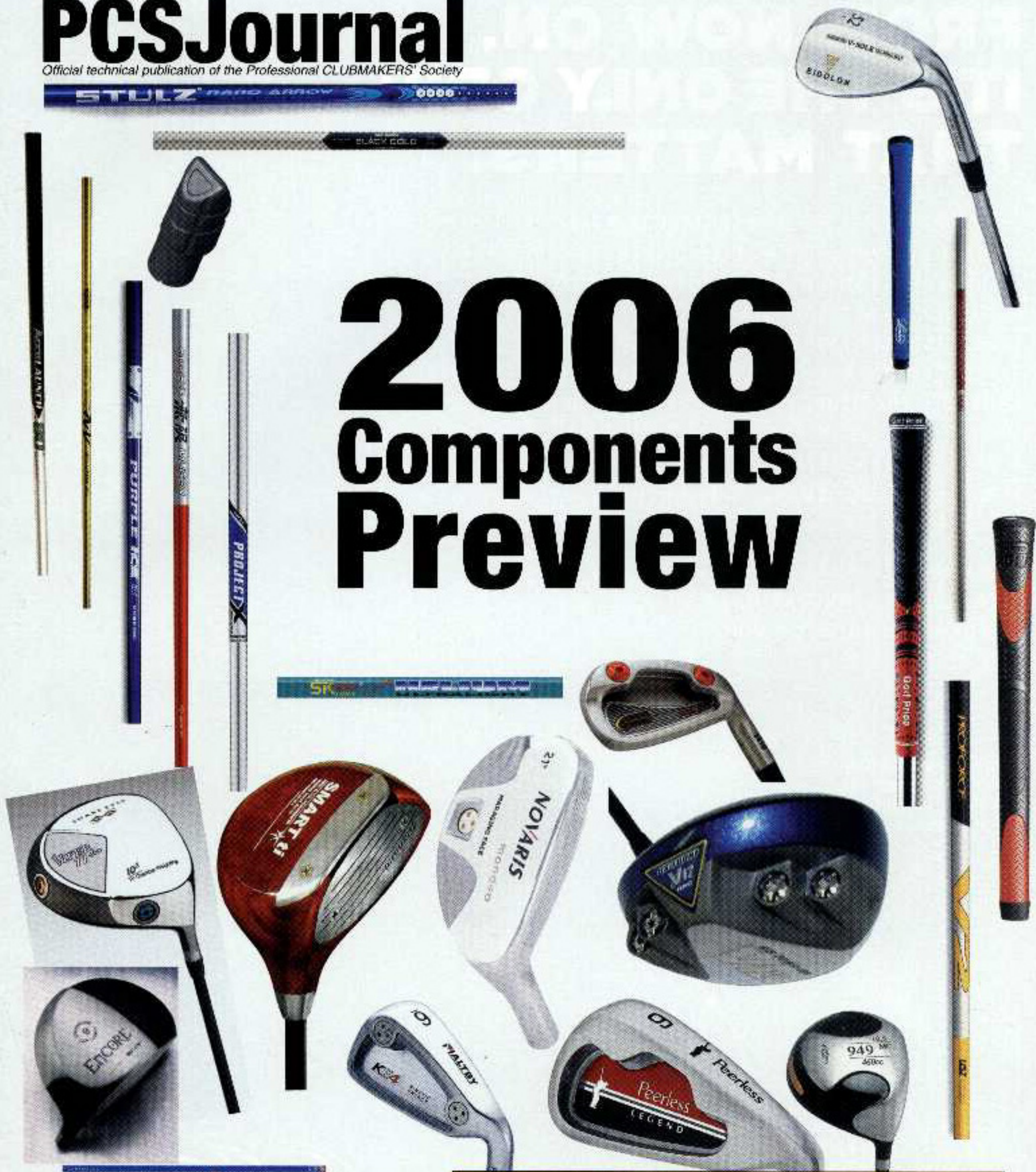


# PCS Journal

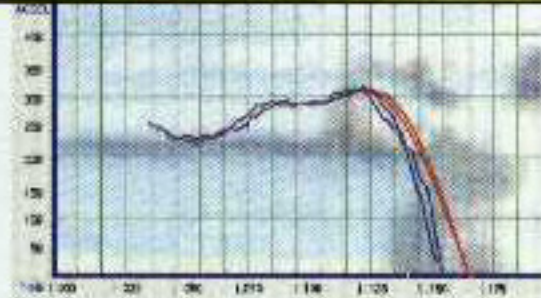
Official technical publication of the Professional CLUBMAKERS' Society

