

Bow Review:

Tomahawk Bows™ Thunderstorm Diamond Series T/D Longbow

by R. Blacky Schwarz 06-03-2004

Black Phenolic and Cocobolo Dymondwood in the riser are the features that all the bows of the Tomahawk Diamond Series have in common. Another thing they have in common is the attention to detail, that Tomahawk designer Dale Karch is very proud of. Dale, an experienced tool and die maker started building his own bows years ago. His quest for the "perfect" bow began out of frustration over the lack of quality in bows that were available at that time. Learning from his mentors and the experience gained from his profession prepared him for the detailed work that is involved when building bows. Combining modern computer technology with old-fashioned skills enabled him to develop the Tomahawk bows, as we know them today. Knowing that he was building a good bow, he was looking for a way to market them successfully. That's why he talked to Todd Smith R.H.M. of 3RiversArchery and asked about having his bows presented in the catalog. Todd said: "If you want to have your bows in the catalog, you need to buy the company. It's for sale". The rest is history. Dale and his wife Sandie bought 3Rivers Archery in 1999 and moved from Wisconsin to Indiana. Even today, with all his chores as the 'Head Honcho' of 3Rivers Archery, Dale's attention to detail hasn't changed as we can see in the "Diamond Series" of his bows.

.....and no, the blonde, good looking cutie in the 3Rivers advertisement doesn't come with the bow.

Reviewed bow:

Model: Diamond Series T/D Thunderstorm
62" 53 lbs @ 28"
Manufacturer: Tomahawk Bows
P.O. Box 517
Ashley, IN 46705
www.3RiversArchery.com
Price: \$ 725.00

Riser:

Length: 17 1/2" from Fade-Out to Fade-Out
Material: The riser is glued up with a center piece of Cocobolo coloured Dymondwood, that is accented with maple and Dymondwood pin stripes and contrasting black phenolic. A Cocobolo-Zebrawood overlay and the inlayed "Diamond Series" medallion enhance the overall looks of the bow.
Shape: slightly deflex
Grip: locator grip with "Shur-Grip" rubber sleeve
Center Cut: 3/16" to center
Distance from pivot
Point to shelf: 1" (from deepest part of grip to shelf surface)
Take-Down System: The bow is equipped with the T-Hawk Take-Down system, designed by Michael Treadway. The cut is straight across the riser, appr. 1 1/4" below the deepest part of the grip. The C-shaped clamp, that holds the bow together is recessed in the riser. So when the rubber sleeve is rolled down, it's hardly noticeable that this longbow is a T/D bow.

Limbs:

Bow Length:	62"
Draw Weight:	53 lbs @ 28" (A.M.O.)
Brace Height:	6 3/4" -7"
Shape:	reflex design with trapezoid cross-section
Material:	The limb consists of a center layer of unidirectional carbon, 2 layers of tapered maple Actionwood core and edge grain ground zebrawood veneers on the back and belly, that are sandwiched between the outer layers of clear Bo-Tuff glass. Tip reinforcement overlays are made from red and black phenolic.
Limb width:	1 3/16" at the fade-outs and 17/32" just below the string groove
Physical weight:	1 lbs 13 oz
String:	A 18 strand Fast Flight Flemish twist string is furnished with the bow. All high performance strings, like Fast Flight , BCY 452, Dynaflyte 97, 8125 etc. can be used.
Finish:	satin two parts epoxy finish

Ordering options:

The Thunderstorm is available in R.H. and L.H. models and in lengths of 58", 62" or 64". Draw weight can be ordered from 40 to 60 lbs for the 58" model and from 40 to 70 lbs @ 28" for the 62" and 64" models.

Testing Parameters:

A force-draw curve was obtained from the reviewed bow, which was used for all the following measurements and calculations. The arrow speeds were measured with the bow shot from a shooting machine with a mechanical release and with finger release, using a "Crick-It" clicker and a deerskin glove. The string was pulled to 28" A.M.O. which is 26 1/4 " from the string to the deepest point of the grip. The arrow for the speed testing had a weight of 9 grains per pound of draw weight. A 16 strand Fast-Flight string without any attachments (silencers, etc.) was used. Speed measurements were taken 3 feet in front of the back of the bow with two speed testers set up in a tandem configuration to ensure straight arrow flight during measuring.

Test Results:

Draw weight:	53 lbs @ 28"
Stored energy:	46.42 ft-lbs
Stored energy per pound of draw weight:	0.88 ft-lbs/lbs
Arrow weight:	477 grains
Arrow speed:	185 fps with mechanical release
Kinetic energy:	36.26 ft-lbs
Efficiency:	78.1% (Kinetic energy / stored energy)
Arrow Speed:	181 fps with finger release

R. Blacky Schwarz is a self-employed consultant and freelance writer and lives close to Heidelberg in Germany with his wife Danny. They both share a passion for the Outdoors and especially bowhunting, which is not legal in Germany. Danny and Blacky bowhunt mostly in the U.S.. They belong to numerous U.S. bowhunting organisations including the PBS. Blacky has been conducting bow reviews for German magazines since 1997.

For further questions, he can be reached at blacky@blackysarchery.com