



Elite Insider Circle Monthly Handicap Improver December 2016



Hello Fellow Golf Enthusiast,

This is Jacob Bowden.

I'd like to stray a bit this month from our usual format.

Normally, I would do a quick recap of the past month and then give you a preview of the current month, which would typically include a Long Drive Q&A, pieces from our various experts like Tom Wishon or Adam Young, answers to your questions, the Member of the Month, a golf joke, etc.

We'd also include a CD for you in which I interview some sort of "golf industry expert" to get their perspectives on the game.

This month, we are going to include the usual CD. This time we've got the very colorful Maurice Allen, who has qualified for and competed in the World Long Drive Championships every year since 2011. He's one of only a few guys who has swung over 150 mph as measured on a Trackman at the World Championships. So I'll ask him about how he swings so fast.

However, that's where our normal convention will go out the door for December.

Instead, I've got something unique and special for you.

As fellow equipment junkies, I'm sure many of you have already heard about mine and Tom Wishon's Sterling Irons® single length irons. We've been getting tons of press and great reviews (we're in Sports Illustrated Golf Magazine this month on page 87) and I've brought them up here and there over the last year or so.



Usually with golf clubs, you only get to see the end-product that comes with all the marketing hype and fancy words meant to get you to buy the product. But it's not too often that you get to hear an in-depth first-hand experience from one of the co-creators of a club design about what went in to making the clubs you see on the shelves.

As our alternative, I am hoping to do that for you today. I'm going to share with you our story and include photos which have not been seen anywhere else!

How it All Got Started

In 2007, I was pursuing a golf career and had come far from being a 27-year old 14-handicapper four years prior. However, I hadn't yet broken 70 in a tournament. Obviously, to make it as a pro you need to be able to shoot that low on hard golf courses. As such I was looking for ways to break that barrier.

I was already playing all my clubs in the same spot in my stance (except for driver) and I remember wondering if all my irons could be the same length that perhaps it could help take my iron play to the next level.

The problem was that in a variable length set, each head weight is progressively different to accommodate the various lengths. That meant to make them all feel the same at one length, I'd either have to add an almost impossible amount of weight to the lower-lofted irons and/or grind weight off the higher-lofted irons.

In lieu of hacking up my existing set, I started poking around the Internet. Lo and behold I found two companies that were making single length sets at the time...My Ostrich Golf (who is no longer in business) and 1Iron Golf.

Wanting to try the concept out for myself, I got a set from 1Iron Golf and, although it was awkward at first, with a month of practice my iron play greatly improved. Four months later I finally broke the barrier and shot my first tournament round in the 60s as a professional in the Long Beach Open.

I was hooked on single length irons!

Over the next couple years, my approach play became top notch. I would use Swing Man Golf swing speed training to hit my driver far and then I'd use my single length irons to hit the ball close. At one point my handicap on my 6,865-yard home course (73.3 course rating and 133 slope) got down to +5.8. I had a 64, multiple 65s, and it was a bad day if I was over 70.

But in 2010, the USGA changed the groove rule which then made my single length irons illegal to use because they had the old grooves.

It forced me back in to conventional variable length irons.

In 2011, after a period of uncertainty about whether the existing single length irons on the market would be updated, I asked Tom Wishon (who had become a friend over email) if he wanted to create a set of single length irons together.

At the time, he said no, so while I was in Texas visiting Barney Adams and the Adams Golf tour department, I also asked David Edel if he would be interested in the project. David also said no, although interestingly I later found out that several months afterwards was when Bryson DeChambeau visited David. I'm happy with how things have worked out but interestingly I can't help wonder if I inadvertently helped put the bug in David's ear about single length irons.

It's funny how things work out!

In 2012, I was frustrated with not coming up with what I felt I needed financially to properly pursue a tour career and I decided to put my playing aspirations on the back burner.

But I still wanted to stay involved with the game and that was when I got in to Speedgolf, finishing 5th at the Speedgolf World Championships held at Bandon Dunes and airing on CBS during the Masters. Although the photos disappeared, you may even remember [the post](#) I wrote for MyGolfSpy about that experience.

Shortly after the World Championships I found out about GRIA Golf's NOVA Single Length Hybrid Irons. Since they had the new grooves, even though they were 5-iron length, I put them in to play and I did well at the following year's Speedgolf World Championships again, this time tying the championship record for golf score with a 72 in 55 minutes and 42 seconds using only 6 clubs.

The NOVAs still weren't exactly what I wanted though and I asked Tom once more if he wanted to do a single length irons project together.