STULZ HARD ARROW 0000

# 2006 Components Preview



MARCH/APRIL 2006 Volume 17 Issue 2



### Swing Speed Radar with Tempo Timer

The Swing Speed Radar® with Tempo Timer is a small, inexpensive microwave Doppler radar velocity sensor providing swing speed and tempo rhythm for golfers of all ages and skill levels. It as-

sists players in developing and optimizing their swings by measuring actual tempo time from club take-away to ball impact at the climax of the forward swing, as well as the swing speed of the clubhead as it approaches the ball. The Swing Speed Radar with Tempo Timer, featuring simple one-button operation, provides unmatched utility in a single, affordable device.

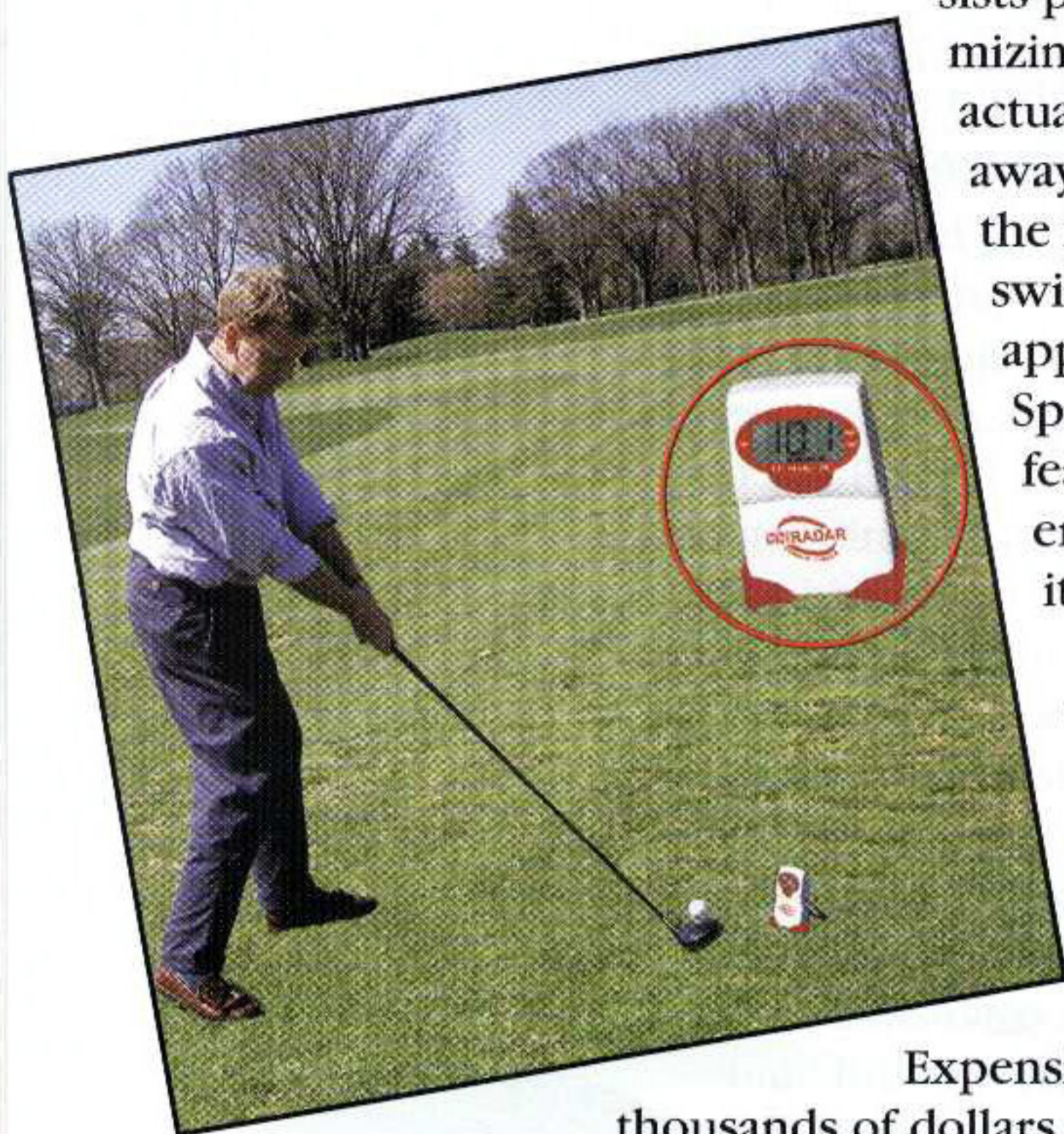
Clubhead speed and tempo are two significant characteristics of a golfer's swing that must be optimized and controlled if the golfer is to consistently achieve his or her best ball-striking results.

