Quantum Vidcast Transcript Highlights

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Intro - Drivers

Zack: We've got a very innovative lineup of golf clubs and excited to talk about it.
Coming in January, and this is our big family for the whole year and to kind of give you guys a set up with the theme of what we were focused on in 2026 and really kind of as a brand going forward is this idea that speed is everything.

And you see it in other sports, how speed can really separate an athlete from their competition. And we see it in golf, obviously, when we talk about ball speed. I mean, this is really what raises your ceiling as a golfer to hit it further.

And that's why we feel like as a as a brand, our North Star when it comes to drivers is about ball speed. And so that's where we really focused our attention this year. And you might be asking, OK, well it's great to hit it further, but distance isn't everything. Or is it?

When we look at strokes gained driving, this particular statistic actually shows that distance is basically twice as valuable as accuracy. And so yes, forgiveness and accuracy. And all those other things, they are important. We're not neglecting those. But speed is really your difference maker and that's what separates you from the competition. Now this is easier said than done, because for years Brian, you and your team have been really, we've talked about trade-offs in the past, but whether it's CT rules, which we'll talk about, material constraints, these are all things that your team has to deal with every single year. How do the limits of speed really play when it comes to this driver we're talking about right now?

Brian: *The continued mission for us is to try to find innovative ways to drive ball speed while still working around the rules of golf, maintaining conformance, working around material limitations, things like durability and deflection rates. And so, our team's been doing research for many years. It's led us to a really breakthrough new face technology.*

New Tri-Force Face

Zack: Yeah. So, I think the key thing here is that you guys, instead of fighting those limitations, you started building around them. And what you guys delivered is something that golf has never seen and what we're calling the Tri-Force.

Now Tri-Force, when we talk about this, as you can imagine, it's made-up of three parts. This is a multi-material face construction made-up of three parts. These materials alone, they're strong, but together is what really makes them unmatched and is giving us that performance and ball speed.

So we'll give you kind of a teaser, then we're going to walk through all of these individually. But the first is titanium, but not just any titanium. This is our thinnest and fastest titanium face ever made possible because it is not by itself. The second material is poly mesh. Poly mesh is a military grade polymer and one of its main jobs is to hold Tri-Force together. And kind of the last piece of this is carbon fiber. This is lightweight, it is strong and it allows the whole face to flex and recover faster. And so when we talk about Tri-Force, I think the key thing is, this isn't just a single material face. This is a fully integrated performance system that is designed for maximum ball speeds.

Brian: *During the collision that happens when a ball strikes the face, you're seeing deflection in the face. And that's what this Tri-Force face is all built around, is the idea of deflection and forces that are in place. So, the rear of the face is actually stretching inward. It's under tension. And tension is a force where carbon fiber excels. It's very strong as it's being stretched apart. By contrast, compression, which is the force that we experience on the outside on a striking surface, it's a crushing force.*

And that's a force that carbon fiber has a weakness in, and it's a force that under that crushing load of a ball strike, you can see issues with carbon fibers delaminating, breaking or failing. And that's one of the reasons why a single material carbon fiber face is made. It's pretty thick, which is not optimal for forgiveness.

Now, by contrast, titanium as a striking surface, it's also lightweight. It's very strong, but very strong in compression, which makes it an ideal candidate to be on the striking surface or the outside of your driver face. Now titanium, we've really found that we've pushed to its limits. It also has limitations around stress and strain and deflection, and we've taken it about as thin as we've been able to in the past without starting to see failures, without starting to see deflection and ultimately yields or cracking. So, by building the Tri-Force Face, by putting titanium on the outside and carbon fiber on the inside, we've really put each material where it excels. They play to their strengths and they mitigate each other's weaknesses.

Zack: Couldn't have said it better. One face can't solve or one material can't solve for everything here. And the result is titanium that undergoes compression and the carbon fiber, which helps us with the tension.

