This bike build is a reimagined iteration of the Honda Hawk GT, the 80s cult track bike. I wanted to give it a second chance with a modern approach to styling, fabrication, and performance.

The original defining characteristics of the ’89 Hawk were blended with a futuristic proportion and aesthetic. Hand sketching and rendering established the direction and emotion of the bike. For the bike to be modern in appearance, the surfacing needed to be sophisticated. To truly execute a design with sensitivity of lines, form, light and shadows, and looks stunning from any angle, the design had to be proven out in clay. A full scale clay model was made using the existing chassis to not only establish the design but also prove out the ergonomics.

Once a design was executed in clay, it was 3d scanned and a point cloud used as a guide to create the CAD.  The tail section tubes were CNC plasma cut before bending, fixturing, and welding. The necessary functional components like the battery, wire harness, and fuel cell were placed in space to optimize function and packaging. The point cloud scan set the stage for the CAD bodywork creation and refinement of the design. Multiple iterations were made in order to coordinate the fabrication and assembly of each part, for the ultimate goal of creating bodywork that is well crafted, functions properly, and looks stunning.

 This project used 3d printing for the bodywork fabrication, which allowed the bodywork to be more artistic and sculptural. By using 3d printing, every part was given the freedom to be as beautiful as it could be.

A great color scheme and well thought out graphics can make or break a design. Digital rendering was used to evaluate different looks before executing in real life. Full scale graphics were created and digitally applied to the virtual surface of the bike before parts were even fabricated. The results are a “one of” bike that uses the latest in prototyping technology for accuracy and refinement, but doesn’t sacrifice the sensitivity and beauty of a traditional design process.

About the builder– Ryan Hahn has aided in the design of multiple production, production intended, and concept motorcycles for Buell motorcycle company, Erik Buell Racing, and multiple consulting projects. Moto Milwaukee is a platform to showcase project builds, share knowledge and highlight the motorcycle community in the city that he lives and works in.

[www.instagram.com/motomilwaukee/](http://www.instagram.com/motomilwaukee/)

Link to high res photos

<https://www.dropbox.com/sh/26xvlkffs51tas3/AABWQ33RalkesDGCJyO_eD6Da?dl=0>