parts on Mecmesin's in-house Mark Two composite 3D printer enables the team to have greater design freedom, and also control over part availability, seeing a reduction in the reliance on external suppliers and lead times.



RETURN ON INVESTMENT

For a batch of 78 parts

TRADITIONAL FABRICATION	UNIT COST OF £2.98
3D PRINTING	UNIT COST OF £0.11
COST SAVING	96% COST SAVING
TIME SAVING	LEAD TIME REDUCTION FROM 5 WEEKS TO 12 HOURS (98.5%)

"We had initially purchased the Markforged printer with our bespoke fixturing in mind as most pieces are one-off runs which are always an expensive manufacture. After just a few weeks we realised the wider functionality of the machine and started to run low volume standard stock parts"

Emily Swinburne,
Mechanical Design Engineer

ABOUT MECMESIN

Mecmesin, established in 1977, specialise in the design and manufacture of force and torque testing solutions producing affordable and easy-to-use products that enable small and large businesses alike to undertake quality control checks on their products without compromising on precision.

www.mecmesin.com