

BOW — REPORT

Bow Logic 34 *by Kodiak Outdoors*



In the past I had only limited exposure to the Kodiak name and the company's brand of bows. When asked to do a full evaluation of the Bow Logic 34 I gladly accepted. Kodiak has made a business of selling high quality bows with an emphasis on a complete package including integrated accessories.

Let's take a look at the Bow Logic 34 and see how it performs both as a bare bow and also with its recommended accessory kit installed.

The Basics

Riser: A short, well-balanced riser lays the groundwork for the Logic 34's design. CNC machined from a single block of 6061 aluminum, it provides 1-1/2 inch of reflex for increased speed and power. Five cutouts, four small and one oversized, keep the load to a minimum. The overall package weighs in at only 3.3 pounds! The machining on the riser is not your "run-of-the-mill" squared off variety. It has many unique pockets and shapes that give it a smooth, state of the art look. Attached to the handle is a laminated one-piece wood grip that is quite colorful. Along with the holes designed to accept Kodiak's integrated accessories are standard AMO mounting holes.

Lynch's Superflauge camo pattern is applied to the riser through a dipping process at the Color Works finishing facility.

Customer Connection:

Sell the mass weight! Many of the bows on the market have climbed back up over 4 pounds, some considerably. If your customer is looking for a bow that is easy handling or they are about to take a pack-in bowhunting trip this bow will pique their interest.

The unique machining and seamless finish will catch the customer's eye.

Limbs/limb pockets: Kodiak's L2R (limb to riser) system is simplistic in design. The end of each limb has an open ended slot, approximately 3/4 inch across, that slides around the limb bolt

fixture. Further down the limb is a retaining fixture that cradles the limb on both sides. There is no traditional limb pocket. According to Kodiak this system has the fewest parts, is quieter and maintains the best limb to riser alignment in the industry. The Logic 34's straight limbs are machined from a solid billet of Gordon Power Tuff fiberglass composite material. Each set of limbs is matched based on deflection characteristics for consistent performance and efficiency. Gordon has an outstanding reputation in the industry for producing high quality fiberglass composite limb material, which is used by many of today's top bow manufacturers.

The limbs are finished in the same manner as the riser.

Customer Connection: Gordon's fiberglass durability track record is a great selling point for customers concerned with longevity and reliability.

The limb pocket, or lack thereof, can be sold on its simplicity and alignment characteristics however I would be ready to answer questions about how to keep debris from get-

ting lodged between the unprotected limb to riser interface.

Eccentrics: Kodiak's eccentric system rides on stainless steel axles that are hardened to a Rockwell C value of 58. The one cam technology employs sealed ball bearings as well. The new Quik Draw S-Cam provides 4 inches of draw length adjustment in half-inch increments. No modules or separate cams are needed; all of

these adjustments are available on a single S-Cam. Clearly engraved graduations take the confusion out of the draw length adjustment process.

In an effort to reduce recoil, Kodiak utilizes a tungsten carbide perimeter weight pressed into the "lobe" of the cam. Both the S-Cam and 4 inch idler wheel are anodized in a bronze color.

Customer Connection:

