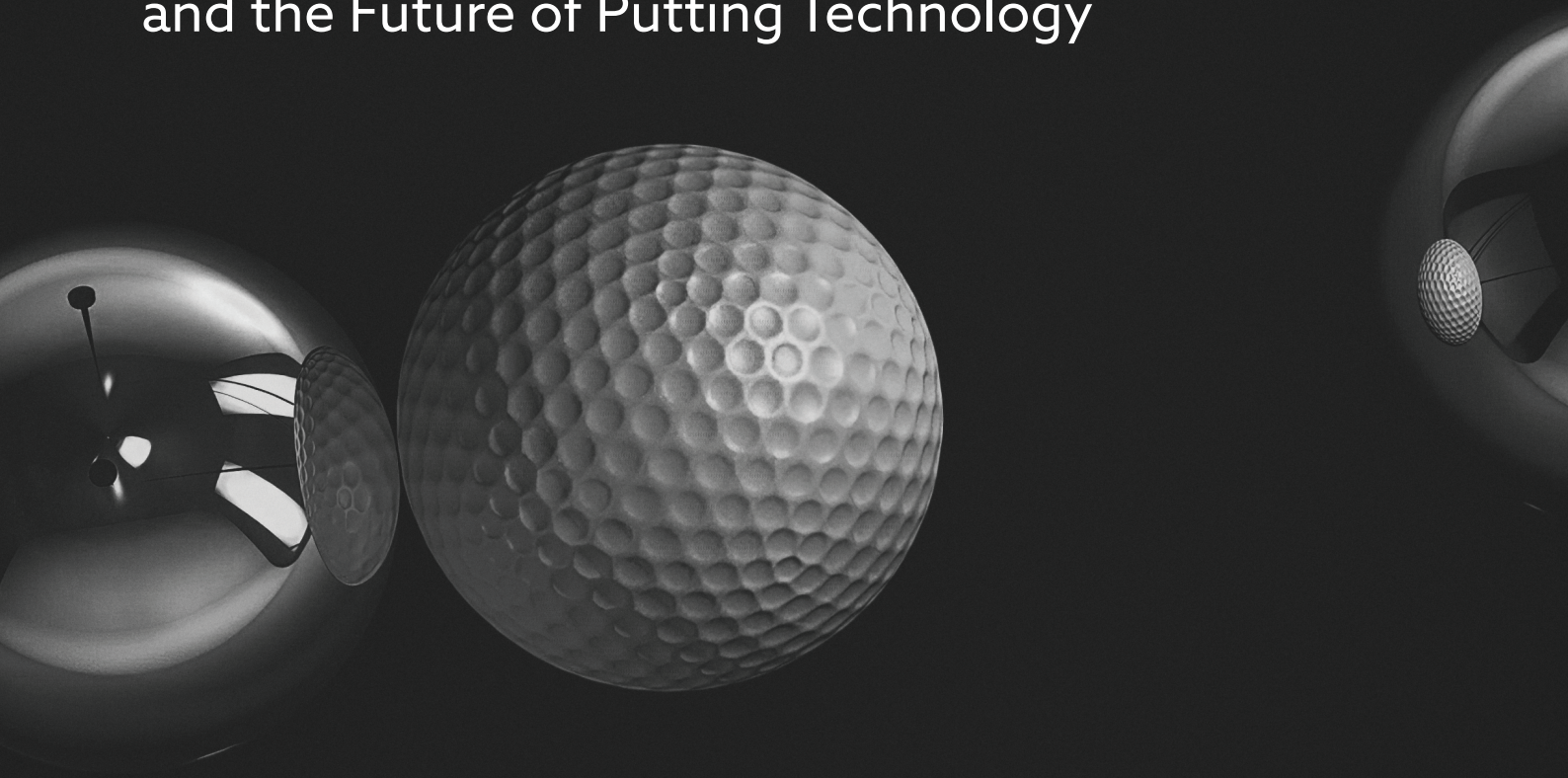
Beyond Zero

The Science of True Roll and the Future of Putting Technology



Presented by Drop Bear Golf

BEYOND ZERO

The Science of True Roll
and the Future of Putting Technology

Beyond Zero: The Science of True Roll and the Future of Putting Technology examines the revolutionary convergence of physics, engineering, and biomechanics that defines next-generation putter design.

This comprehensive white paper explores how Putter.One's round face technology eliminates backspin through equator-to-equator contact, creating immediate forward roll that traditional flat-faced putters cannot achieve.

Through detailed analysis of zero loft benefits, center-balanced stability, and adjustable weighting systems, readers discover why sphere-on-sphere contact represents the optimal solution to putting's fundamental challenges.

Supported by independent testing, biomechanical research, and industry expertise, this guide demonstrates how Drop Bear Golf's Putter.One integrates multiple innovations into a unified system that works with physics rather than against it—redefining what's possible on the greens.

Beyond Zero

The Science of True Roll and the Future of Putting Technology

After more than a decade of research and development, Drop Bear Golf has engineered a putter that transcends conventional design limitations to address putting's fundamental challenges through first-principles physics. **Putter.One** combines four revolutionary technologies: CenterStrike's™ round face geometry matching the golf ball diameter, zero effective loft through precise contact point engineering, center-balanced zero torque design, and adjustable weighting for personalized performance.