One of the reasons why we love titanium as a striking surface is still the ability to use artificial intelligence. And we will talk about that in in just a few minutes from a spin perspective. But to keep this kind of focused on speed, we said we had to go thinner. What we were actually able to do was

take this 14% thinner versus where we were with Elyte and that is what is really allowing us to push titanium.

Brian*: And that is something that we wanted to do from the early stages. We knew that if we could go thinner, we could drive more ball speed, but we had to solve for it in a way that maintained conformance and also maintained conformance and durability. And that's where the rest of the system comes into play.*

Zack: Yeah. And this is all made possible because it's not by itself. We have that carbon fiber reinforcement that is sitting behind the titanium that I think as you've described before, it catches that titanium and then and then really allows that energy to transfer and turn into ball speed.

Now this is really kind of to two aspects of Tri-Force, OK, you've got kind of your outer layers, but we saw this fundamental issue we had to solve for which was we had to get these materials to stay together. We had to find a material that wasn't just some epoxy or glue because that's too rigid and that's where polymesh comes in. And like we had talked about, that is a military grade polymer. And I think the story you have around where your team found this is pretty interesting.

How Poly Mesh Works In Tri-Force

Brian: *Yeah, early material research pointed us to this material, which was being used in a military application as a way to reinforce pop-up structures and protect anybody inside from materials that could splinter or shear or tear apart. We put it initially on some long drive heads. Those were an application where we wanted to reinforce the heads and make them stronger. But we didn't want to take away any ball speed from the player.*

And so, the key here is that this is not a glue or an epoxy. Those types of materials are brittle. They add stiffness and poly mesh is a polymer that will improve the material strength properties and ultimately reduce its hits to failure without adding any stiffness. So, it still allows a face to be fast and flexible, but just makes the whole system stronger.

Zack: Yeah. And so that is your summary of Tri-Force and how we are delivering faster ball speeds. And one other kind of piece in the kind of, I guess to tie it all together is this idea of 17 percent more responsive, which essentially is speaking to stress allowables. It's probably another way to say stronger, better energy transfer, kind of all of those things. And that is what Tri-Force does. And again, we're doing that. It's going to give us more ball speed, which is going to allow players to score better.

Leveraging A.I. and Micro Deflections

So, we'll talk a little bit about AI briefly, but I think when we talk about this driver, it is a speed story. It is all about ball speed. But we do have to think about this if our true goal is about getting to making this. Our true goal is making this driver longer. We have to make sure that we're not losing other variables and that's where backspin becomes this balancing act. And it's where we have, we feel like we have a very strong competitive advantage with how we're able to leverage artificial intelligence and micro deflections. Talk a little bit about what you guys are seeing and how you guys changed it up this year with having three different layers to model.

Brian: *Yeah, really exciting result again built on continued leadership in the AI space. We've improved our models and our coding to be able to account for multi materials that want to deflect differently. These materials have different deflection rates and different amounts of stress. Polymesh lets us harmonize two very different materials and have them work together as a completely integrated system. It's something that is now better than either single material, and it gave us more levers and more control over the effects of micro-deflection.*

So, we're able to locally optimize and improve and influence launch and spin conditions off center. We're very excited about the results that we've seen. We've seen best in class spin consistency up and down the face towards the heel and the toe. We've effectively increased the size of our sweet spot.

Zack: And I think too when we talk about what we're essentially doing is we're trying to take a player's worst shots, if you tend to strike it low in the face, you're going to see a higher spin rate. What we're effectively doing is taking that probability that that spin rate's going to be too high for optimal distance and we're bringing more of those shots into that optimal spin range.

On the converse side, if you're if you're a player who's hitting a high on the toe and you're kind of seeing that ball fall out of the sky, we're essentially adding spin to those shots. So, they're going to stay a little bit straighter, we're going to stay in the air longer and you're going to hit it a little bit further. And so that's really what AI is doing for us and how in this driver we're seeing it really play out as it is an increase in the likelihood that you're going to be in the optimal spin window no matter where you hit it on the face.