This time he said yes and in October 2013 I flew to Tom's place in Durango to hash out the details!



Initial Concepts & Experimentation

Having played and sold a variety of single length sets by that point, I felt I knew the ins and outs of the market as well as anyone. I also had the modern-day advantage of the Internet. I searched Google far and wide for anything I could possibly find to uncover what people liked and disliked about single length iron sets.

When I arrived at Tom's, we literally just started by writing things out on a whiteboard.



My requests from Tom were for us to create a set that:

- Was cool-looking
- Was USGA legal
- Was shorter length (some people didn't like longer length wedges)
- Had a high degree of custom fitting capabilities
- Had good distance gapping (distance bunching historically occurred in single length)
- Went the distances and trajectories that people would expect for a modern day set of golf clubs (some previous problems included low-lofted irons flying too low and short, high-lofted irons flying too high and long, etc)

I just didn't know how we would do it. That was where Tom's brain came in.

First, we did some testing.

My ball-striking was solid at the time and I was comfortable hitting virtually any shot on-call at a variety of speeds. Tom built some mockups and we both hit them on his Trackman launch monitor to observe what would happen when certain variables were changed like length, weight, head type, club head speed, shot shape, etc.



Based on our testing, we got our initial concepts laid out and to minimize risk we decided to make our initial set type for the 75% of the golfers who swing a driver

between 85-105 mph. In this way, we would hit the meat of the market but also allow the clubs to be played by both beginners and better players as well.

We decided on 8-iron length. With other single length sets typically being 5, 6, or 7-iron length, Tom felt like 8-iron length would give us a longer term ball-striking advantage. Going shorter on club length would also help satisfy my observation of some people not liking longer length wedges. As Tom reminded me, the difference in length of an 8-iron to a wedge is not very much.

However, to make sure we had enough distance in the low-lofted irons at 8-iron length, we tweaked the lofts...and Tom also had the brilliant idea of making the 4-7-irons with his High COR face to get the distance and shot height we needed.

It was also a bonus that those High COR heads could then be made with variable thickness club faces, which gave us a larger effective “sweet spot”. Basically, as you move away from the sweet spot, the thinner face makes the club springier in those off-center areas.

To satisfy my custom fitting requests, Tom designed a hidden hosel weight bore that allows us to add up to 10 grams of weight to the club head. This lets us accommodate different lengths, different MOIs, and different swing weights...as well as to add an extra gram or two here and there when needed to account for the minor changes in weight you see from head to head as part of normal manufacturing tolerances.



This gave us an edge on performance as well as quality control.

He also knew what kind of metals we needed to use to get our desired loft and lie bending options. I had heard of metals like HS 300 High Strength Steel, 8620 Carbon Steel, etc. However, I didn't know the pros and cons of each one...or how much each

of those cost for that matter.

With Tom's knowledge, we could figure out what the best possible materials we could use would be while still leaving money left over for freight costs, sales and marketing, future research and development, taxes, legal and business fees, etc.

This all played in to some pricing research I had previously done. I knew we would have to spend money to get the quality of materials I wanted but I didn't want to price interested golfers out of buying the clubs though either. A set of Titleist or Mizuno irons generally cost around \$1000 for an 8-club set of 4-GW or 5-SW. This then became the rough target for our pricing.

There's a lot to think about!

Fortunately, our skills and knowledge complemented each other and this is one thing that made Tom and I such a great pair.

Epoxy Models

After I flew home Tom had me look around at golf shops and on the Internet to find the general shape of heads that I liked.

I still have the pics I found, but I'm not sure if I should share which brands I referenced. However, it's safe to say that the backs of the iron heads look generally like our finished product.

The Sterling Irons® hybrid is based off the look of the Wishon Golf 775 HS for no other reason than I liked how it looked when I hit it. It also had his GRT (graduated roll technology) in which there is limited roll (the vertical curvature on the face) for more consistent launch angles.