Independent testing confirms what physics predicts: equator-to-equator contact between identical spherical surfaces creates immediate forward roll without backspin, while the center-balanced design maintains face angle through impact. This white paper examines the scientific principles underlying this breakthrough and presents the compelling case for why round face technology represents the future of putting.

The Backspin Problem in Traditional Putting

Why Flat Faces Create Backspin

Every golfer has experienced putts that bounce, skip, or veer offline unexpectedly. The culprit often lies in the initial launch conditions created by traditional flat-faced putters. Research using high-speed cameras and launch monitors reveals that most putters with standard loft specifications (2-4 degrees) create backspin at impact when the loft angle exceeds the rise angle of the putting stroke.

The Problem: This backspin must be overcome by friction with the green before the ball can transition into forward roll. During this conversion phase, which can last 4-10 inches depending on conditions, the ball behaves unpredictably. Minor imperfections in the green surface have outsized effects during this vulnerable skid phase.

Why It Happens: Traditional flat-faced putters contact the ball below its equator due to their built-in loft. This geometry inherently imparts backspin as the angled face slides under the ball at impact. The golfer must then rely on green friction to convert that backward rotation into forward roll—a process that introduces inconsistency and vulnerability to surface conditions.

The Zero Loft Solution: CenterStrike Technology eliminates backspin at the source. By contacting the ball at its equator rather than below it, the round face creates immediate forward rotation. According to *Science and Motion Sports,* creators of the SAM PuttLab, optimal putting requires achieving forward rotation as quickly as possible. Zero loft delivers this instantly, bypassing the problematic backspin-to-roll conversion phase entirely.

Traditional putters force golfers to constantly manage variables—stroke mechanics, hand position, and shaft lean—to minimize the backspin problem. Zero loft eliminates this complexity through pure geometry.

The Launch-to-Roll Transition

Traditional Putter Performance: Extensive research documents that a typical 8-foot putt with a standard lofted putter will skid up to 10 inches before achieving true roll. Ball roll quality experts define "true roll" as the state when the ball has lost approximately 30% of its initial speed and is rotating purely forward with consistent angular momentum.

The Vulnerability Window: The longer this transition takes, the more opportunity exists for the putt to be deflected offline. Spike marks, grain variations, and minor elevation changes all exert maximum influence during the skid phase when the ball lacks the gyroscopic stability of pure forward rotation. A ball skidding for 10 inches on an 8-foot putt spends more than 10% of its journey in this unstable state.

Zero Loft Advantage: With equator-to-equator contact, the ball transitions to true roll within 4-5 inches—reducing the vulnerable phase by 50% or more. This means the ball spends the vast majority of its journey in a stable, predictable rolling state where it resists deflection and holds its line. The gyroscopic effect of immediate forward rotation provides stability from the first inch of travel rather than requiring 10 inches of skidding to develop it.

The difference is measurable: traditional putters create a problem (backspin), then rely on friction to fix it (conversion to forward roll). Zero loft creates the solution from first contact—pure forward rotation that never needs correction.

CenterStrike Technology: The Round Face Revolution
Physics of Sphere-on-Sphere Contact

The inspiration for CenterStrike Technology came from observing Newton's Cradle, where spherical balls transfer energy through equator-to-equator contact with perfect efficiency. This principle extends to putting: when two spheres of identical diameter make contact at their equators, energy transfer occurs along a pure horizontal vector.

Drop Bear Golf's multi-patented round face matches the standard golf ball diameter exactly. This geometric matching ensures that at proper address and with the recommended sole-press-sweep stroke, contact occurs precisely at the ball's equator,—the widest circumference and true center of mass.

This contact point geometry creates zero effective loft naturally. Unlike flat-faced putters that require careful shaft lean management to achieve optimal launch conditions, the round face delivers consistent equator-level contact regardless of minor variations in stroke mechanics.

Eliminating Backspin Through Geometry

Testing on Quintic ball roll analysis systems demonstrates a remarkable characteristic of round face contact: the ball immediately begins forward rotation without any backspin phase. This occurs through two complementary mechanisms.

First, the zero effective loft means the putter contacts the ball at its equator rather than below it. With a flat face angled with loft, the contact point sits below the equator, naturally imparting backspin as the face slides under the ball. Equator contact eliminates this geometric source of backspin.

Second, the curved geometry of the round face creates a rolling contact rather than an impact. As the spherical putter face moves through the ball, the tangential contact naturally encourages forward rotation. The ball literally rolls off the putter face rather than being struck and launched.

Independent testing confirmed what the physics predicted: “delivers a clean, tight topspin that is a joy to behold,” as noted by *putterzone. Golf Digest* recognized the innovation’s ability to “improve initial roll,” while *The NY Daily News* characterized the approach as “simple as it is revolutionary.”

The Sweet Spot Everywhere Advantage

Traditional flat-faced putters have a defined sweet spot—typically a quarter-inch circle—where contact produces optimal results. Strike the ball toward the toe or heel, and the ball comes off with less energy and potentially altered direction due to gear effect.

The cylindrical geometry of Putter.One transforms the entire face into a continuous sweet spot. Because the surface curves equally at every point along its width, striking the ball anywhere on the face produces consistent results. Quintic testing verified this remarkable forgiveness: off-center hits showed minimal performance degradation compared to center strikes.

