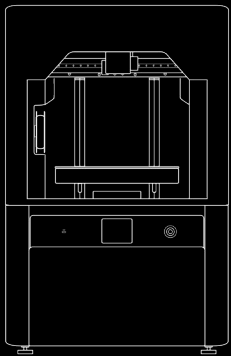


# HydraTune



Industry

Application

Technology

Materials

Engineering / Mining

Battery Pack

FX10

Onyx®

# Battery Pack

Western Australian company, HydraTune, has developed a digital platform for the safe and accurate maintenance of hydraulic equipment that has the potential to substantially reduce losses caused by hydraulic inefficiency on mine sites worldwide.

Managing director, Shane Lewis, originally believed units would need to be made on a one-off basis to suit the specific needs of each user, and saw a key role for 3D printing in his manufacturing process. He invested in two Markforged FX10 printers and a metal upgrade kit. Shane also opted for Markforged's advanced package, which gave him access to the Eiger Simulator system, a sophisticated tool for testing the strength of parts at design stage.

HydraTune used the Eiger Simulator in designing their printed version of the battery pack for the SafeAdjust system. This part has to handle harsh environments and rough treatment. Made in aluminium, its manufacturing process was originally outsourced, and the result was heavy and expensive.

**“At \$220 an item we’ve cut costs by two thirds.”**

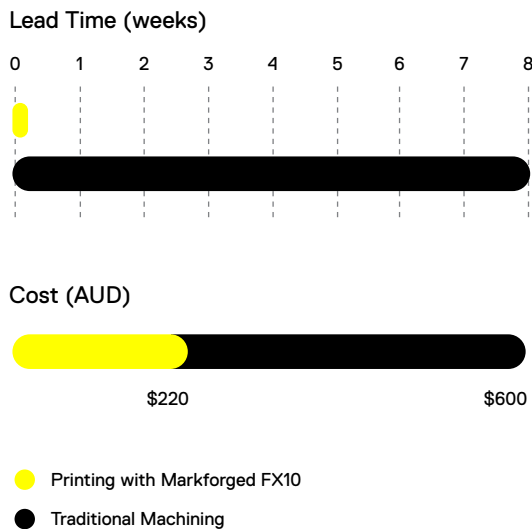
— Shane Lewis  
Managing Director, HydraTune

**“We don’t have to wait eight weeks for outsourced packs, we can print one in a day.”**

— Shane Lewis  
Managing Director, HydraTune

“Our redesigned battery pack is printed in Onyx on an FX10. It’s lighter than the aluminium version, and meets all the strength criteria required for minesite work.

“We don’t have to wait eight weeks for outsourced packs, we can print one in a day, and at \$220 an item we’ve cut costs by two thirds,” Shane said.



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