



## General Overview of MT Propeller System

Propellers are available with 2, 3, 4, 5, and 6 blades, and the pitch may be fixed or variable (either electrically or hydraulically controlled.) Every prop design is custom-designed to be the perfect match for the application it will be used in. We even offer several custom colors!

Wood composite props can also be made to copy the blade patterns of most vintage aircraft, since no molds or castings are required for this type of construction. Wood composite props have been created for aircraft ranging from Spitfires and Yaks to the Junkers Ju-52 Trimotor.

### Blade Construction

MT Propeller-Germany uses advanced CNC machines to ensure that the wooden propeller blanks are milled to the tightest of tolerances. This ultra-precise manufacturing technique ensures that every single prop blade will have exactly the right airfoil shape and blade profile along the entire length of the blade, which means that every blade of the prop will perform exactly like the others. This leads to incredibly smooth running and less stress on the engine and crankshaft. After the wooden cores have been created and have passed inspection, a metal leading edge is added to provide for maximum protection against damage from rain, water spray, gravel, etc. The metal leading edge is usually stainless steel, but for turboprop applications where the prop speeds are generally always high (even while taxiing) an optional nickel leading edge is available (nickel has roughly twice the resistance to nicks and damage than stainless steel.) Finally, the blades are covered by a tough, multi-layered epoxy/fiberglass composite covering. This composite covering adds torsional rigidity to the blade, as well as protects the entire blade against erosion and seals against water damage.

The materials and color coats used on the external layers are carefully chosen to provide for many years of superb resistance to damage and to maintain your prop's great looks. For most applications, the rear face of the prop is painted flat black for visibility and to avoid reflections, and a variety of standard and custom colors are available. You will be proud to be seen with an attractive MT prop on your aircraft!

## The MT Advantage

## Durability

Wood composite props have a lot going for them, from their resilient construction, to the exacting standards, to their ability to be repaired easily if required. All of this can be described in one word: DURABILITY. Your MT natural composite propeller will hold up through all types of climates and weather... from the snowy tundra to the blistering heat of the desert, and everything in between, you can depend on your MT prop to serve well. Best of all, this isn't just marketing hype or hopeful thinking based on limited lab tests. The extensive laboratory testing is backed up by the fact that many thousands of MT natural composite props have been in service around the world for many years now. This large fleet of props is being operated in every conceivable environment. snow, rain, humidity, floatplanes, dust, heat, you name it. This is proof positive that wood composite propellers are equal to the toughest challenge of all. surviving in the real world.

### Variable-Pitch, Constant Speed, Feathering, and Reversible Props

For those looking for a variable-pitch propeller, we offer both electrically and hydraulically-controlled models with 2, 3, 4, 5, and 6 blades. Feathering and full reverse is available as well. Governors, control units, spinners and hub assemblies, and other accessories are available to fit Continental, Lycoming, Rotax, and turbo-prop engines in a wide variety of aircraft applications, including motorgliders and airships.

MT also offers the ELCOPROP, the only certified electric constant speed prop available worldwide. This propeller weighs about the same as a metal 2-blade fixed pitch prop, and is available in tractor or pusher configurations with 2, 3, or 4 blades and can be used on engines up to 350hp. Full-feathering capability is an available option. Several STC's are available to retrofit aircraft currently equipped with fixed-pitch props, and it can be used in other applications such as ground-effect vehicles.

We offer everything you need to put a variable-pitch prop on your aircraft, or we will help you mount a new prop to work with your existing governor and other components whenever possible.

### Fixed-Pitch Props

Fixed-pitch props are made in a manner that's generally similar to variable-pitch blades. We can also provide elegant "wood look" props built to the same demanding standards as the more usual wood composites.

# The MT Advantage

**Flight-Resource**  
A Division of **McFarlane**

World's Largest MT Composite  
Propeller Distributor!