This forgiveness proves especially valuable under pressure when stroke mechanics deteriorate slightly. Golfers need not fear the consequences of less-than-perfect contact, building confidence that translates directly to improved performance.

Zero Torque Through True Center Balance
The Face Angle Imperative

Research across multiple institutions consistently demonstrates that face angle at impact determines 83-85% of a putt’s starting direction, with path accounting for only 15-17%. This finding revolutionizes how we must think about putter design: maintaining a square face through impact is nearly six times more important than controlling the stroke path.

Traditional putters with offset centers of gravity create rotational forces that twist the face open during the backswing and require precise timing to square at impact. This manipulation demands thousands of hours of practice and breaks down under pressure when fine motor control deteriorates.

Testing with SAM PuttLab precision measurement systems shows that face angle errors of just 1 degree will cause misses from 13 feet when path is square. From 8 feet, face angle must remain within 1 degree of target. From 15 feet, that tolerance shrinks to just 0.5 degrees—a microscopic margin that explains why putting frustrates even accomplished golfers.

Engineering True Balance

Putter.One achieves zero torque through pure symmetrical design and center shaft placement. The single bend shaft anchors directly in the center of the putter head, aligning the shaft axis with the center of gravity. This engineering ensures that when suspended and allowed to move freely, the putter naturally stays square to the stroke arc rather than twisting open and closed.

Unlike traditional designs where the golfer must actively manipulate the putter to overcome its imbalanced nature, center balance works with the golfer's natural motion. The face wants to remain square, eliminating the need for compensatory hand action that introduces inconsistency.

The non-reflective electroplated finish on the shaft removes visual distraction, allowing golfers to focus on target and speed without interference from glare or shaft position in their field of view.

Stability Through the Stroke

The balanced inner weight system extends behind the face to create optimal center of gravity depth. This engineering choice provides two benefits: enhanced forgiveness on off-center hits through increased moment of inertia, and improved stability throughout the stroke as the mass resists twisting forces.

When combined with the adjustable weight modules at the putter's ends, golfers can fine-tune the head's resistance to rotation. Heavier configurations increase stability for those who tend toward excessive hand action, while lighter setups suit golfers with naturally quiet hands who benefit from enhanced feel.

The Continuous Arc Sole Design
Gliding Over the Green

The patented continuous arc putter bed represents a crucial innovation often overlooked in discussions of putter technology. This precisely engineered sole radius allows the putter to glide smoothly over the grass surface rather than catching or bouncing.

The sole-press-sweep method takes full advantage of this design. By keeping the putter

in contact with the grass throughout the stroke, golfers achieve several benefits: consistent low point positioning, natural face squaring through impact, and the ability to putt effectively from fringe and slightly longer grass where traditional putters struggle.

When viewed from the side, the putter's airfoil-inspired profile becomes apparent. This aerodynamic shaping contributes to the smooth gliding action while maintaining structural integrity and optimal weight distribution.

Eliminating the Hop Problem

One of putting's most frustrating challenges occurs when the ball hops or bounces immediately after impact, interrupting the intended roll and sending putts offline. This typically results from lifting the putter through impact or having excessive effective loft.

The continuous arc sole combined with the sole-press-sweep technique eliminates this problem mechanically. Golfers cannot lift the putter without feeling immediate feedback from losing grass contact. The method naturally enforces proper strike mechanics while the zero effective loft ensures the ball transitions immediately to roll rather than launching upward.

Users consistently report that the technique feels natural after minimal practice. As one anonymous testimonial from a competing manufacturer's employee noted: "it's like cheating!" The mechanical advantage built into the design reduces the skill threshold required for consistent performance.

Adjustable Weighting for Personalized Performance
The Pendulum Principle

Research into optimal putting mechanics consistently identifies the pendulum stroke as the gold standard for consistency. A true pendulum motion minimizes moving parts, reducing variables that can introduce error. The mass swings from a fixed point with gravity providing consistent force.

Heavier putters naturally promote pendulum mechanics by increasing the system's inertia. The mass wants to continue moving smoothly once set in motion, discouraging the jerky, handsy strokes that plague consistency. However, the optimal weight varies by individual based on tempo, strength, and sensitivity preferences.

Modular Weight System

Putter.One features swappable weight modules that screw into the outer sides of the putter head. This system currently offers ¬±10 grams of adjustment range, allowing golfers to customize the head weight to their stroke characteristics.

The placement of these weights at the extremities rather than centrally serves dual purposes. First, it maximizes their effect on head stability and forgiveness by increasing the moment of inertia around the shaft axis. Second, it allows adjustment without compromising the center balance that defines the zero torque characteristic.

The adjustment process requires no special tools or technical knowledge. Golfers can experiment with different weight configurations during practice sessions to identify the setup that produces optimal consistency and feel. Many find that different conditions or putting surfaces benefit from different weight configurations, making the system valuable for players who compete on varied courses.

Finding Your Optimal Weight

While precise guidelines require individual fitting with launch monitor technology, general principles can guide initial weight selection. Golfers with quick tempos often benefit from heavier configurations that slow the stroke and promote smoothness. Those with naturally slow tempos may prefer lighter weights that allow easier acceleration through impact.

