2024 Golf Ball Vidcasts

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Intro

Jason: The real focus for us is going to be on the Chrome Family of products. As we move forward, you'll notice some key changes – obviously the name on some balls, an entirely new look, and all of this has been very purposeful. We wanted this to be a moment in time where not only do we have an entirely new branding architecture, but an entirely new product line top to bottom.

Eric: The change to Chrome Tour and Chrome Tour X signifies that we're really going after that aspirational and better player. There's been a lot of work over the last few years, interacting with Tour players, gathering their insights, understanding what they really like and want to see out of future products. And incorporating those insights into designs and technologies that can make the ball perform better for everyone.

Performance

Jason: One of the goals for us with this line is to create the most advanced Tour Balls, and that comes to life for us in so many ways. One of the ways this is going to come to life is that every detail matters.

Eric: Absolutely, and when you capture better players insights, some of the challenges we encounter is matching up their insights with their test data. There's always a challenge in the industry to continue to bridge the gap between mechanical testing with what players see out on the course. There's been a significant effort on our part to bridge that gap and to match our test results with what players are seeing.

In some of those observations and opportunities, we've developed new technologies to address some of their preferences. It really comes down to, every little component of the golf ball needed to be looked at. And in these new golf balls, it's been a complete overhaul on every component of the golf ball. It's those little details that really matter when a player opens the box and looks at the ball. Ultimately, we want them to feel like they are playing a premium product because it is.

Core Technologies

Jason: There are really 3 key core technologies across the entire range – the HyperFast Soft Core, Seamless Tour Aero, and our High Performance Tour Urethane Soft Cover – all rallied around the idea of Precision Technology. These are going to be the 3 key technologies that are going to exist in all these products.

Eric: The HyperFast Soft Core is focused on speed, Seamless Tour Aero is focused on flight, and the cover is focused on control. So it's quite simple: speed, flight, control.

The entire golf ball is compressed, every layer contributes to the performance of the golf ball on every shot. If you hit a 6-iron or even a full Pitching Wedge, you would see around the same amount of deformation or deflection. The core is a primary component to how the golf ball is going to perform. It enables us to manage spin rates through the bag, it changes the feel of the golf ball, but ultimately the core is designed to give us ball speed, particularly driver ball speed.

If you have a slow core, you're going to have a slow golf ball, so we set out to make our core much faster than we have before, capitalizing on what we've done in the past and building on that. We have a completely new rubber system where it's a new base polymer that we're using in combination with a variety of ingredients that give us the targeted compression and material properties that we're seeking. In the end, it gives us more ball speed for each of these new products.

Seamless Tour Aero

Jason: As we talk about Seamless Tour Aero, this is unique for us to talk about bringing more consistency into the ball flight and a more optimized flight by ball. Each ball will have a uniquely designed aerodynamic pattern, and it's completely different from anything we've ever done, bringing our aerodynamics into a completely different zone.

Eric: We set out to ensure that our aerodynamics matched the launch properties of the golf ball. If you have a golf ball that has low spin yet has a high lift pattern and that ball doesn't fit into the player's flight window, they will manipulate their launch conditions to get the ball into their flight window. You can be in a situation where a player is using a ball with too low of spin across the board, but they've done that to get themselves into that flight window.

We've developed in house computational fluid dynamics, that tool gives us the ability to visualize the flow around the golf ball from a global perspective, which is important for drag and lift. But also at the local perspective, it helps us understand what the flow is doing over each dimple. By managing each dimple, it enables us to focus on the ball flight from start to finish, where the ball starts off fast but as it approaches the ground the speed has significantly decreased.

This has led us down this path of developing an industry first, it's a combination of Callaway's hexagonal surface geometry with strategically placed spherical dimples that provide stability through the entire ball flight. We've ended up with model specific patterns that maximize distance and improve stability over the entire ball flight, which the player will see in a variety of conditions. It's something that we've benefited from by merging with Topgolf, we're utilizing a 9 camera Toptracer system that gives us the ability to track the ball from start to finish with high level resolution. This has helped us validate this performance downrange with over 10,000 shots to capture real world results, to ensure that this pattern is going to deliver the performance that we expect for the best players.

High Performance Tour Urethane Soft Cover

Jason: It allows us to have the feel that we're looking for, softer feel, but also increase the spin that we're getting and the consistency of that spin.