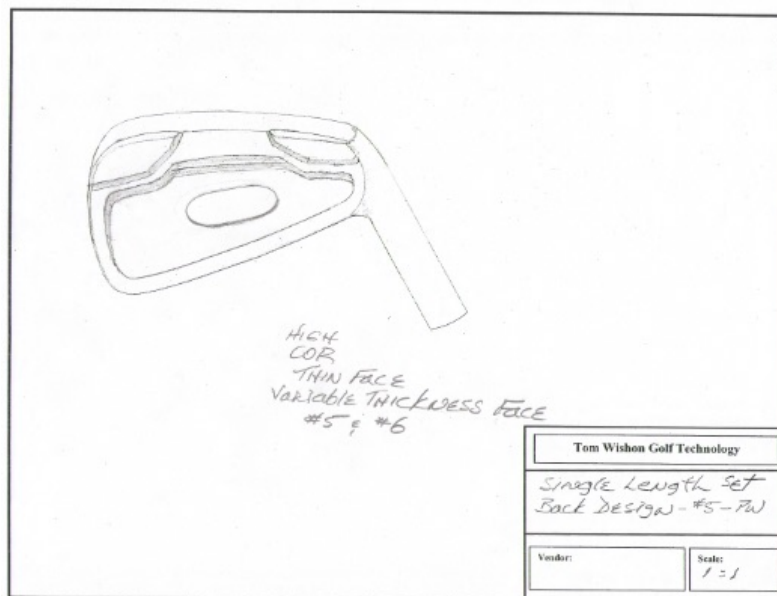
After Tom knew the general look I was after, he sketched out the initial heads by hand and literally carved epoxy models...also painting them by hand. This step was so we could have something physically in our hands to see what the heads might look like.

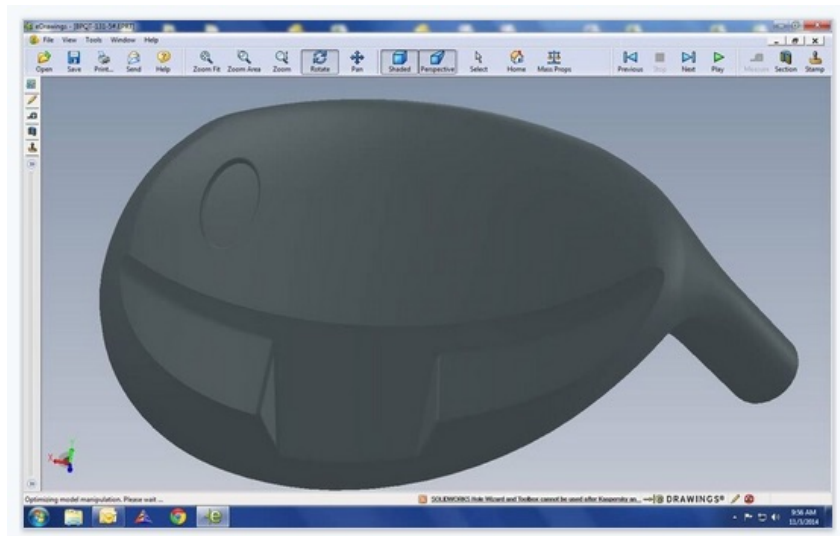




CAD Drawings, Computer Modeling, & Tooling Dies

Once the physical handmade models were in a place that we liked, the next step was to create the CAD drawings and do the computer modeling in order that we can get that info to the factory for them to make the tooling dies.





Naming, Trademarking, Logo Design, Cosmetics

When you submit all the computer drawings and what-not to the factory, it takes them awhile to build the tooling dies. I forget exactly, but I seem to recall it was about 3 months.



So up until this point and during this waiting period, there was also an on-going concurrent process of dealing with things like the name, logo, and stuff of that nature.

Sometimes coming up with a name is easy. It can just pop in your head. Other times it's more challenging. But even once you come up with a name that sounds cool, there's tons of other considerations. For example:

- Are there social media accounts and a website available?
- Is the name and/or logo already protected via trademark?
- How does the name play in to search engine key word optimization?
- If you say the name out loud, what are the chances someone would misspell it if they wanted to find it?
- How polar is the name?

During this process, I found out it's one of the reasons why Tom historically named his models by letter and number, for example the Wishon Golf 775 HS. It's a lot less headache to do it that way.

We had at least a 3-page brainstorming list of name ideas and we narrowed down the list when one of the names didn't meet the above-mentioned criteria. The first "final" name was Same Length Golf but we ran in to issues with trademarking it.



Then we almost went with Eagle Irons. That didn't work either.



We ended up with Sterling Irons®...which interestingly originally came from the street that my wife and I live on in New York City called Sterling Place.



Even still, we had a subsequent bump in the road when we found out that there was another golf company called Sterling England in the UK. We had a trademark in the US but they had one in the UK. Both of us wanted to sell our products in the other's country. It took a little bit to arrange an agreement in which we both co-exist. Fortunately, although we both make golf clubs, the type of clubs and target audience were both different for our two companies, which made things easier in the end to come to an agreement.

Similarly, with the logo, we thought we had a good one that had 3 diagonal stripes. People reacted to it well. The stripes were all the "same length" and they kind of looked like the trajectory of a golf shot in that they moved upward at an angle.