Distance control provides the best feedback for weight optimization. When putts consistently finish at appropriate speeds regardless of length—avoiding both aggressive and tentative strikes—the weight configuration suits the golfer's natural mechanics. The goal is removing conscious thought about stroke speed, allowing the pendulum motion to produce consistent energy transfer naturally.

The Sole-Press-Sweep Method
Three Steps to Consistency

Putter.One's design enables a simplified stroke method that builds confidence through mechanical advantage:

Sole: Rest the putter's continuous arc bed fully on the ground. No hovering, no waggling. This establishes the natural low point and ensures the round face aligns properly with the ball's equator. The identical diameters of ball and putter face make this alignment intuitive—when the sole sits flat, the geometry works.
Press: Lean the shaft slightly forward to prepare for launch. While no rigid rule governs the precise angle, golfers quickly develop feel for the press that produces optimal contact. This forward press naturally de-lofts traditional putters, but with Putter.One, it maintains the equator-to-equator contact geometry while setting up the sweeping motion.

Sweep: Move the putter along the grass without lifting. The continuous arc sole glides smoothly, maintaining contact through and past impact. This eliminates the need to precisely time a descending or ascending blow, as the natural mechanics deliver consistent strike conditions.

Self-Correcting Mechanics

The brilliance of this method lies in its self-correcting nature. If golfers lift the putter, they immediately feel the loss of grass contact and see the ball hop—instant feedback that prevents practice from grooving poor mechanics. If alignment is off, the equator-to-equator contact doesn't occur properly and results suffer—again providing clear feedback.

This built-in feedback mechanism accelerates learning curves compared to traditional putters where golfers can practice faulty mechanics for years without recognizing the root cause of inconsistency. The method enforces best practices mechanically rather than requiring conscious thought during each stroke.

The Science of True Roll
Launch Angle and Spin Rate Optimization

Research establishes that optimal putting on fast greens requires approximately 2 degrees of launch angle with topspin. This specific combination lifts the ball just enough to clear minor surface imperfections without excessive hop while the topspin creates immediate forward rotation.

CenterStrike Technology achieves these ideal conditions naturally. The equator contact with the press-sweep stroke produces the slight upward launch component required, while the rolling contact off the curved face imparts topspin rather than backspin. Testing confirms that balls leave the putter face already rotating forward rather than skidding.

This represents a fundamental departure from traditional putter behavior. Flat-faced designs require the ball to transition through backspin, neutral spin, and finally into topspin over several inches of travel. The round face eliminates this transition entirely, beginning with the end state: pure forward roll.

Angular Momentum and Stability

When a golf ball rolls with topspin, it possesses angular momentum that stabilizes its path, similar to a gyroscope resisting deflection. The faster the forward rotation, the more stable the ball becomes and the less it's affected by minor green imperfections.

By establishing forward rotation immediately, Putter.One's built-in technology maximizes this stabilizing effect throughout the putt's journey. The ball spends 100% of its travel in a stable rolling state rather than allocating the first several inches to an unstable skid-to-roll transition.

TaylorMade's research into groove technology found that adding just 25-50 RPMs of top-spin significantly improves consistency. While their approach uses angled grooves in flat faces, the round face geometry achieves similar or superior results through pure contact physics—no specialized surface treatment required.

Resistance to Deflection

High-speed video analysis reveals that balls in pure roll maintain their line through imperfections that would deflect skidding balls offline. The gyroscopic effect combines with the ball's mass and angular momentum to power through grain, minor elevation changes, and spike marks.

This resistance to deflection becomes especially valuable on older or imperfect greens where minor inconsistencies abound. While traditional putters suffer performance degradation on less-than-perfect surfaces, the immediate true roll produced by Putter.One maintains consistency across varying conditions.

Users report this benefit explicitly: putts that would normally be deflected offline on bumpy greens somehow find the hole anyway. The physics explanation is straightforward—the ball enters its stable rolling state before encountering the imperfection rather than being vulnerable during transition.

Comprehensive Design Integration

Eye Position and Alignment

The single bend shaft design positions the shaft centrally in the golfer's field of view while placing the hands in optimal relationship to the ball. This geometry naturally encourages proper eye position—directly over or slightly inside the ball—which research shows provides the most accurate perception of target line.

Unlike plumber's neck or offset hosels that can create visual confusion or require compensation, the centered shaft simplifies alignment. Golfers can focus on the target rather than managing equipment quirks, reducing cognitive load during the stroke.

The electroplated non-reflective finish eliminates glare that can distract or disrupt visual focus. In bright sunlight or under artificial lighting, traditional chrome shafts create reflections that draw attention away from the ball and target. Putter.One's finish maintains visual simplicity that supports concentration.

Conforming Innovation

Revolutionary design risks rule violations that limit competitive use. Putter.One conforms fully to USGA and R&A *Rules of Golf,* ensuring that its advantages remain available in all competitions from club championships to professional events.

This conformance wasn't accidental but represents careful engineering to innovate within established parameters. The round face, adjustable weights, and unique sole design all meet regulatory requirements while delivering measurable performance advantages.

Materials and Construction

Putter.One features an anodized aluminum core that provides optimal weight distribution and the structural integrity required for precision manufacturing. This material choice enables the continuous arc sole design while maintaining durability.

The variable stainless steel weight modules offer corrosion resistance and precise weight specification. The combination of materials creates what users describe as a solid, confident, dense sound at impact—feedback that builds trust without harsh acoustics.