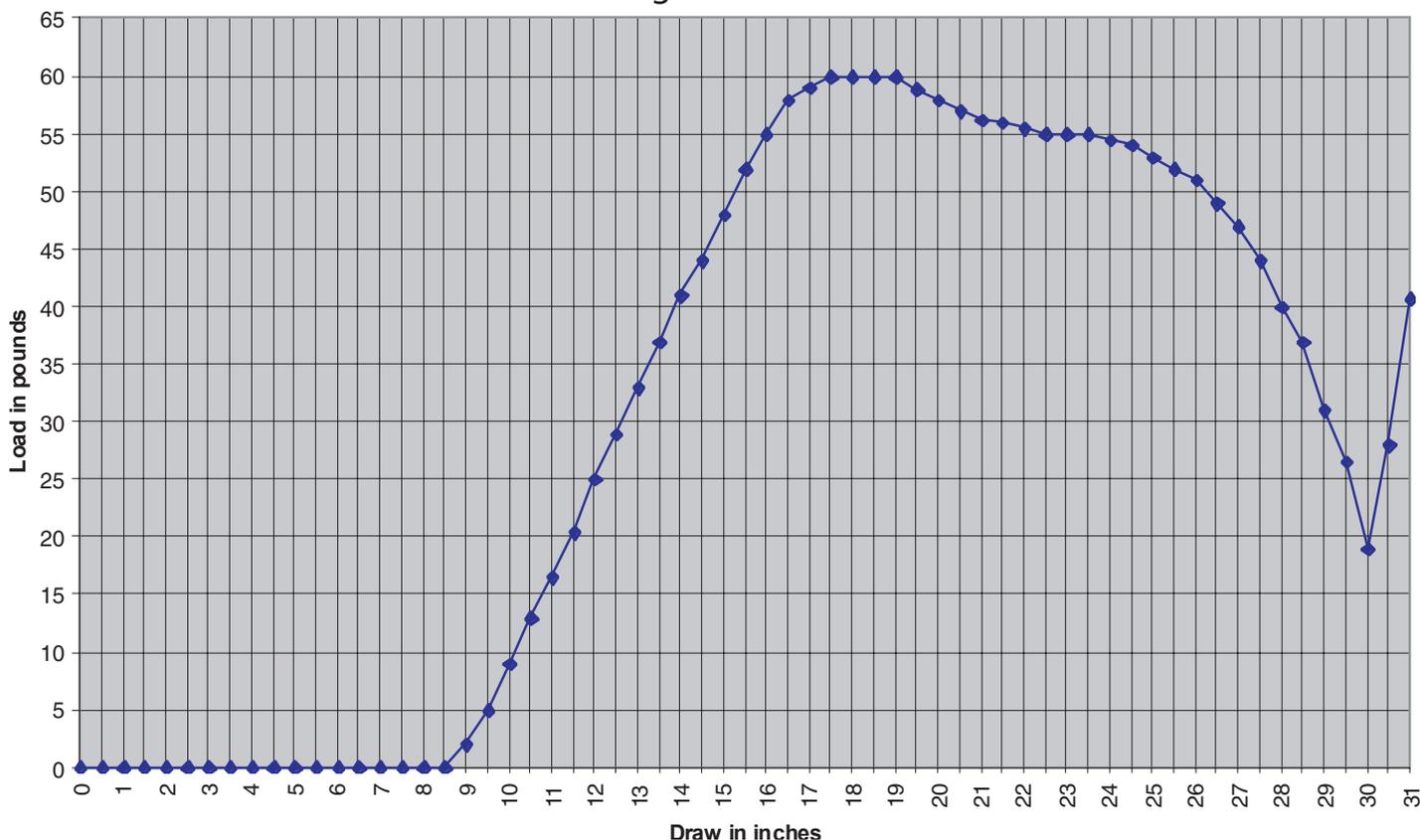
What is better than a modular

About The Author

Jon E. Silks has a degree in Quality Engineering and works in the area of non-destructive testing technology. His entire career has centered around the testing and evaluation of products. Now 36, he's been bowhunting since age 12. Silks started writing for magazines and websites four years ago and since then has done more than 225 product reviews. Manufacturers who appreciate his thoroughness and frankness have often asked him to review products that are still in the development stage. Silk's work has appeared on Bowhunting.net and Bowsite.com and has been published in Petersens Bowhunting, Bowhunter, Arrow Adventure, and Whitetail Fanatic, along with ArrowTrade. Jon and Jennifer Silks have six children Silks can be reached by email at silksoutdoors@core.com



Kodiak Bow Logic 34 Force Draw Curve



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system for draw length adjustment? The S-Cam! You not only do not have to stock different cams, you don't even need modules. All you need is a set of hex-head wrenches and you can get virtually anyone set-up to shoot with this bow. The cost to you is greatly reduced for the same reason and in today's world of "I want it now" you will always be able to respond – now!

Use the tungsten carbide perimeter weight, sealed ball bearings and hardened stainless steel

axles to bring out the quality of this eccentric system and overall, this bow manufacturer.