Brian: *And that gives us very consistent distance…We are so excited for this product to reach the market. We are highly confident players are going to see meaningful ball speed increases with best in class and consistency.*

Quantum Fairway Woods

Zack: So, moving on to a new category, we're switching gears. We're going to talk Fairway Woods and I think when we talk about Fairway Woods, it's important to know Callaway has been a leader in this category for several years now, being #1 multiple times. And when we talk about this, this category, I think it's important to understand we didn't blow this up because we didn't feel like we needed to. What we did do is we made the system more efficient, more explosive and really more

adaptable to how golfers are using Fairway Woods in today's game. And so, when we talk about these performance pillars that we feel like has made Callaway #1, it's really centered around three things. So you've got consistent launch, which we have a technology for that we're going talk about. It's about improving impact location in arguably the hardest golf club to hit in the center, making sure that that's easier.

And then again kind of looking at how the market is using Fairway Woods slightly differently than they have in the previous couple of years and making sure we have perfect gapping.
And then the kind of the last piece of this is bringing a lot of those technology platforms into our hybrids. So you're going to see fairway woods and hybrids really share the same suite of technologies. That way a golfer isn't choosing between, hey, this is a fairway wood technology, this is a hybrid technology. They're similar enough to where we feel like we can get performance gains in both. Talk a little bit about what we've done in Speedwave 2.0 to make this better.

Brian: *An invention from the Elyte lineup that is now fully optimized. We have thinned out the internal structures to allow for more deflection. We have increased the span of the feature, again allowing for more speed low on the face. What we see here on screen is now a view from our design simulation tools. It shows deflection how far back down through the face cup and actually into the soul we are storing and returning energy. All of that adding ball speed for the player when they miss low on the face, which is what our data suggests that players do more often than not.*

Zack: That is kind of 1 cornerstone is putting in technology where we know golfers going to miss it and then let's turn things over to the technology that's like, OK, how do we help golfers not miss it in that place anymore? And that's the Step Sole design, which was a technology that really started with the original Apex utility wood back in 2018 I want to say, where we're actually removing unneeded material that's on the sole that can that can bounce up into the golf ball that can just wreak havoc on your impact location, just real quick, how do we improve it in a Quantum?

Brian: *Yeah, feedback from our tour team that led us down this path. And again, we discovered this and incorporated our Elyte fairways, but now we've had a full year to optimize this technology and so we've reduced some of this spin on the heel. It allows it to move very efficiently through the turf, keep the leading edge and face square at impact and really just help us improve our overall turf interaction on this club. Continue to have data that shows improved impact locations make contact higher on the face, which helps improve their launch conditions.*

Zack: And then because we know, like we said, how important fitting is, you know, we've included these under the fairway wood and the hybrid platforms. So, you're going to have the same suite of technology, Speed Wave 2.0, Step Sole Design and also the new Optifit 4 hosel. This was something that we brought into the hybrids with Elite that has seven unique loft and lie options, specifically with the ability to go flat or upright by two degrees, especially when it comes to hybrids.
A lot of players struggle with missing left on those particular products and now you have that ability

to go to flat and start get your start lines you know starting on the on the right side. So now you have that ability both in your fairway woods and your hybrids, Then the other piece of this to note is, high lofted fairway woods have become such a huge part of our ecosystem as an industry and even on Tour. And so, we know that there's a lot of players that are that are wanting to get more and more high lofted fairway woods into their bags. We're actually going to have adjustable 3 woods and 5 woods across the entire board and every model.

So that's our fairway woods and hybrids. Again, it's taking something that players trust and making them better again and again and again. And that is how we feel like we can best serve the golfing community is taking our best and continuing to make it better.

