

GETTY IMAGES/STEPHEN DUNN

Boo Weekley has used a Miyazaki ultralight driver shaft that weighs 45 grams.

Weight watchers

IN A QUEST TO SQUEEZE EVERY YARD OUT OF DRIVERS, MANUFACTURERS LAUNCH A NEW ERA OF LIGHTWEIGHT SHAFTS

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Ben Hogan's steel driver shaft weighed about 140 grams, or 5 ounces. Phil Mickelson's current graphite driver shaft weighs 73 grams, almost halving the weight of Hogan's.

For your game

As light as it may seem, Mickelson's Fubuki driver shaft from manufacturer Mitsubishi Rayon is considered a medium-weight shaft, rather than a lightweight shaft, in today's weight-conscious golf environment.

A new generation of lightweight driver shafts was prominent at the 2011 PGA Merchandise Show.

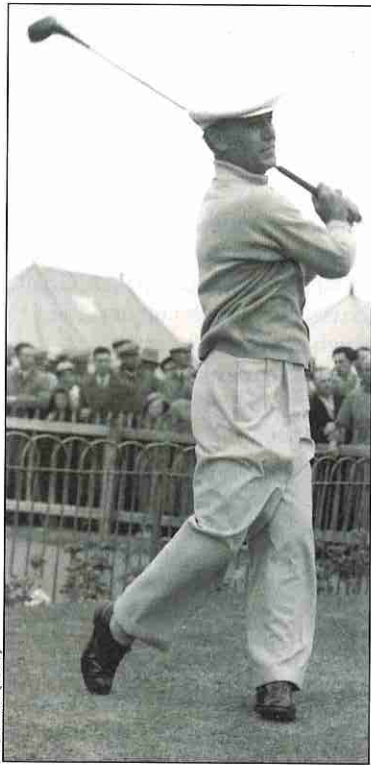
From a broad perspective, these lightweight shafts weigh about 40-60 grams. Medium shaft weight is 60-80 grams.

New lightweight driver shafts are intended more for amateurs than touring pros. The common wisdom is that lighter shafts enable golfers to swing faster, thus generating more clubhead speed.

Touring professionals generally are seeking control more than speed, although Boo Weekley recently played several events with a Miyazaki 39 ultralight driver shaft that weighed about 45 grams. Weekley has switched to a 59-gram Miyazaki shaft.

This contemporary lightweight movement includes more than shafts, as some club manufacturers are starting to sell drivers with dramatic overall weight reductions.





AP FILES (1953)

Ben Hogan's driver weighed nearly 400 grams overall, about 120 grams heavier than some of today's models.

Hogan's steel-shafted driver weighed close to 400 grams overall. Among the 2011 models are the 275-gram Bobby Jones SuperLight, the 276-gram Tour Edge Exotics XCG-4 and the 279-gram TaylorMade Burner SuperFast 2.0.

"It makes perfect sense," said Jesse Ortiz, who designed the Bobby Jones driver. "With these big driver heads, it's easier to hit the ball in the middle of the face. If you can do that, you will pick up yardage with a lighter driver."

Lighter grips, such as the 26-gram Winn Lite, also have entered the equation. Shafts, though, remain the primary

consideration in reducing weight.

"Everyone is chasing the 5 to 10 extra yards," said Chad Embrey, project manager for shaft manufacturer Fujikura. "The easiest way to do that is to reduce the weight of the overall club. So (club) manufacturers are starting to push. They are asking shaft manufacturers how light we can go."

That answer keeps evolving. As materials continue to improve, it becomes easier for shaft manufacturers to produce lighter shafts with a full range of flexes.

Historically, the lighter graphite shafts were designed for golfers with slower swing speeds. In the 1980s and '90s, many graphite shafts broke in the hands of bigger hitters. This no longer is true, as the durability of shafts has increased substantially.

In the United States, shafts weighing 40-50 grams are flourishing. The Grafalloy ProLaunch Blue 45 was a trendsetter, and many others are appearing.

UST Mamiya has a new 45-gram shaft called the Attas T2, which motivated Robb Schikner, UST's vice president of engineering design, to say, "I think we're right there. We're ready to make a sub-40 shaft with lower torque. The key is durability."

Club manufacturers have performance and durability tests for new shafts. Lighter shafts with thinner walls sometimes fail durability tests, but shaft companies remain focused on improved new designs.

The new lightweight stampede persuaded legendary graphite designer Al Jackson to step back into the golf spotlight. Jackson, famous in the fishing-tackle business, introduced lightweight red AJ golf shafts in the mid-1990s.

He maintained a low profile while continuing to sell these shafts, but he is looking to the future.

"I just bought a factory," Jackson said, "and I'm excited about making more shafts (weighing 44 to 52 grams)."

Brett Porath, director of Titleist club fitting, reflected a more cautious approach to lightweight shafts.

"We will always follow performance," Porath said. "If we get performance benefits, we as an industry will go in that direction. If lightweight shafts offer control and accuracy in addition to distance, then we may see a new trend. But I think it's too soon to reach a conclusion. Driver shafts didn't get to 70 or 60 grams in one day. Sometimes it pays to be patient and evaluate what happens."

Titleist offers a full range of custom shafts, including lightweight. The company offers the Mitsubishi Rayon Diamana 'Ilima 61, which weighs 58 grams, as one of its stock shafts.

Aldila is about to introduce the RIP 50, said Mike Rossi, vice president of sales and marketing. "We're testing sub-50 shafts in X flexes, which is pretty amazing at the clubhead speeds that some of these pros have."

Numbers on golf shafts frequently do not reflect the true weight. This is true of many manufacturers. Miyazaki, a division of Japanese conglomerate Sumitomo, sells three families of shafts in the United States - 39, 43 and 59. Only the 59 matches the weight of shafts in the family. The actual weights of the 39 and 43 shafts are slightly higher than the numbers.

"The PGA Tour guys definitely are showing interest in lighter shafts," said Tim Gillis, Miyazaki sales and marketing manager. "They're also looking at longer shafts. They want distance, too, as long as they don't lose control. With this new technology, they can get both."

There is no authoritative source for exact shaft weights on the PGA Tour, but Mark Timms, founder of custom clubmaker Cool Clubs in Scottsdale, Ariz., makes drivers for dozens of touring pros. He estimated the average weight of Tour driver shafts to be about 65 grams.

"I would guess it's come down 5 or 6 grams in the last couple of years," Timms said.

If lighter shafts mean more distance, touring pros are not immune to the temptation. Tiger Woods, who used an 83-gram driver shaft for years after switching from steel to graphite, is now down to 73 grams in his driver shaft. ○