Understanding the Market Context
The Zero Torque Movement

Recent years have witnessed growing awareness of torque's negative effects on putting consistency. Several manufacturers have introduced designs attempting to reduce face rotation through various engineering approaches. This movement validates the importance of face angle control that research has long established.

However, these designs continue using traditional flat faces with inherent loft that creates backspin or requires careful stroke mechanics to achieve optimal launch. They represent important steps forward but stop short of addressing all of putting's fundamental challenges simultaneously.

The Round Face Breakthrough

Drop Bear Golf's Putter.One represents the first serious round face putter designed for mainstream competitive use. While spherical-faced putters have appeared periodically throughout golf history, none combined the engineering sophistication, testing validation, and complete feature integration required for professional-grade performance.

CenterStrike Technology proves that round face design isn't a novelty but a superior solution to the ball-striking challenge in putting. The physics advantages manifest in measurable performance improvements documented through independent testing and user feedback.

USAToday recognized the significance, noting "Latest Putters Packing High Tech Punch," while *Independent Golf Reviews* characterized the results as "Unconventionally Straight." These endorsements from respected media outlets validate that the unconventional appearance serves genuine functional purpose.

Accessibility Across Skill Levels

Unlike technologies that benefit primarily skilled players capable of consistent execution, Putter.One's advantages scale across all ability levels. High handicappers benefit from the forgiveness and simplified stroke method. Mid-handicappers appreciate the consistency building confidence for more aggressive plays. Low handicappers and professionals gain the marginal improvements that separate good putting from great.

The sole-press-sweep method proves particularly valuable for beginners who haven't yet grooved faulty mechanics. Rather than spending years developing compensations for traditional putter limitations, new golfers can build fundamentally sound technique that maximizes the technology's advantages from day one.

The Investment in Performance
Premium Technology at Premium Pricing

At $649 USD, Putter.One represents a significant investment that reflects the engineering sophistication, materials quality, and decade of development behind the design. This pricing positions the putter among premium equipment chosen by golfers who prioritize performance over cost.

The value proposition becomes clear when considering putting's impact on scores. Even at recreational levels, putting accounts for approximately 40% of strokes. For golfers shooting in the 90s, eliminating just two three-putts per round through improved consistency saves four strokes—enough to break into the 80s.

The adjustable weight system adds value by ensuring long-term relevance. As stroke mechanics evolve or golfers play different course conditions, the ability to reconfigure the putter maintains optimal performance without requiring equipment replacement.

The Return on Innovation

Equipment represents tools for achieving scoring goals. A driver that gains 10 yards or irons that improve accuracy by 10% deliver measurable value. utter.One's combination of immediate true roll, zero torque stability, complete forgiveness, and simplified stroke mechanics addresses the aspect of golf where most players struggle most.

Consider that many golfers willingly invest $500-600 in drivers used 14 times per round while using putters costing under $200 for 30+ strokes. The logic favors allocating resources toward equipment that impacts the majority of scoring opportunities.

Real-World Performance Validation
Independent Testing Confirmation

Quintic ball roll analysis provides objective measurement of launch conditions, spin rate, and roll quality. Testing of Putter.One documented the immediate forward roll that physics predicts while demonstrating the sweet spot expansion across the entire face width.

Video analysis captured putts struck at various points along the face producing nearly identical results—a forgiveness level that traditional designs simply cannot achieve through any amount of perimeter weighting or moment of inertia engineering.

User Experience Insights

Golfer feedback consistently emphasizes three themes: immediate performance improvement, enhanced confidence, and the intuitive nature of the sole-press-sweep method. Many report achieving better results after just a few practice sessions than they experienced with traditional putters used for years.

The confidence factor proves particularly valuable. Knowing that contact anywhere on the face produces good results and that the face stays naturally square through impact allows golfers to focus attention on reading breaks and judging speed—the variables that actually require skill and experience.

Competitive Application

While Drop Bear Golf doesn't currently have tour player representation, the technology's conformance to competition rules ensures availability for all levels of competitive golf. The performance advantages that benefit recreational players scale equally to elite competition where millimeter-level precision separates winners from the field.

As awareness grows and players experience the technology firsthand, tour adoption becomes increasingly probable. The pattern seen with other innovations—initial skepticism followed by gradual acceptance as results speak for themselves—will likely repeat with round face technology.

Looking Forward: The Future of Putting
Beyond Current Trends

The golf industry periodically experiences technology revolutions that fundamentally change equipment categories. Oversized titanium drivers, multi-material irons, and urethane-covered balls each represented quantum leaps that redefined performance baselines.

Putting technology has evolved more conservatively, with improvements typically representing incremental refinements rather than revolutionary breakthroughs. Insert materials, alignment aids, and weighting strategies have all contributed to better putters, but none addressed the fundamental physics of ball-striking at the level that round face geometry enables.

Putter.One represents that revolutionary leap for putting—not through incremental improvement of existing designs but by reimagining the contact event itself based on first-principles physics.

Integration of Multiple Innovations

Putter.One's significance lies not in any single feature but in the complete integration of multiple innovations working synergistically:

- Round face geometry creates equator-to-equator contact
- Zero effective loft through contact point engineering
- True center balance eliminates torque
- Continuous arc sole enables the sweeping stroke
- Adjustable weights personalize performance
- Optimized sight lines support alignment

Each element reinforces the others, creating performance advantages greater than the sum of individual features. This holistic design approach reflects the decade of development invested in understanding how these technologies interact.

