



FV 430 Armored Personnel Carriers (APC) Mechanical Housing (Tachometer)

Combating obsolescence by solving long lead times and costly low volume production issues.

Background

The FV430 series of Armored Personnel Carriers (APC) is a family of fighting vehicles utilized by NATO forces and their partners. Initially introduced in the 1960s, this platform has undergone numerous redesigns and modifications throughout its service life. The Mechanical Housing Tachometer maintains the mechanisms that transmit signals to the driver's gauges, enabling more accurate speed and distance calculations during vehicle navigation.

The Challenge

Many components from the original vehicle variant are no longer in production, necessitating reliance on "new old stock" or small batch manufacturing to maintain support. This dependence leads to delays in repairs, resulting in vehicles with reduced fighting effectiveness or taking them out of the battle altogether.

The Solution

SPEE3D's CSAM technology can 3D print metal replacement parts from design to deployment in less than 18 hours or 1 day.

The Value

Ensuring continuous operation of equipment is crucial in critical environments. Delays in sourcing parts can diminish the performance of the equipment or render it completely non-operational. With CSAM technology, customers can minimize wait times and associated costs for essential spare parts.

Benefits

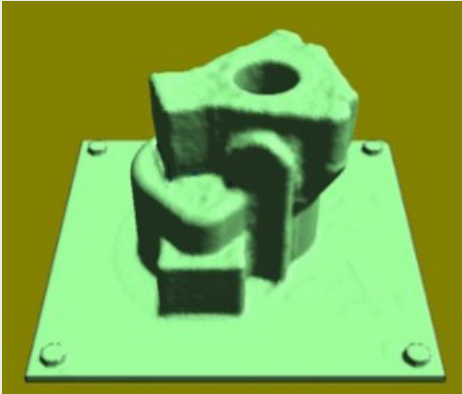
Combating obsolescence; extending the life of vehicles indefinitely

Minimizing downtime; keeping operations moving without waiting for parts to be delivered

Production

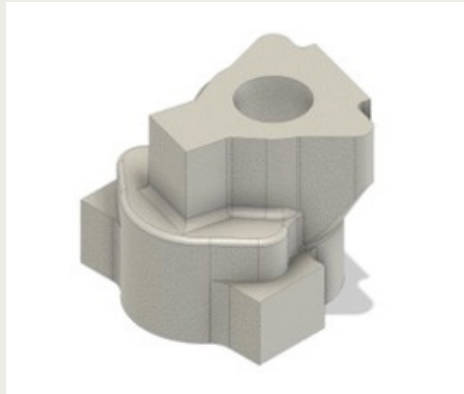
Method	Time
Manufacturing (Casting or Machining)	6-8 weeks
SPEE3D CSAM Aluminum 6061	17.5 hours

Design to deployment in 17.5 hours



Print: 108 minutes

Aluminum 6061, 1kg of material



Cook: 11.5 hours

Heat treated in a standard air furnace



Cut: 4 hours

Critical surfaces machined on a CNC



About the Equipment

The FV430 series of Armored Personnel Carriers (APC) are a family of fighting vehicles that are used by NATO forces and her partners. Variants include armored infantry vehicles, ambulances, forward repair vehicles and communication platforms. First brought into service in the 1960s, the platform has had many redesigns and modifications over its service life, which has ensured that it still operationally effective in today's modern military.

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