



Wayne Williams, Testing Director
4226 South Camino del Tejon
Green Valley AZ 85614 USA

Quantum Putter Test Report -- 1/3/2006

Our Client (Duane Engdahl, Managing Partner of Quantum Golf Company) was given a choice of two Testing Scenarios: 1) The Candidate Putter (Quantum Putter) being tested against a variety of other putters currently on the market with Test Participants being unfamiliar with all putters used in the test; or 2) The Candidate Putter being tested against the putter currently being used by the Test Participant (hereinafter called the Incumbent Putter).

After being advised that Testing Scenario #1 would most likely produce more favorable results for the Candidate Putter (obviously when Test Participants compare the unfamiliar Candidate Putter to other unfamiliar putters, the result will be better than when they compare the unfamiliar Candidate Putter to their own favored and very familiar Incumbent Putter); Client Engdahl opted for Test Scenario #2 anyway saying,

"While it would be somewhat interesting to learn how the Quantum Putter compares with other putters in an "even-steven" performance test, but the really important thing for us to learn is whether or not a typical golfer would actually give up his own favored and familiar putter and go out and buy a new Quantum Putter. If the answer to this ultimate question is "yes" even by a relatively small percentage, then we can conclude that our product is marketable."

So, GolfTestUSA assembled 25 Test Participants for a two day Independent Performance Test of the Quantum Putter in accordance with Test Scenario #2 (the scenario which is strongly slanted against the Candidate Putter). The Test was conducted on 12/21-22/2005 at the San Ignacio Country Club in Green Valley Arizona (just south of Tucson), and was directed by Wayne Williams, President of GolfTestUSA.

Here are the results of this independent testing:

THE QUANTUM PUTTER OUTPERFORMED INCUMBENT PUTTERS

Each of the Test Participants made a number of standardized putts of varying lengths and lies with their own Incumbent Putter. Then each of the same Test Participants made the same number of similar standardized putts with the Quantum Putter.

Most Test Participants experienced better putting results with the unfamiliar Quantum Putter than they did with their own familiar Incumbent Putter (56%) which is a remarkable testimony to the superiority of the Quantum Putter.

Overall, the Quantum Putter outperformed the Incumbent Putters by a very significant margin of 8% by actual measurements accurate to nearest inch.

On the Ultimate Marketing Question, we asked the following, "If you had to make a choice between playing the rest of your life with your Current Putter or the Candidate Putter, which would you choose." We expected no more than a small percentage of Test Participants to respond positively to this very difficult question, and were absolutely astounded at the large percentage of positive responses.

THE ULTIMATE MARKETING QUESTION

A remarkable 40% of Test Participants actually said they would give up their current Incumbent Putter in favor of using for the rest of their life the Candidate Putter.

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Extrapolating that result over the 60 Million golfers worldwide, we estimate the Worldwide Market for the Quantum Putter to be 24 Million.

After the Formal Testing was finished we conducted a Group Discussion with the Test Participants that focused their opinions regarding the Candidate Putter Features and Benefits. We asked everybody to respond to the same Yes/No Questions after the Feature/Benefit was explained. The results are summarized below:

| FEATURE/BENEFIT                            | IMPORTANT | UNIMPORTANT |
|--------------------------------------------|-----------|-------------|
| 1. Sweet Impact Dynamics                   | 88%       | 12%         |
| 2. Good Glide                              | 60%       | 40%         |
| 3. Convertibility for Practice/Play        | 68%       | 32%         |
| 4. Adjustability for Conditions of the Day | 56%       | 44%         |
| 5. Topspin Bounceless Launch               | 88%       | 12%         |
| 6. Tactile Grip                            | 76%       | 24%         |
| 7. Fitted for Shaft Length                 | 92%       | 8%          |
| 8. Fitted for Lie Angle                    | 100%      | 0%          |
| 9. Fitted for Head Mass                    | 76%       | 24%         |

Then to stimulate discussion we asked those who liked the Candidate Putter better than their Incumbent Putter, what it was it they liked better about the Candidate Putter. Here is a summary of all such comments:

#### LIKED THE CANDIDATE PUTTER BETTER BECAUSE...

- Better Balance gives Better Impact Dynamics.
- Glide Plate gives Less Friction and No Bite.
- Massiveness of Head gives smoother stroke