Silencing /Shock reducing features

Kodiak has dubbed their sound dampening system "QLS" (Quadra Lateral Stabilization). The QLS system employs four individually mounted pods on the side of the riser near the limb bolt attachment area. In fact, the drilled and tapped holes that the pods screw into break into the limb bolt dowel chamber. The pods themselves however are not long enough to reach and damage the limb bolt threads. The pod's purpose is to silence the rig and to be added or removed individually to balance the bow both vertically and horizontally. Each pod is made of a bronze anodized aluminum dome potted with a rubber like material. The potting material holds the rubber stem in place, which has a metal plate at the end complete with a threaded stud.

Also included in the silencing package are Sims Vibration Lab's String Leeches. If the bow is bought as a package an optional sound-reducing stabilizer is also included.

New accessories in the Bow Logic family include this Cobra Sidewinder Sight and Whisker Biscuit rest, made with mounting plates that match up to any Bow Logic riser. Below, the single cam incorporates both draw length adjustment and a perimeter weight.

Customer Connection:

The QLS pods are both unique and adjustable. Use them to sell to those customers who are concerned with the noise level of their hunting rig.

Sims is well known throughout the world of archery and bowhunting and for good reason; they make products that are unparalleled in sound/shock reducing performance.

Strings/Cables

New for Kodiak is the use of Winner's Choice Custom Bowstrings, which come standard on all Bow Logic bows.

String: BCY 8125 – 20 strand at 90 inches

Cable: BCY 8125 – 20 strand at 35 5/8 inches

Customer Connection:

Winner's Choice strings have a fantastic reputation in the industry for performance and durability. Sell it!

Testing

As with any of my bow evaluations, I always start out with a thorough inspection of the mechanics, machining, finish and overall workmanship. One small blemish was found at a machining edge but it was barely noticeable and inconsequential. To be fair, it could have actually happened at some point during transit. The remainder of the bow was spotless and the camo finish was uniform and seamless. Both the cam

and idler wheel moved freely when pressure was taken off with a press. The cable slide moved smoothly over the carbon cable guard with no noticeable binding.

Since the Logic 34 comes in either a bare bow or a package I decided to see if the



integrated accessories mounted correctly. The integrated Carolina Archery Whisker Biscuit fit up nicely with the machined holes on the riser. The dowel pin and single screw held the rest in snugly and with perfect alignment. The sight is manufactured by Cobra and is called the Sidewinder. A machined pocket with a side-drilled hole accepts the single screw that holds it in place. Once the screw was tightened the sight was firmly held in place.

The Kodiak Bow Logic 34 was set up with my standard rigging for ArrowTrade bow testing – string nock, N.A.P. QuickTune 3000 arrow rest, 60 pound pull, and a 30 inch draw length. All shooting was done with a T.R.U. Ball Pro Diamond release aid. Also, standard to the testing set-up is a 540-grain Easton XX78 Super Slam aluminum shaft. The bow was then paper tuned.

In order to judge the subjective qualities of the Kodiak Bow Logic 34 other bows of similar specs were used for comparison. Without other rigs it is extremely difficult to judge how a particular bow rates. At the time of this evaluation there were four other bows in my shop that made for a close comparison. Alongside these bows; the Kodiak was rated on noise level, smoothness of draw, feel/balance and shock/vibration.

The noise level of the five test bows was tested by having a friend fire an AMO rated arrow from each as I listened from various positions. The process was then repeated with a lighter 350-grain arrow. I rated the Kodiak number 4 out of the 5 when shooting the lighter arrow and number 3 of 5 when shooting the heavy arrow. The Logic 34 developed a noticeable “twang” when launching the 350-grain dart. Remember, this is a comparison of the bows tested, two of which are commonly ranked at the top of the industry. The number four ranking of the Kodiak should in no way be interpreted as too loud for hunting. It is in fact a quiet bow and will do fine in the woods.

Smoothness of draw was determined by drawing each bow at least 20 times. When all was said and done



The Bow Logic series from Kodiak also includes 36 inch and 34 inch models that have similar features but their own accessories and performance traits.

the Kodiak was ranked next to last of the bows tested. A look at the force draw curve may explain this rating.

I did not particularly like the grip on the Bow Logic 34 when I first held it in my hands. It felt too pronounced in the palm of my hand. I felt the same way about the Mathews Switchback grip when I first handled it as well. Once drawn the Kodiak positions your hand comfortably and correctly for good shooting form. Out of the five bows I ranked it second!