Brian: *These products are going to be easy to launch, very fast and highly versatile. Great adjustability throughout the whole lineup.*

Quantum Irons With 360 Modern Undercut

Zack: We've got one more category to cover here. And we started this vidcast talking through how important ball speed is to distance, how important distance is to golfer in terms of their scoring capabilities. And when we think about the Quantum line, speed is something we focused on across every single product, but it's a little bit different with irons in the way that we're focusing on speed because it's not about maximizing ball speed across the phase to hit it further.

I think traditionally game-improvement irons, that was kind of one of the main things was how do we make these go longer and that's not really where we focused here. I mean certainly they're going to be long, but the biggest thing was how do we improve forgiveness across the face or speed across the face to give golfers the ability to hit more greens. Because that's how they're going to score better. And so obviously if we're looking at the center, this is where we all want to hit it. But the reality is that our testing shows that you're actually missing the center of the base, roughly 80 plus percent of the time. And so, if your iron isn't performing in these specific areas, your iron isn't really built for reality. And that's where Quantum comes in.

One thing that I'd like to mention here is this return to forgiveness that we have in Quantum. Callaway's always been known for approachable irons, irons that are easy to hit, that have a ton of forgiveness, that kind of have that approachable sort of profile at address. It's confidence inspiring. So, you're going to notice that these irons have gotten back to that. Big cavities, easy to hit. The Max is clearly in that Max game improvement space. The Max OS is clearly in the super game improvement space. Just in general, kind of bigger oversized profiles.

And as we talk about cavity backs, why we think Quantum is the ultimate cavity back is because the construction is a brand new one that we've never done before and that is the modern 360 degree Undercut. I I think the best way to describe this is as we look at a traditional undercut, typically the face gets welded on and then you have your body and your hosel that all gets that is all caste

separately. And that's kind of what this looks like here. And then with the Modern 360 undercut, we've essentially flipped that all the way around where we have the hosel and the face are one piece and we're able to basically Weld the back on, which is allowing us to now weld line back further and that is giving us so much room for sole flexure.

Brian: *Yeah, really a reimagined way of making a 360 undercut, which is a heritage and core technology for Callaway Irons. And we have that here. We have an undercut that runs all the way around the perimeter. It gives us a more active face with more deflection and you can really see the span of that deflection on the sole. It allows us to store and return a lot of energy through this face, which is helping us deliver speed, consistency off center and helping players to hit to a consistent number more often.*

Zack: And I think too you you've mentioned this before and as we're looking at this FEA here, Callaway's always been kind of known for ball speed and industry-leading construction when it comes to speed and forgiveness. You can see here how much more of that with that weld line being pushed back, how much more of the souls being activated. And you know, I think you've used this before. It's like if you're if you hit something out on the toe low, you could lose 4 miles an hour, which, that's a club and it's that that feeling of, when you play golf where you hit one and you're like, oh, I hit that one pretty good and then it comes up short and you're like, well, dang it, I thought that I I hit that one good. That's the reality of when you miss it out of the center of the face and you and you do hit it. This technology is going to help, maybe it doesn't get you the full club back, but it's going to get you a good ways, a good chunk of the way there. So you are hitting more greens.

And then we have the progressive Tri-Sole. So, this is a technology that has been in several of the Callaway irons as of late, but it is one that I think is really important to highlight because even though it's typically something you see on better player irons, we continue to see testing the shows it helps golfers of all abilities, all different types of swing types, speeds, shapes and sizes.

Brian: *Yeah, and we've completely overhauled our design tools now to build in this sole design capability. Each Tri-Sole is uniquely designed, different parts of the sole that are measured and obsessed over. So, every product model and every loft, a unique design, you're going to see it in a very pronounced way from heel to toe and all about turf interactions, keeping the leading edge from grabbing or digging. Allowing golfers to get in and out of the turf with speed and with confidence and also again seeing some improved impact locations as a result of this SOL technology.*

Zack: Yeah, it's it's definitely another cornerstone Callaway technology