- Center Shafting gives Better Alignment and Impact Dynamics.
- Practice Feature was fun and seems like it would do a lot of good.
- Weight of Head and Balance felt good.
- More Weight felt good.
- Balance and Heaviness gave me better feel and performance.
- Lie Angle put me more upright over ball and that seemed to work better.
- Negative Loft Angle really worked to give better ball launch.
- Liked the Weight and Feel better.
- Balance was better and I liked the look of the Putter.
- Impact was solid and much better - Sweet Dynamics is real!
- Very forgiving on my miss-hits.
- Good Feel and Balance - seemed to hold Line Better.
- Overall Weight and Feel is better.
- I liked the Balance and Weight better.
- Balance and Sweet Spot made Putting easier.
- It can be fitted for exactly the right Shaft Length and Lie Angle
- Liked the Weight and Feel of the Putter.
- Liked the Practice Feature.
- Topspin Bounceless Launch because of hitting the ball above center of gravity.

Then of those who liked their Incumbent Putter better than the Candidate Putter, we asked why and here is a summary of their responses:

#### **LIKED THE INCUMBENT PUTTER BETTER BECAUSE...**

- It's an old friend and I am familiar with it.
- Couldn't get used to the new putter in such a short time.
- I have more confidence in my old putter still.
- The new putter doesn't have an alignment line (heard this often).
- I didn't like the "stubby" appearance of the new putter (heard this often too)..
- The Logos on top of the head of the new putter were distracting (heard this twice).
- I didn't like the glide plate on the bottom of the new putter.
- I didn't like the straight centered shaft of the new putter.

Each Test Participant was asked whether or not the Test was conducted in a fully fair and unbiased way and all responded that they thought that it was. Absolutely no compensation was given to any Test Participant for their involvement in the Test (except that pizza and refreshments that were provided during the Focus Group discussion).

For the fun of it, one of the Quantum Test Putters was given away to a Test Participants selected by random drawing after the Test was fully completed (we waited until after the testing

was complete to announce this drawing to make sure this gift in no way influenced the outcome of the testing). Test Participant Larry Slaughter won this drawing.

The 25 Test Participants and the Incumbent Putter they were using during the Test is shown below along with Handicaps. We include handicaps to indicate that the Test Participants represent a cross section of Typical Recreational Golfers.

| <u>TEST PARTICIPANT</u> | <u>INCUMBENT PUTTER</u> | <u>HANDICAP</u> |
|-------------------------|-------------------------|-----------------|
| Larry Slaughter         | Odyssey                 | 5.6             |
| Jerry Johnson           | Odyssey                 | 13              |
| Bob Paglia              | Ping                    | 18              |
| Russ Gladwell           | Odyssey                 | 20              |
| Donald Bristell         | Harvey Perick           | 21              |
| Robert Sullenberger     | TAD Moore Long Neck     | 9               |
| Richard Williams        | Mallet Clone            | --              |
| Carl Landis             | Ping                    | 29              |
| Gary Rudolph            | Odyssey                 | 26              |
| Stephen Normand         | Cobra                   | 9               |
| James Kaurlik           | Natural Golf Mallet     | 13              |
| Alice Adams             | Ping                    | 5               |
| William Johnson         | Ping                    | 18              |
| Carlos Lopes            | Winfield                | 22              |
| Gerry Wilson            | Ping Long Shaft         | 12              |
| Robert Hock             | Odyssey                 | 18              |
| Ib Pedersen             | Ping                    | 21              |
| Connie Johnson          | Alien                   | -               |
| Rick Blackmar           | Dead Center             | 19              |
| Harold Lindamood        | New Wave Mallet         | 16              |
| Bob Barrette            | Ping Craze Clone        | 3               |
| Chuck Smith             | Cobra                   | 16              |
| Don Buchanan            | AMF                     | 9               |
| Spud Adams              | Odyssey                 | 8               |
| Lyle Schultz            | Wilson                  | 12              |

Now we at GolfTestUSA would like to offer our Final Analysis based upon our observations during the Quantum Putter Test:

### **FINAL ANALYSIS**

It was evident that the design of the Quantum Putter has several benefits. The weight of the putter and the balance appear to assist golfers in making accurate putts. The testers were able to adapt to the Quantum Putter and became comfortable using it in a short period of time. Even golfers who indicated they would prefer to continue using their own putter had solid results with the Quantum Putter. The Quantum Putter has several new innovations that contribute to the overall performance it achieved in this test. Because of superior performance, we are pleased to award our Seal of Excellence to the New Technology Quantum Putter.



GolfTestUSA is available at any time to answer any questions and clarify any issues related to this test. Contact Testing Director Wayne Williams or visit our website at [www.golftestusa.com](http://www.golftestusa.com).