

Manufacturing Tooling for Local Handmade Fly Rod Company

Tom Morgan Rodsmiths is a local, tradition rich, custom handmade fly rod company. Their webpage page states:

At Tom Morgan Rodsmiths we are committed to hand-crafting the perfect fly rod, built one at a time, for each and every customer. We will work with you to determine the ideal rod for you, and will incorporate your preferences to ensure the final product is uniquely yours. We use only the highest quality materials - from agate stripping guides and pristine cork to flawless bamboo strips and more than 20 different wood species for your reel seat. Throughout our build process, we inspect your rod's progress for perfection at every step, which ensures we deliver the finest rods in the world.



In order to continue and support the next generation of fly rod manufacturing and assembly, TMR is in need of some advanced engineering support. The goal of this project to provide an analysis, design, and potentially revolutionary process in which take-down rods are utilized by consumers. Simply stated, a new solution is desired to optimize the re-assembly of rods when they are used. The tip-over-butt (or butt-over-tip) assembly process results in a stiff section of the rod while in use. This goal of this project is to study this engineering detail, and a provide a solution that maintains a constant stiffness down the entire rod.