Accessibility and Adoption

As more golfers experience the technology and word-of-mouth spreads, adoption curves will accelerate. The combination of dramatic performance improvement and intuitive use creates ideal conditions for rapid market acceptance once initial awareness barriers fall.

The premium pricing positions Putter.One as an aspirational purchase that golfers save toward or receive as significant gifts. This creates exclusivity that paradoxically drives demand—early adopters gain competitive advantage while the technology remains relatively scarce.

Conclusion: Redefining What's Possible

The conventional wisdom in putting holds that success requires perfect technique honed through endless practice. While skill certainly matters, this perspective ignores the role equipment plays in either supporting or hindering that skill development.

Drop Bear Golf's Putter.One challenges the assumption that golfers must overcome equipment limitations through technique. Instead, it asks: what if equipment worked with physics rather than against it? What if the putter naturally did what golfers intend rather than requiring constant compensation?

The answers emerge through Putter.One's CenterStrike Technology:

Physics-Based Performance: Equator-to-equator contact between identical spherical surfaces eliminates backspin and creates immediate forward roll—not through exotic materials or surface treatments but through pure geometry.

Comprehensive Integration: Zero effective loft, true center balance, continuous arc sole, and adjustable weighting combine to address every aspect of putting performance simultaneously.

Validated Results: Independent testing confirms what physics predicts while user feedback demonstrates real-world performance improvement across skill levels.

Simplified Execution: The sole-press-sweep method reduces putting to its essential elements while building correct mechanics through inherent feedback.

Universal Application: From beginners learning their first stroke to competitive players seeking marginal gains, the technology delivers measurable advantages while conforming to all competition rules.

The golf industry has reached the point where incremental improvements to traditional flat-faced putters offer diminishing returns. The fundamental limitations of that geometry—backspin creation, inconsistent effective loft, restricted sweet spots—cannot be fully overcome through refinement.

Round face technology represents the logical next evolution, supported by physics, validated by testing, and proven by results. Just as oversized drivers revolutionized distance and cavity-back irons democratized ball-striking, spherical putter faces will redefine putting performance for golfers everywhere.

Putter.One stands as the first fully-realized expression of this technology: ready for competition, proven in testing, and available to golfers willing to embrace innovation over convention. As one user noted, it feels "like cheating"—but it's simply the advantage that comes from equipment engineered to work with physics rather than despite it.

The future of putting has arrived. It's round.

Technical Specifications

Drop Bear Golf | Putter.One

- Center Strike round face anodized aluminum core with stainless steel weight caps
- Adjustable weight modules (¬±10 grams current range)
- Continuous arc sole for gliding through-grass stroke
- Zero effective loft through equator contact geometry
- True center balance (zero torque) via symmetrical design
- Single bend center shaft with non-reflective electroplated finish
- USGA and R&A conforming
- Price: $649 USD

dropbeargolf.com

*This white paper synthesizes research from multiple sources including Science and Motion Sports SAM PuttLab, Quintic ball roll analysis systems, biomechanical studies on putter design and face angle influence, academic research on ball launch dynamics, and independent testing validation. All claims regarding CenterStrike Technology performance are based on proprietary testing and user feedback.**

Frequently Asked Questions (Content Quick Guide)

1. What is CenterStrike® Technology and how does it differ from traditional putter faces?
CenterStrike® Technology features a patented round face with the exact diameter of a golf ball (1.68 inches), creating equator-to-equator contact at impact. Unlike traditional flat-faced putters that contact the ball below its equator and create backspin, the round face geometry produces immediate forward roll through pure spherical contact. This eliminates the 4-10 inch skid phase that plagues traditional putters, getting the ball into stable, true roll within the first few inches of travel.

2. Why does zero loft matter if traditional putters use 2-4 degrees successfully?
Traditional putters require 2-4 degrees of loft to compensate for their flat face geometry and the depression the ball creates in the green. However, this loft creates backspin when it exceeds the rise angle of the stroke—backspin that must be overcome before forward roll begins. Zero loft through equator contact eliminates this problem at the source, creating immediate topspin without requiring the ball to transition through backspin and neutral spin phases. The result is a more predictable, stable roll from the moment of impact.

3. How does zero torque/center balance improve putting consistency?
Research demonstrates that face angle at impact determines 83-85% of a putt's starting direction, while path accounts for only 15-17%. Traditional putters with offset centers of gravity create rotational forces that twist the face open and closed during the stroke, requiring precise timing and hand manipulation to square at impact. Zero torque design places the shaft axis directly through the putter's center of gravity, eliminating rotational forces so the face naturally stays square to the stroke arc. This removes a major source of inconsistency and allows golfers to focus on reading breaks and judging speed.

4. What is the sole-press-sweep method and why is it important?
The sole-press-sweep method is a three-step approach that maximizes Putter.One's design advantages: (1) SOLE the continuous arc bed fully on the grass to establish proper alignment, (2) PRESS forward slightly to prepare the launch angle, and (3) SWEEP the putter along the grass without lifting. This method provides built-in feedback—if you lift, the ball hops; if alignment is off, contact feels wrong. The technique naturally enforces optimal strike mechanics while the putter's design delivers consistent results, creating a self-correcting system that accelerates skill development.

