

# HighGrade

BY JON E. SILKS



## Mathews McPherson Series Monster

Mathews Archery made its way in the world as the Solocam king. Mathews introduced single-cam bows to the market and made them a huge success. The company is viewed by many as the world's top archery outfit. So, it was with great surprise that the archery industry learned there would be a dual-cam bow coming out of the Mathews factory.

To understand why Mathews would enter the two-cam market after they became a top dog through promoting single-cam technology, you have to understand Mathews' owner, Matt McPherson. While Matt has proven his skills as a businessman,

he's still an inventor at heart. Matt had an idea he thought would improve on existing two-cam bow design. Simply put, Matt said, "We felt we could raise the bar."

Matt's business sense also recognized "a certain appetite for two-cam systems" in the marketplace. So, he decided to merge his idea with a business opportunity. Twenty years ago, Matt introduced the fastest dual-cam bow on the market at the time, the Eliminator, under his McPherson bow company. Knowing a two-cam bow did not fit in the Mathews culture, he purchased the McPherson bow name back and created the McPherson Series Monster.

### SPECIFICATIONS

**Manufacturer:** Mathews, Dept. PB, 919 River Road, P.O. Box 367, Sparta, WI 54656; 608-269-2728; www.mathewsinc.com

**Model:** McPherson Series Monster

**Eccentric System:** AVS Dual Cam

**Draw Weights:** 40-, 50-, 60-, 70- and 80-pound peak

**Draw Lengths:** 25-30 inches, in half-inch increments; modular

**Riser:** Fully machined aluminum, reflex

**Limbs:** Split, Engineered Composite

**String:** BCY 452X, 59 1/4 inches

**Cable:** BCY 452X, 30 3/8 inches

**Mass Weight:** 4.4 pounds

**Letoff:** 80 percent

**Grip:** One-piece walnut

**Brace Height:** 6 inches

**Axle-To-Axle Length:** 33 1/2 inches

**Finish:** Realtree AP Camo or Black Matte

**Advertised IBO Speed:** Up to 353 fps

**Suggested Retail Price:** \$899

**Comments:** A speed lovers bow with a relatively tame shooting experience.

### Speed and Power

Generating advertised IBO speeds reaching 353 fps takes a special engine. The power for the Monster is McPherson's Advanced Vectoring System (AVS) cam. In this new system, the cables wrap around a set of special bearings on either side of the cam. The bearings are not centered on the axle, and as the archer starts into the draw cycle the bearings rise, take up string, store more energy and help the system peak quickly. Approaching full draw, the bearings let up and place string back into the system, which allows the Monster to achieve high letoff percentages. Locking cams together with the AVS bearing synchronizes them and forces them to work together. It

The Monster is Mathews' first two-cam bow and features radically past parallel split limbs (another Mathews' first) set into a set of V-Lock limb pockets. A Harmonic Stabilizer is joined by familiar Mathews components such as a harmonic damper, roller guard and Inline wood grip.

### The UPSHOT

SPEED/ARROW VELOCITY 1 (375-GRAIN ARROW)*	KINETIC ENERGY 1 (375-GRAIN ARROW)**	SPEED/ARROW VELOCITY 2 (425-GRAIN ARROW)*	KINETIC ENERGY 2 (425-GRAIN ARROW)**	DRAW CYCLE
319 fps	84.76 foot-pounds	302 fps	86.09 foot-pounds	Aggressive.
*Test result **Product of speed and arrow weight				

also finishes with a solid, single-cam style wall. AVS cams, which ride on stainless steel axles, produce 80-percent letoff and offer draw lengths from 25-30 inches in half-inch increments through a series of modules. In testing, the Monster displayed an aggressive draw in that it was very quick to peak and remained there for much of the power stroke before a swift rollover into a solid wall. While aggressive, it was not harsh, meaning it did not have rough transitions from climb to peak or from peak to holding weight.

### Another Surprise

Mathews has been a leader in the limb position arena with their bow models displaying increasingly parallel positions from one year to the next. What we haven't seen from Mathews, until this year, is a set of split limbs. The Monster's split limbs start out past parallel and are radically beyond parallel at full draw. Mathews uses top-of-the-line flow waterjet machines to precisely cut limbs from engineered composite plates. Needle-like streams of 60,000-psi water cut the components according to what Mathews calls "vector-defined computerized patterns". Limbs are matched based on deflection values for consistent performance and are available in peak draw weights from 40-80 pounds. Each individual limb tip is shaped like a "V" and is seated into its own V-shaped limb pocket. This design naturally aligns the limb under pressure. A notch in the limb approximately one inch back from the tip is met by a small matching protrusion on the pocket that reverse locks the limb into the pocket. During testing, I noticed that the Monster, while somewhat top heavy at rest, balanced well at full draw and held tight to the target. With speeds



**The job of generating incredible arrow speed is left to the new AVS eccentric set and its unique cam-action bearing. New Dual Cam Technology helps the Monster reach IBO speeds up to 353 fps.**

reaching the 350-plus fps mark, you might expect a significant kick at the shot. However, I found a surprisingly small handle bump and little perceptible vibration.

### And So Much More

The McPherson Series Monster also features a fully machined reflexed riser, a one-piece Inline Walnut grip, CNC machined aluminum Roller Guard, threaded brass stabilizer mounting inserts both front and back, a large Harmonic Damper, all-new Harmonic Stabilizer and film dipped Realtree AP Camo finish.

*Editor's Note: Our standardized High Grade testing includes the use of the same equipment and test methods. All bows are tested with a draw length of 29 inches and a draw weight of 65 pounds. Speed tests are conducted with two different arrow weights — 375 grains and 425 grains. For more detailed information on the testing parameters, go to [www.bowhuntingmag.com](http://www.bowhuntingmag.com) and click on "Bow Testing Parameters."* ▲