Eric: Our design approach is how can we use a soft cover, which we know the benefits of more spin, consistency for shots into and around the green, while managing spin rates with your driver and long irons. We had to change the substructure to give us those low spin rates off the driver and irons. By using a softer cover, it makes the ball feel softer which the best players have noticed after a few shots, they've noticed on the 15-20 yard shot the ball is going to launch lower and bite more than it has before.

It's centered around softer covers. Even with an iron shot, if you have a better connection with the ball and the club face where there is less slippage, you get more consistent launch conditions. So it does result in a reduction in variation from a launch perspective and from a downrange dispersion perspective.

Precision Technology

Jason: Precision Technology plays a role in all these key technologies for us, going back to the mindset of bringing more consistency shot after shot to the golfer. We're doing that in each of these technologies from the core, which delivers faster ball speed and more consistent ball flight, to how the ball flies through the air, and in the softer cover delivering a more consistent spin profile as well.

Eric: Our mindset has been, let's search for the perfect ball and let's find out what makes it not perfect so that we can address it. All the technologies role up into Precision Technology. For example, our Seamless Tour Aero, the seamless versus cross-seam design is much more consistent than competitors. No matter how that ball is oriented downrange, you're going to get a consistent ball flight. It's like what we did with concentricity offset which was more focused on lateral dispersion, this is more focused on downrange dispersion.

Chrome Tour – Better Players Seeking Distance and Feel

Jason: This ball has come from two places – one is looking at the market as a whole and where our products were in our lineup. We had an opportunity for that better player, some who like a slightly softer feel but still like a certain performance target that we're trying to get. We saw that come to life with a Tour prototype that's played a significant role in the development of this product – with a softer, more penetrating version of Chrome Soft X. The proving ground on Tour combined with the opportunity in the market is the inspiration for this product.

Eric: That prototype really highlighted a couple things for us on Tour. Some players do value slightly softer feel around the green, and some players are seeking a ball flight that's different than what we offered on Chrome Soft X – a slightly more penetrating ball flight that for them was more consistent into the wind. We took those insights and applied them directly to the Chrome Tour.

Jason: One of the key metrics we've talked about with the core is ball speed and looking against our competitors we've seen significant gains relative to the competition. Faster and longer is the key objective.

<u>Chrome Tour X – Best Players Seeking Speed and The Ultimate In Control</u>

Jason: Our fastest golf ball, particularly off the driver, but it's also going to be our highest spinning ball as well. Players have viewed it as one of if not the fastest ball out there. We've worked with our Tour players, and it's given them a lot of confidence. It's taken what was already an industry leader in Chrome Soft X, both in speed but also in spin.

Eric: These ball speed gains are real, they're noticeable and they're significant. Having done tests, they're all seeing gains over Pro V1x and a lot of it for the Tour player is knowing that they're playing the fastest ball, and it gives them additional confidence that they are playing the best product.

Jason: We're generating more spin as well, taking what was already an industry leader in Chrome Soft X and making it better.

Eric: Again, noticeable gains here over the key competitors. It's fast off the tee and it's going to give you more spin around the green.

Chrome Soft – Aspirational Player Looking For A Tour Quality Ball

Jason: This has been a key product for us and a product that we know golfers love, and we wanted to keep true to that heritage, targeted to the aspirational player looking for a Tour quality ball. Certainly, we have a faster golf ball with a similar spin profile to where we've been. Again, as you think of the aerodynamic properties of this ball, we've made it longer almost exclusively through the gains that we've made in ball speed and the aerodynamic properties. We have a higher-flying ball where we've optimized trajectory to deliver more speed.

Eric: This is a good example of how Seamless Tour Aero can benefit the golfer. We've increased the overall peak height to where it's more optimized – we're maximizing carry distance and total distance. Where other competitors are increasing their peak height maximizing only carry distance yet losing out on total distance.

Compression

Jason: It's a more rounded out line and the inspiration of that Chrome Tour product is fitting into a different zone than we might have had in the past, better suited for the better player.

Eric: Chrome Soft is in the same general space as it currently resides in terms of feel, and we're giving that ball more distance for player benefit. Chrome Tour X is in its same general feel space because that's what most of our Tour players are using, and we have increased the greenside performance as well as a Seamless Tour Aero package that helps give it a more penetrating ball flight. That's for the player who likes to have more spin on their irons and wants to be able to take spin off when they want to and have more workability.

The Chrome Tour is a new space for us where we're making the ball slightly softer than Chrome Tour X but not that much softer, and it does have lower spin. It's designed for players who want to go after the ball and don't feel like they have to pull back on decreasing their spin rates.