5. How does the adjustable weight system work and who benefits from it?
Putter.One features swappable weight modules (±10 grams currently) that screw into the outer sides of the putter head. Heavier configurations increase stability and promote smoother pendulum strokes—ideal for golfers with quick tempos or excessive hand action. Lighter setups enhance feel and suit players with naturally slow, smooth tempos. The weights are positioned at the extremities to maximize their effect on moment of inertia and forgiveness without compromising the center balance. Golfers can experiment to find their optimal configuration for different conditions or personal preferences.

6. Is this technology conforming to USGA and R&A rules?
Yes, Putter.One fully conforms to all USGA and R&A *Rules of Golf* and appears on the conforming equipment lists. The round face geometry, zero loft design, center balance, adjustable weights, and continuous arc sole all meet regulatory requirements. This ensures the putter is legal for use in all competitions from amateur club championships to professional tour events, giving golfers confidence that these performance advantages are available wherever they compete.

7. Why does the entire face act as a sweet spot?
Traditional flat-faced putters have a defined sweet spot (typically a quarter-inch circle) where optimal contact occurs. Strike the ball toward the toe or heel, and gear effect causes directional inconsistency and energy loss. Putter.One's cylindrical geometry curves equally at every point along its width, meaning any contact location produces the same rolling effect. Independent Quintic testing verified this: off-center hits showed minimal performance degradation compared to center strikes. This forgiveness proves especially valuable under pressure when stroke mechanics naturally become less precise.

8. What kind of results can golfers expect when switching to this technology?
Results vary by individual, but common improvements include: faster transition to true roll (4-5 inches vs. 10+ inches), improved directional consistency due to stable face angle, enhanced confidence from knowing the entire face performs equally, and simplified stroke mechanics through the sole-press-sweep method. Many users report noticeable improvement within just a few practice sessions. The technology particularly benefits golfers who struggle with: manipulating the putter face, inconsistent contact points, putts that bounce or skip, and maintaining confidence on varying green conditions. Independent testing confirms measurable advantages in launch conditions and roll quality.

References and Further Reading

If you'd like to dive into the weeds, as it were, here are some links for additional research.

PEER-REVIEWED RESEARCH

Richardson, Ashley K., Andrew C. S. Mitchell, and Gerwyn Hughes. "The Effect of Dimple Error on the Horizontal Launch Angle and Side Spin of the Golf Ball During Putting." Kinesiology, University of San Francisco, 2017. https://repository.usfca.edu/ess/44/.

TECHNICAL DOCUMENTATION AND RESEARCH ORGANIZATIONS

Science and Motion Sports. "The Fundamentals of Putting - Episode 2: Putter Face and Direction." Science and Motion GmbH. Accessed October 21, 2025. https://www.scienceandmotion.com.

Quintic Consultancy Ltd. "Quintic Ball Roll Launch Angle Analysis." Accessed October 21, 2025. https://www.quinticballroll.com/Quintic_Ball_Roll_Launch_Angle.html.

INDUSTRY TESTING AND ANALYSIS

MyGolfSpy. "Best Zero-Torque Putters of 2025." August 12, 2025. https://mygolfspy.com/buyers-guides/putters/best-zero-torque-putters-of-2025/.

Golf Digest. "Does Putter Loft Matter? Gear Questions You're Afraid to Ask." February 16, 2023. https://golf.com/gear/putters/does-putter-loft-matter-gear-questions/.

Wall, Jonathan. "How 'Zero-Torque' Became a Red-Hot Gear Trend." Golf.com, October 10, 2024. https://golf.com/gear/putters/torque-balance-putter-fully-equipped/.

EQUIPMENT TECHNICAL ANALYSIS

Maltby, Ralph. "Putter Face Angle vs. Path." The GolfWorks. Accessed October 21, 2025. https://www.golfworks.com/putter-face-angle-vs-path/.

Modern Golf. "Face the Facts in Putting: Controlling Face Angle." GolfWRX, April 2, 2015. https://www.golfwrx.com/291757/face-the-facts-in-putting-controlling-face-angle/.

Gray, Daniel. "Putting: 90% of Starting a Putt on Line Is Face Alignment." Daniel Gray Golf. Accessed October 21, 2025. https://danielrgray.com/putting-90-of-starting-a-putt-on-line-is-face-alignment/.

BIOMECHANICS AND PHYSICS RESEARCH

Mackenzie, Sasho. "Are You Using the Wrong Putter? What This PhD's Interesting Experiment Revealed." Golf Digest, December 19, 2023. https://www.golfdigest.com/story/putter-study-dr-sasho-mackenzie-golf.

The Golf Performance Center. "Launch Your Putts." February 21, 2020. https://thegolfperformancecenter.com/5-elements-blog/launch-your-putts/.

Honu Golf. "Topspin Not Hopspin." Accessed October 21, 2025. https://www.honugolf.com/topspin-not-hopspin.

TRADE PUBLICATIONS AND MEDIA

Anderson, Mark, Christoph Bausek, and Jamie McConnell. "Finally Master Ball Spin: 7 Secrets Weekend Golfers Actually Use." Golf Easer, June 21, 2025. https://www.golfeaser.com/golf-ball-spin.html.

