



BOW REPORT

BY JOE BELL

MATHEWS MCPHERSON SERIES MONSTER



This bow raises the bar on smooth speed, but offers a strong dose of shootability as well.

Mathews has jumped into the speed craze, and in usual “Catch Us If You Can” fashion, the execution is flawless. This ultra-innovative bow company didn’t come out with just one speed bow, but three, including the all-new dual-cam (not SoloCam) Mathews McPherson Series Monster and Monster XLR8.

Yes, the thing everyone’s been talking about—Mathews is now making a two-cam bow! Company owner, inventor, and chief bow designer, Matt McPherson, actually began his professional career making fast dual-cam bows—perhaps too fast and too innovative for their time. Long-time archers may remember the dual-cam McPherson Eliminator from 1989. Well, Matt designed and manufactured that bow, which was considered the fastest bow on the planet at that time. Two years later, he designed the single-cam dual-feed system, which is how the company came to build its stellar reputation. In just 17 years, Mathews has not only built some of the most ingenious bows ever invented, but a noteworthy reputation along the way.

But why the two cam? Matt felt he

could raise the bar on dual-cam engineering and capitalize on speed. Although the new 2009 Mathews Reezen Series brings one-cam bow speed to a new level (340 fps IBO), for maximum speed you simply cannot beat a dual-cam system. However, McPherson thought it was time to put an engineering spin on the old two-cam of yesterday. This brings us to the new Monster and its AVS Dual-Cam Technology.

REVOLUTIONIZING DUAL-CAM TECHNOLOGY

Whereas the hybrid cam systems are fast and smooth, McPherson feels the dual-cam system has the capability of being smoother and faster, given the system performs at maximum efficiency. And so McPherson concentrated much of his focus on that—making the system more efficient.

This brought about some design features known as AVS Technology. AVS stands for Advanced Vectoring System, which involves the use of two oversized cam bearings (red in color) that are found in pairs at each axle end of the bow. Each opposing split-yoke cam cable is fastened to these bearings, rather than directly to the

Experience why this bow was fittingly named the Monster—it is one in terms of speed and smoothness. Those who crave ultra-fast setups will fall in love with this one. Specifications include a 33 1/2-inch axle-to-axle length, 6-inch brace height, 4.4-pound weight, and up to 353-fps IBO speed.

axle itself. By doing this, the center of the bearing actually revolves toward the archer but then lowers or goes inward toward the opposing cam at completion of the draw.

This does two very important things: It allows the system to store more energy, and it helps to achieve high letoff. It also completely synchronizes the cams together and balances the load on the limbs evenly, since there's a split-yoke at each end.

"The bearings work together ... they are roped like a timing chain on an automobile engine," says McPherson. "It's very efficient and extremely fast, and the system is completely synchronized. It tends to 'lock' the cams more when you come to full draw. It responds like a single cam since there's no bump, bump feel—just a solid, positive stop."

Greater efficiency is gained through the use of AVS since the bearings rise as you draw and then lower as you come to the draw valley. Again, this aids the bow to store more energy, more quickly. "First it takes up line in the system, but then it lets it out," said McPherson.

OTHER INNOVATIONS

Monster bows are being marketed under the Mathews McPherson Series name. The company felt this was important since it is a completely different type and style of bow. For this reason, they have a different flare compared to Mathews' SoloCam models. For starters, they use split-limb, not solid-limb technology.

"We use V-lock split limbs on the Monster Series," said McPherson. "We have a patent on this technology. When pressure is pushing on the limbs, it automatically aligns them. The limbs also have reverse-lock indents, so the limbs can't come out rearward either. With extreme parallel limbs, there's

sometimes a tendency for the limbs to back out when putting the bow in a press. With this system, it cannot happen. The bow must be completely taken apart for the limbs to become detached."

Mathews also equips the Monster Series bow with the new Harmonic Stabilizer. The stabilizer typically dampens 75 percent more of the residual shot vibration. It's recommended to place the accessory at the bottom of the bow riser, rather than the top. However, for added aiming stability, you can also outfit the top part of the riser with an extra Harmonic Stabilizer, although it won't do as much to eliminate vibration.

SMOOTH SPEED

Two models are offered in the McPherson Monster line: The standard Monster and the XLR8. XLR8 is a unique abbreviation for "accelerate." The Monster is equipped with a 6-inch brace height and comes with an IBO speed of up to 353 fps, while the XLR8 has a 5-inch brace and a speed of up to 360 fps plus.