Expensive launch monitors costing thousands of dollars, primarily used by well-funded clubmakers, instructors, or pro golfers, generally include these two vital parameters in their measure-

ment systems. However, less expensive devices for use by most instructors, clubmakers and by the golfing public are limited in utility. Prior swing speed meters can be inconsistent, unreliable and complicated to use. Some even require attachments to the club potentially changing the club's swing dynamics. Metronome-type devices can provide tempo time models for the golfer to emulate, but the resulting tempo time only can be estimated by comparisons with the model.

Inexpensive at a manufacturer's suggested retail price of \$149.95, the Swing Speed Radar with Tempo Timer is two devices in one. It is the practical choice of clubmakers and instructors who want the flexibility and convenience of use in the field as well as at in-shop hitting stations. The Swing Speed Radar with Tempo Timer can be used by golfers of all ages and skill levels, at home or at practice facilities, as they strive to optimize swing mechanics and rhythm for the best distance, control, consistency and accuracy.

For more information, please contact Al Dilz, President, Sports Sensors, Inc. at 888-542-9246, e-mail [adilz@cinci.rr.com](mailto:adilz@cinci.rr.com), or visit [www.swingspeedradar.com](http://www.swingspeedradar.com).



## STULZ GOLF

### Stulz Unique Tri-Edge Shaft Design Improves Accuracy, Distance

Stulz Golf may be a newcomer to the golf business, but the Stulz name represents decades of excellence in international engineering and innovative manufacturing techniques. This is the unique heritage on which Stulz is predicated, and the foundation for launching itself into the very competitive worldwide golf market. Using the engineering expertise and quality-control models leading Stulz to global success in automotive systems manufacturing and in the high-efficiency ventilation industry, Stulz Golf is bringing unparalleled standards of performance to its golf products.

The Stulz Tri Edge Nano Arrow is a breakthrough series of shafts employing a never-before-used tri-edge shape and nano technology. The exhaustive research, innovative design and precise engineering of these shafts have been two years in the making. This is not the introduction of just another golf shaft. The shaft employs a patented mid-shaft tri-edge shape resulting in better diffusion of load and energy transfer. It is not a gimmick. The technology conforms to the Rules of Golf as stipulated by the United States Golf Association.

To optimize the performance of a large clubhead, a new shaft design was necessary. The triangular shape was utilized because of its strength and energy-transfer capabilities. It was positioned in the lower portion of the

shaft to help keep the head squarer at impact. The three edges also help transfer ideal vibration providing impact feedback for the golfer.

The Tri-Edge design offers tighter shot dispersion as a result of the significant reduction in clubhead drooping and twisting. We are able to improve the consistency of the CPMs along the edges of the shaft resulting in a more consistent performance. Tour players, professionals, amateurs and robot tests are used to evaluate the Tri-Edge performance. The shaft is played on tours around the world. A number of the long drive competitors recently made the switch to the shaft.

The Tri-Edge shaft is built on a carbon fiber, carbon nano tube and resin platform in which carbon nano particles are used to eliminate air pockets during construction. The carbon nano base translates into more particles per unit of mass; and therefore, increases the inner strength of the shaft while reducing the overall weight. A number of weight options are available for the wood model: 50, 65, 80, 90 and 100 grams. The hybrid shaft is 85 grams, while the iron shaft is 70 grams. A number of flexes are available for each wood, hybrid or iron model.

Quality and engineering precision are the cornerstones to the game at the Winter Park, Fla.-based Stulz Golf, and innovation is nonstop. For more information call 866-995-9800 or visit [www.stulzgolf.com](http://www.stulzgolf.com).