REEL TECHNOLOGY

**2SPEED GEARING**

This shifting mechanism is designed so that gearing changes are quick and easy, even when fighting a fish. The low gear ratio used for high-power retrieves is selected by pushing the button on the base of the handle. Return to the high-speed ratio by sliding the release button along the handle shank. There is no gear meshing during the shift.

**AEROWAVE**

This oscillation system incorporates the strength of a standard system with some of the line winding performance advantages of a two-speed worm-driven system. Aero-Wave wraps line onto the spool so that it does not dig into itself, and reduces the chance of the line stacking at one end. The result is longer casts and a smoother feeling when a fish is pulling drag.

**AERO WRAP II**

A two-speed oscillation system that produces a criss-cross line lay. This pattern reduces friction, allowing for longer and easier casts.

**AR-C SPOOL**

Through tens of thousands of casting tests and computer simulations, it has been determined that the AR-C spool lip design produces longer casting distances than a standard spool lip, while preventing backlashes and wind knots from forming. It also allows the line to flow off the spool in smaller loops during the cast, which means less slap on the stripper guide. This results in longer casts with less friction. A spool designed with a V-shape spool lip ensures the line comes off the reel in smaller loops, for longer, more accurate casting.

**A-RB**

Anti-Rust Bearings possess extreme durability, at least 10 times the corrosion resistance of standard stainless steel bearings.

**C14**

C14 is a material created by the interfusion of carbon and polyamide. The upshot is a reel whose precision inner workings are housed within a protective shell with all the performance advantages of metal, but weighing less and therefore reducing arm fatigue whilst increasing feel and balance through the rod.

**Cl4+**

We have upgraded our light-weight carbon material C14. Keeping it light weight, rigidity and durability of the material under fishing conditions are highly improved. From this characteristic, we were able to reduce the volume and weight of the rotor and the body.

**CROSS CARBON DRAG**

Dartainium is a special drag material that provides a wider range of drag settings and the smoothest performance ever.

**EASY MAINTENANCE**

This feature enables you to directly lubricate the inner workings of the reel without having to take it apart. A small oil-lubricated port can be found on each of the SR-System and S-System reels which, when removed, enables you to apply manufacturer approved lubricants to the inside mechanism.

**Dyna-Balance**

High Efficiency Gearing provides more leverage and power for fighting fish.

**Extreme Drag Sound**

This audible and highly exciting sound, which occurs when a fish runs, is a modern alternative to the more traditional mechanical clicker or ratchet.

**EXCITING DRAG SOUND**

With E.I., after the anodisation process is finished, a second layer of surface treatment is added. This treatment is forced into the remaining surface impurities. This gives salt no hideout and also results in an extremely smooth-to-the-touch finish. A reel with E.I. treatment has more than double the corrosion resistance of a standard anodised reel.

**FLOATING SHAFT**

Friction is reduced between the pinion gear and the main shaft, by the use of a bearing or bush.

**FLOATING SHAFT II**

The key friction area on most fixed spool reels is where the spool drive shaft meets the pinion. Shimano designers have overcome this by reducing a large percentage of surface area contact and incorporating bearings on either side of the shaft. The resultant design leaves the shaft in a 'floating' position, considerably improving efficiency and longevity.

**Fluidriver II**

An additional polishing process maximises tooth meshing and contact. This increases overall reel function efficiency, resulting in more power and less effort.

**Freebody**

G Free Body technology has been developed to shift the reel’s centre of gravity closer to the rod. This has been achieved by moving the worm shaft oscillation mechanism 19mm from the bottom of the reel to the top. By moving the centre of gravity closer to the anglers hand position, the G Free Body helps to reduce fatigue and enhance casting comfort.

**G FREE BODY**

The Hagane body is a metal reel body with high rigidity. The body stiffness and impact resistance virtually eliminates body flexing. The result transforms the angler’s actions directly into cranking power.

**HEG**

Hagane is the concept of power. By using a cold forging technique, we produced a class-leading drive gear that is stronger and more durable.

**HYBRID BODY**

This combination of aluminium and XT7 Graphite retains maximum strength exactly where required.

**COMPACT BODY**

Compact Body is designed for reduced weight and improved function, giving far more leverage when fighting a fish.

**COREPROTECT**

Total Protection: The concept of COREPROTECT is simple... to provide water resistance without creating a heavy rotation feeling. There are three key areas of the reel that require protection; the roller clutch, the body and the line roller.

**DYNAMO**

This drag material provides a wider range of drag settings, along with the smoothest Shimano drag performance ever.

**E.I.**

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I DC+ is the latest development in automatic cast control. This new digitally controlled braking system makes adjustments by the angler unnecessary, resulting in smoother, more accurate and backlash-free casts.

