Anatomy of a golf ball and what it means for your game

Here’s how the three main types of ball are built, and the difference that can make to your game. Again, all types traveled about the same distance in our tests, but some spin differently (good golfers tend to prefer a higher rate of spin off their irons so that they can control the ball better) or feel different (most golfers prefer a soft feel). Whatever the type of ball, manufacturers sometimes tweak the materials they use in an effort to set their product apart from the pack.

The 2-piece ball
Best for beginners and intermediate players.

A two-piece ball is usually the least expensive. This construction is used by 60 to 70 percent of golfers. However, these balls ranked toward the middle or bottom of our Ratings. The core is typically synthetic rubber that’s been heated and pressurized to harden it, which gives the ball lots of speed. The cover is generally made of ionomer, a type of plastic, and is often thicker than the covers on three-piece or four-piece balls. As a result, they tend to be more durable. The balls tend to be harder, so they spin less.

The 3-piece ball
Best for more experienced players.

Provides low spin off a driver to go far, yet provides more spin off iron shots, for better golfers who can, for instance, create backspin that causes the ball to roll less after it lands on the green. May cost twice as much as a two-piece. The core is typically synthetic rubber similar to that of a two-piece ball and is just as hard. The middle layer is generally extremely thin and made of ionomers. The outer plastic cover can be thinner than most two-piece balls, and softer. As a result it sticks to the club face a little better on shorter shots, which aids spin, though thinner covers are also more apt to tear.

The 4-piece ball
Best for stronger players.

Four-piece balls are generally recommended for players with faster swings. Typically, it has the same hard inner rubber core as two- and three-piece balls, but that is surrounded by a second, thinner layer of rubber to soften the feel. It contains two outer layers, one made of ionomer and one of hard plastic. This allows the manufacturer to tweak the characteristics of the ball. While these balls are often dubbed “tour” or “pro,” it doesn’t mean they’re better overall: One of the four-piece balls we tested fell in the lower half of the Ratings.

The dimple effect

Each company stamps its balls with a distinctive pattern. Once the ball is airborne, dimples reduce the resistance, or drag, of a smooth ball. Dimples also contribute about 40 percent of a ball’s distance (its spin provides the rest). Dimple depth helps determine the ball’s trajectory. Trial and error has pegged the optimum dimple number at about 350 to 450 per ball.