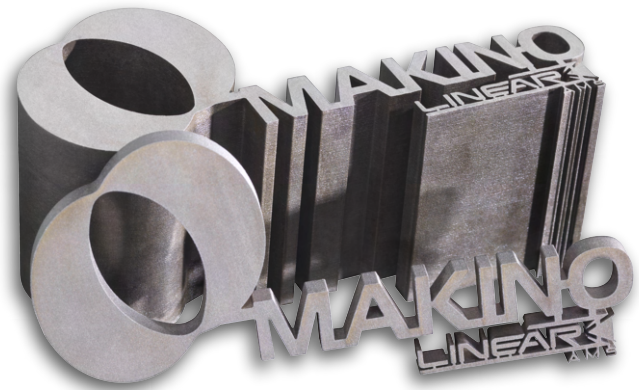


## Additive Manufactured Part Cut-Off

Machine: U6 H.E.A.T. Extreme  
Material: Powdered Metal  
Thickness: Varying Thickness  
Details: Both Away 1 Pass Machining

| Wire Diameter     | Cycle Time |
|-------------------|------------|
| 0.010" Ø Brass    | 35 minutes |
| 0.016" Ø H.E.A.T. | 20 minutes |



### 1.7x Faster Machining Speed (43% Reduction of Cycle Time)

Many users of additive technology will utilize conventional means to separate the part from the base plate, typically using band saws. Band saws do not provide good accuracy often times damage the piece, leading the expensive and time intensive part to be scrapped. At their best, bandsaws will leave an inconsistent amount of stock material on the part, requiring additional conventional finishing operations (EDM, milling, grinding).

Wire EDM is the ideal process for separating the printed part from the backing plate, as the process is significantly more accurate, 100% repeatable, and will lower the overall manufacturing costs.

The use of wire EDMs for these operations are very difficult, as the flushing characteristics are extremely poor, affecting machining speed. The machine must also manage very dynamic changes in material thickness, which often leads to wire breaks. This is often overcome by cutting at slower speeds.

An ideal wire EDM for printed cut-off applications must contain a robust flushing and filtration system and an advanced and highly capable adaptive power control to maximize speed and productivity. Makino wire EDMs are uniquely designed for this type of application.

The Makino Hyper-i control and generator provide the robust and advanced power control technologies. And the high capacity dual flush pump configuration provides the biggest leap in performance for this type of application.

Makino wire EDMs use two independently CNC controlled flush pumps that deliver double the horsepower to flushing than other machines on the market, Makino wire EDMs also read and react more quickly and precisely to changes in flushing dynamics during operation, which provides optimum level machining speeds.

To learn more, visit [www.makino.com/extreme](http://www.makino.com/extreme)