We ended up scratching that one though because although we think we would've been fine, we didn't to take the chance of any interference with the Adidas logo.

You'll also notice that the original colors included a navy color and medium grey...colors of business. We thought it looked good on the computer. However, when we got the first real prototypes in the mail and saw them in person, we had a change of heart. They just didn't look as appealing in-person.



Obviously red and black ended up being our final primary colors of choice.

I had also originally wanted to design a cool looking medallion. The medallion is the fancy looking thing that gets stuck in the back of a cavity-back club to spice up the look.



The problem we ran in to is that the 4, 5, 6, and 7-irons are all High COR with variable face thickness faces (that's the little squiggly lines outside of the sweet spot area that you see in the back of the cavity).



Those lower-lofted heads are not just a block of soft steel like the 8-SW. There's some flex in the face and the off-center hits are more forgiving, which we needed to achieve the shot height and distances we wanted in those irons heads.

In the end, I couldn't get the medallions I wanted. However, we still feel like we came away with a good look for the heads, which by the way is a challenge in itself. You must decide on the fonts, where to put the words, what words make sense, and how big to make them. Further, we were dealing with 3 different head types, which added to the challenge of making them look related.

After all that, we additionally wanted to marry the heads to the shafts and grips to make sure those all blend together and have a uniform look.

For the shafts, to keep our original investment costs down, we made the decision to simply pull from Tom's existing stock from Wishon Golf. He had already designed an entire suite of shafts that would be suitable for over 99% of golfers.

It just made good sense.

Now that we have an idea of how many of which types of shafts that people are ordering with the clubs, we've got some specifically branded Sterling Irons® shafts and stickers in the works. Functionally they are basically just the same high-performance Wishon Golf shafts. There's no sense reinventing the wheel there. We'll just have a new branded look that is specifically for Sterling Irons®.

Coming up with something that ticks off all the checkmarks is easier said than done!

The Testing Samples & Masters

Once the tooling dyes are finished, the factory will make some initial samples. We started off with the 4-hybrid, High COR 6-iron, and 8-Iron.



Boy, is it super cool to get those for the first time because you can see them in person and hit them as well!

First, Tom did some quality control to make sure the tooling dyes were making the heads properly within spec. He also hit them with his robot as well as tried them out personally and with some other folks. Then he shipped them to me in New York to try out.

It was at this point, we decided to change the blue and grey colors. We also decided not to start with a 19-degree 4-hybrid and instead do a Sand Wedge. At the time, my club head speed was above tour level. I had no problem getting shot height out of an 8-iron length 19-degree head. However, for those with more normal industry club head speeds, many of them couldn't hit the 19-degree hybrid high enough.

This wasn't so much a problem with our clubs. It happens with conventional progressive length clubs too. Sometimes you just need a certain amount of club head speed to be able to get a club up in the air.

Think of the difference in shot height of a conventional 2-iron, 2-hybrid, or 5-wood. They are all similar lofts, but each one hits the ball progressively higher. This was simply a matter of most golfers not being able to swing fast enough to make it a functional club. Again, a bit of risk and up-front investment management our part.

Once we had sufficiently tested the real prototypes, Tom worked with the factory to make subsequent adjustments to the tooling dies. Then the factory made a 2nd run of samples for us to repeat the process until we finally arrived at our final destination...and then the factory made a set of brass masters and we hit the go button on the 60-75-day process of making the first minimum factory order of 100 sets.



Website, USGA, & Launch

After we had the colors and logos sorted out as well as some nice initial photos of the clubs taken, we could start on the website in early 2016.

We also had a set of clubs sent off to the USGA to be tested. Not every club passes, but fortunately we got through without any hitches thanks in-part to the quality of Tom's design work.

April 11, 2016

Dear [REDACTED]

Decision: 2016 – 215 A-H

This is in reference to the **Sterling** 5, 6, 7, 8, 9, P, S, and G irons, received on March 30, 2016, which you submitted for an official ruling. This is a transition iron set consisting of cavity backs (#5-7) and musclebacks (8-P, S, G). The irons are designed to be assembled to one length.

Please be advised that the irons, as submitted, have been evaluated and it has been determined that they conform to the Rules of Golf.

This ruling applies only to the samples submitted and any clubs manufactured identical to them. This ruling does not apply if there is any change in the design, manufacture, material or construction of these particular clubs. If a club of similar design, with identical markings is acquired from any source and found to fail USGA standards, then the conformance status of these clubs will be reviewed.