The Lo-Mass Drilled Spool System is designed for anglers who require long casts and can sacrifice line capacity to do so. The Lo-Mass spool features a large arbor that is cross-drilled to reduce its weight. By moving the arbor of the spool outward, the mass of the spool is closer to the rim of the spool.

Magnumlite is a revolutionary material 30% lighter than CI4! The reduction in weight of the rotor is felt by the angler when cranking as it produces an unmistakable silky feeling.

One Piece Bail allows the line to travel unimpeded to the line roller. Its seamless design reduces friction and the chance of tangles or cuts to the bail arm.

P3 stands for Power - Precision - Performance. Utmost performance is the end result of ultra-efficient drive trains, tight tolerances and superior line lay systems.

Working on the same principles used to develop P3, but with an AR-C spool, playless handle and a body with rear protector. Shimano P4 stands for Power, Precision, Performance and Pleasure and combines uncompromising quality with mid-priced affordability.

An oversized line roller that spins on a bearing. This reduces line twist from casting and retrieving.

A unique spool lip design reduces casting friction as line leaves the spool, as well as reducing line-slap on rod guides (also known as AR-C spool). A one-piece bail wire allows line to travel unimpeded and smoothly to the line roller.

The Shimano Stable Spool Design technology features balanced and uniform thin wall aluminium construction throughout the spool. This precision significantly reduces spool vibration and creates an incredibly smooth feeling when casting and retrieving.

Compact body design to reduce weight and allow for better grip and leverage while fighting a fish.

All these concepts have one thing in common — a philosophy of values in which we believe the best spinning reels should be designed by. Smooth, Silent and Strong, SR encompasses the value of unsurpassed reliability, whereas SW features every value and principle imaginable in order to create the greatest spinning reels on the planet.

Shielded Anti-Rust bearings are similar to A-RB, but feature additional shields for the ultimate protection.

Shimano’s durable, high quality, rust resistant bearings.

Eliminates friction on the spool shaft for increased free spool. The result is a longer cast requiring less effort.

SVS Infinity provides 4-6 settings and an adjustable brake dial to provide a much wider and more precise range for maximum control and consistent brake performance in all conditions.

Consistent spool speed is achieved by altering the speed of the oscillation cam. This results in an even line lay, delivering excellent casting and overall manageability.

Varispeed with extra teeth on the main gear to enhance line lay.

Variable Brake System uses weights to slow down the spool’s rotation. This provides the angler with more consistent spool speed, as well as easier line management during the cast.

The Wiffle spool sports drilled holes and thinner spool edges, thereby reducing inertia. As the spool has less resistance (inertia), the reel has better castability due to the fact that it needs less power to accelerate the spool during casting, and less brake force to control the spool speed.

It’s all about leverage! We’ve repositioned the reel handle closer to the body to increase cranking leverage, rigidity and torque, as found in the Calcutta D reels.

Shimano’s XGT7 Graphite is 200% stronger than current graphite using our latest technology for improved rigidity and longevity.

The first lip in the proprietary three-lipped rubber seal system is designed to keep low pressure water out. Then grease between the second and third lips resists high pressure water while enhancing a smooth rotor rotation.

The adoption of thicker titanium wire dramatically increases the rigidity and impact resistance of the bail. The nature of the metal makes the bail lighter and provides excellent corrosion resistance.

Ultimate toughness was sought for the main gear to withstand the maximum drag needed when tackling offshore species. The difference is obvious; the main gear is thicker and stronger.

The cold forged aluminium handle has a 35% increase in rigidity resulting in more power under heavy load. The one-piece shaft cover incorporates an aluminium outer shell and stainless steel core. This configuration allows the shaft casing to thoroughly and accurately encase the top of the handle shank, resulting in increased rigidity of the entire handle.

The shape and thickness of the aluminium rotor creates high rigidity that results in more fish fighting power. Increased mass of the aluminium rotor generates greater inertia, resulting in easier fishing of heavy jigs and high resistance lures.

By placing sealing gaskets in 12 critical locations throughout the rigid aluminium body, we are able to create a water resistant structure that can hold up against the toughest conditions and fish that Mother Nature has to offer.

X-Ship stands for Extra, Smooth and High Power. By supporting the pinion gear on both ends with SA-RB bearings (on Stella models) and introducing a bigger drive gear, Shimano increased gearing efficiency and higher power. This results in a fishing reel with ultra-light handle rotation for less effort, even under heavy loads. This increases the efficiency of the reel, meaning it will stay smoother and perform at its peak for much longer.

Incorporating large diameter drag washers at the base of the spool provides greater drag stability. The result is smooth and consistent drag performance throughout the fight. The Coil Wave Spring features steady elasticity at any compression level, and little deformation under repeated compression. This results in precise drag adjustments throughout the curve, giving the angler more control at high drag pressure.