Shock and vibration will many times go hand in hand in that a bow with a significant kick (hand shock)

has a good deal of vibration as well. The Kodiak does not fit into that mold however as it has a strong kick with a minimal, short-lived vibration cycle. Still, the kick by itself was enough to land the Logic 34 in a tie for last among the five bows. As it is human nature to take the noise we hear from the bowshot and transfer it to the shock and vibration we feel I wear earplugs while doing this test. It should be noted here that Kodiak's emphasis on these bows being shot as an integrated rig has merit. I was surprised by the difference the C4 Stabilizer made in this category. It literally cut the kick by at least 2/3!

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The C4 Stabilizer with Doinker technology – DON'T LEAVE HOME WITHOUT IT!!

Speed was measured using an Oehler Research Inc. M35 Chronograph. Through ten shots fired into my Block Target, the average reading taken with a 540-grain arrow was 232 fps. Just to add another reference I re-tuned the bow to shoot a 350-grain arrow and recorded an average speed of 280 fps. I also noted a 4 fps loss when shooting through the integrated Whisker Biscuit arrow rest as compared to the speeds from the N.A.P. QuikTune 3000.

The Kodiak Bow Logic 34 is an easy handling rig with a great grip. I especially like the lightweight feel and the comfort and form-complementing qualities afforded by the grip at full draw. The bow has a catchy look with its unique machining, no limb pockets, bronze anodizing and Superflauge Camo. I would like to see Kodiak improve on their bare bow shock levels. Perhaps a longer riser with sweptback limbs would do the trick? The accessories are all quality in the package offered and I especially appreciate the C4 stabilizer. The Bow Logic package is a definite plus.

Test Bow Tech Info:

(540-grain arrow/ 60 pound peak draw weight)

Stored Energy: 74.58 foot-pounds

(When you draw the bow you supply power/energy into the limbs. The amount of energy that the limbs can hold is known as the stored energy.)

Efficiency Rating: 86.6%

(This is the amount of the stored



The C-4 stabilizer recommended for this model made a dramatic difference in the amount of kick being transferred to the shooter's hand, reducing it by as much as two-thirds. That's a reason for setting up all Bow Logic models with this accessory.

energy (in %) that can be successfully transferred into propelling the arrow upon release. The bow design, including limbs, limb pockets, cam systems, and axle types play into the bow's efficiency. An example would be a sealed ball bearing in the idler wheel versus a simple unsealed rod bearing. It takes more energy to rotate the unsealed rod bearing (more friction) versus the sealed ball bearing (less friction) so more of the bow's potential energy is used. The end result is a lower efficiency rating because less stored energy is left over

to propel the arrow.)

Kinetic Energy: 64.56 foot-pounds

(This is the energy that actually goes into propelling the arrow. Basically it is the energy that is left over from the stored energy after all of the bow system friction is accounted for.)

SE/PF Ratio: 1.243

This is the ratio of stored energy to peak force. In other words what return are you getting for the power you supply. ←

Specifications For 2005 Kodiak Pro Logic 34

Draw weights: 60 or 70 pound. Max

Draw Lengths: 27 to 30 inches

Axle-to-axle length: 34 inches

Brace Height: 6 - 7/8 inch

Mass Weight: 3.3 pounds

Let-off option: 65 or 80 percent

Eccentrics: S-Cam (Single)

AMO speed: Not advertised

IBO speed: 299

Available finish: Lynch's Superflauge Camo

Cable: 8125 – 20 strand at 35 5/8 inches

String: 8125 – 20 strand at 90 inches

Grip: 1-piece laminated wood

Riser: CNC machined 6061-T6 aluminum - reflex

Limb pockets: None! Uses patented L2R System

Limbs: Straight, Gordon Power Tuff fiberglass

Cable Guard: Carbon - Straight

Warranty: Lifetime on riser, limbs and cams

MSRP: \$649.00

The Bow Logic Series is available in 32, 34 or 36 inches axle-to-axle length. All of these bows have a mass weight of 3.3 pounds and feature the L2R limb mounting system and QLS sound dampening system. All of the bows in this series are equipped with Winner's Choice strings, the Quik Draw S-Cam and SVL string silencers. The defining feature of any Bow logic bow is the integrated accessory package available. Each bow is specially machined to accept these accessories and provide optimum performance.