In advertisements, you are only authorized to make the statement: "**Conforms with the Rules of Golf.**" Use of the USGA name, seal or logo, and/or indicating that the product is "Approved", "Tested", or "Certified" is prohibited.

We are retaining the samples as a record of this decision.

The USGA reserves the right to change the Rules and interpretations regulating equipment at any time.

Sincerely,



John Spitzer
Managing Director-Equipment Standards

JS:sk

cc: John Bodenhamer

For the good of the game®

I also got to have the very first set of clubs a couple months ahead of everyone else. You can only imagine how cool it is to be able to play your very own set of golf clubs after a 2.5-year design and development process.



The website itself took several months to build before our April launch. It in itself is a lot of work just getting all the text written, everything put in its place, running test transactions, and leaking a few sales through to tweak the process and make things are working properly before fully opening the sales floodgates.

We are open to how things evolve, but our initial concept was to have our operation be entirely web-based.

Normally, most golf clubs are sold through big box shops like Golfsmith, Dick's Sport Goods, Golf Galaxy, Vonn's, Golf USA, PGA TOUR Superstore, Edwin Watts, Global Golf, TGW.com, etc.

What these companies typically then buy to put on their shelves is almost directly in proportion to what is played on the professional tours. The "usual" model is pay as many tour players you can to play your clubs and get "tour credibility" in order that the big box shops buy your stuff who then sells it to you the end customer.

We hadn't raised any sort of venture capital to afford this type of business model. We were just self-funding. Going an internet-only sales route seemed like a better way to go. Plus, internet shopping and technology is becoming more and more a part of our lives.

Why not roll with the trend?

As custom club fitting is such an important part of club performance and Tom and I both believe in it very much, we offer a larger variety of options that you can choose from to get the most out of your game.

For example, normally you might only be able to select a steel or graphite shaft as well as the shaft flex. Whereas with us we'll offer you options for 7 or 8-iron length, shaft flex, shaft weight, lie angle, swing weight, and grip size. Custom loft bends are even doable if you ask.

For those that don't know what to choose, based on his years of club fitting experience and expertise, Tom came up with a list of questions you can answer on the SterlingIrons.com website that will help us suggest the best options for you.

Once your order comes in, our quality control is second to none and Tom and I both sign off on your specs. Each set is built on demand to your liking and no two sets are alike.



When the components arrive at the facility, each head is weighed and measured precisely for loft and lie.



Often times, Tom is even the one doing the actual bends to dial them in just right for you.



As I previously mentioned, the hidden weight bore that's in each club head, we are also able to add up to 10 grams of weight. This allows us to truly dial in swing weight and MOI to a level of precision that you simply can't get when buying off the rack.

We believe this level of quality control and custom fitting is why we are getting such great reviews.

After your clubs are customized and assembled, we drop them off with USPS, who then ship them directly to your address of choice!

Wrapping Up

As Elite Insider Circle members, I hope you've enjoyed the "insider" insight for this month and have learned a bit about the back story and what has gone in to the Sterling Irons® single length irons!

If you've got any questions, feel free to ask.

Tom and I try as best as we can to be open books!

Coming Up

As far as what's coming up...we just released the 19-degree 4-iron. If you'd like to add that to your set, visit <http://sterlingirons.com>.

We're working on the 60-degree lob wedge and left-handed sets now. Those should be available in the spring.

On a separate note, my time in NYC is finishing up. It's been a great experience to live in the Big Apple for 2 years but my wife Jen got a nice new job offer in Washington DC and we will be moving there in January. Fortunately, we've already found a nice place to live. It even has a view of the Washington Monument and the United States Capitol.

Then at the end of January I'll be heading down to Florida for the PGA Merchandise Show. Although I'm 13 years in to my golf career, I've never been there. It will be interesting to go and see what it's like. I'll be sure to share my experiences with you...probably in the February MHI because the show is towards the end of January and there won't be time to get it out to you until then.

I've already been thinking about what I'll be checking out.

On the 22nd and 23rd there is a teaching and coaching summit, which includes Mike Adams, Michael Jacobs, Shaun Webb, James Sieckmann, Andrew Rice (who we've interviewed previously for the MHI), Dave Phillips of TPI, and more. On the 24th, I'll be interested in hitting Cobra's new single length irons to see how they compare to the Sterling Irons. Lastly, from the 25th to 27th I'll wander around inside. I'll see as much as possible but particularly I want to see things for in-home golf setups (turf, launch monitors, nets, etc).

We hope you enjoyed the Monthly Handicap Improver...feel free to contact us at info@swingmangolf.com with questions, comments, suggestions, etc!

Have a great month!