As you would assume, 6-inch brace height bows aren't for every shooter, but after handling and shooting the Monster, I would rate the bow somewhat forgiving compared to similar models on the market. It has a solid, beefy feel to it, and the bow aims well at full draw.

While visiting online chat sites over the past few months, I've noticed some negative comments regarding the Monster's draw cycle and how it seems to "load up" at the back end. Personally, I just didn't feel it. Sure, the cycle gets a little firm at the back end, but nothing out of the ordinary for a speed model. I actually thought the Monster's draw was smoother and silkier compared to other new models that are in some cases 15 to 20 feet per second slower!

The 5-inch Monster XLR8 wasn't available for testing at this writing, so I cannot comment on its handling/shooting characteristics. I will say this, though. Any bow with a 5-inch brace really is intended for special applications and for archers with highly refined shooting form. Otherwise, average-skilled archers will find little consistency in such setups, resulting in poor accuracy and loss of confidence. Matt did mention, however, that he and others at the company were surprised at how well it does shoot.

SHOOTING THE MONSTER

I shot the Monster with and without Mathews' new DeadEnd String Stop, and it was much smoother and vibration-free with it installed.

Although my shot testing was limited to 40 yards, I found the bow extremely shootable for its speed output. My test bow came in a 27-inch draw with 70-pound peak limbs. I added a 1/2-inch-long string loop and set the bow for 65 pounds. Shooting Carbon Express Aramid KV 250 arrows (cut to 26 inches) and 100-grain points, for a complete arrow weight of 370 grains, I noticed very little shot recoil or vibration. It was sweet shooting.

Accuracy was exceptional—plenty of 3-inch-size groups, and the bow was not finely tuned, by any means. Personally, I think one of the key advantages to this bow over other speed models is how it uses split-yokes to keep the cams tracking perfectly. There's no cam lean with this system. This can really make the difference when shooting broadheads, and the bow will tune more easily. It is also likely to be more tolerant of slight shooting errors.

"We feel this bow is as forgiving as anything that's ever been created in this speed zone," adds McPherson. "It'll be

more accurate because of the tolerances we build into our products, too ... which are very, very tight.”

“It all comes down to crazy speed at incredible efficiencies,” McPherson comments. “For those who want the ultimate speed machine, the Mathews McPherson Series Monster is the ticket. They are the fastest we’ve tested to date. We really think we’ve raised the bar on dual-cam engineering.” ←

BOTTOM LINE:

Extreme speed without the kick—that’s the Monster, really. This bow comes packed with innovation that takes blazing arrow speed and high efficiency to a new level.

SPECIFICATIONS

Model: Mathews McPherson Series Monster

Manufacturer: Mathews, P.O. Box 367, Sparta, WI 54656; (608) 269-2728; www.mathewsinc.com.

Peak Draw Weights: 40 to 80 pounds

Draw lengths: 25 to 30 inches (25.5 to 29.5: 1/2-inch sizes)

Axle-to-Axle Length: 33 1/2 inches

Limbs: QUAD VLock split limb

Riser: Machined aluminum

Grip: In-line Walnut

Eccentrics: AVS (Advanced Vectoring System) Dual Cam

Brace Height: 6 inches

Mass Weight: 4.4 pounds

Advertised IBO Speed: Up to 353 fps

Suggested Retail: \$899

Color: Realtree AP Camo or Black

PERFORMANCE RATINGS

True Speed: 306 fps, 27-inch draw, 65 pounds, string loop, 26-inch-cut Carbon Express Aramid KV 250 w/100-grain point, AAE Max Hunter vanes, total arrow weight: 370 grains.

NOTABLE HIGHLIGHTS:

- Highly shootable for only 6 inches of brace height; “solid,” with a polished high-quality feel and look.
- Unique split-limb design uses V-lock limb pockets for positive alignment and reverse-lock indents to prevent the limbs from coming out in a press.
- AVS Cam System is highly efficient, yet smooth to draw; feels unlike two-cam systems since it has a positive rollover and stop—goodbye to that out-of-time bump-bump feel.
- Added features, such as the Harmonic Stabilizer, String Grubs and the DeadEnd String Stop, all work to make the bow sweet shooting, despite incredible speed and energy output.