Snyder Golf USA. "Golf Ball Spin: What It Means and How It Impacts Your Game." March 13, 2025. https://snydergolfusa.com/blogs/news/golf-ball-spin.

TaylorMade Golf. "The Science of a Pure Roll." Accessed October 21, 2025. https://www.taylormadegolf.com/clubhouse/3914-the-science-of-a-pure-roll.html.

EQUIPMENT REVIEWS AND TESTING

Golf Monthly. "What Is a Zero Torque Putter?" February 27, 2025. https://www.golfmonthly.com/features/what-is-a-zero-torque-putter.

Today's Golfer. "Best Zero-Torque Putters 2025: Tested by Experts to Help You Hole More Putts!" September 2025. https://www.todays-golfer.com/equipment/best/zero-torque-putters/.

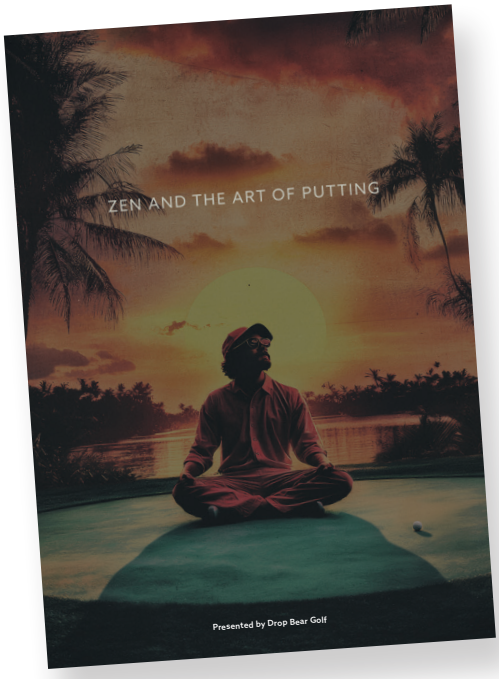
McCormack, Kris. "Zero Torque Putters." Fully Equipped (podcast). Golf.com, October 10, 2024.

HISTORICAL AND TECHNICAL REFERENCES

Kronos Golf. "Why Use a Putter with Zero Degrees of Loft?" Video. June 22, 2018. https://kronosgolf.com/video-blog/2018/6/22/why-use-a-putter-with-zero-degrees-of-loft.

Kelley, Brent. "What Is a Face-Balanced Putter in Golf, and Do You Need One?" LiveAbout, June 10, 2018. https://www.liveabout.com/what-is-a-face-balanced-putter-1564141.

Furyk, Jim. "What Are the Benefits of a Center-Shafted Putter?" Jim Furyk Golf, June 20, 2023. https://jimfuryk.com/center-shafted-putters/.



AVAILABLE FOR FREE DOWNLOAD

"A comprehensive approach to putting mastery..."

Zen and the Art of Putting introduces a mindful approach to putting by integrating practical drills, visualization techniques, and moments of focused meditation. This guide encourages golfers to develop a deeper awareness of their movements and a stronger connection to their putting technique. And, best of all, it's free with absolutely no obligation to purchase anything. Ever.

ZenAndTheArtOfPutting.com

"As simple as it it revolutionary."

—New York Daily News

INTRODUCING

PutterOne

The world's most accurate and forgiving golf putter!

Patented round face, zero loft, zero troque
Center Strike™ Technology delivers true roll with every stroke
Over 30 user-configurable weight and feel combinations
Customizable length and lie
Conforms to the Rules of Golf for both the USGA and R&A
Limited lifetime warranty against manufacturing defects

Seeking angel investors and influencers
as we capital raise our way to production.

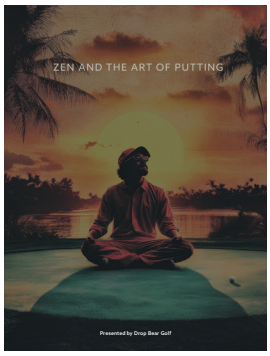
Drop Bear®

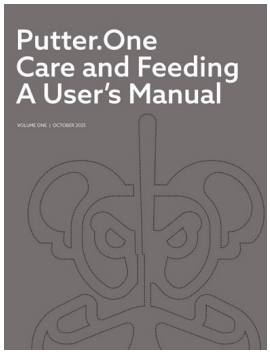
You get to the green. We'll take it from there.®

LEARN MORE AT DROPBEAR.GOLF

ADDITIONAL FREE RESOURCES

Transform your putting through mindful practice. Six essential drills—covering alignment, tempo, and zero loft principles—paired with powerful visualization and meditation techniques used by tour professionals. In just 30 minutes, build the mental foundation that separates great putters from good ones. Scientific, practical, proven.





Your comprehensive troubleshooting guide for mastering revolutionary putting technology. When putts aren't performing as expected, this systematic manual diagnoses the root cause—from directional inconsistency to confidence issues—and provides physics-based solutions. Includes the confidence-building Sole-Press-Sweep method, distance control protocols, and mental game strategies that work with CenterStrike® Technology's advantages.

DOWNLOAD YOURS AT: PUTTERONE.MEDIA

Contact

Brian Wittman
media@dropbear.golf

REVISED NOV 10, 2025