

# COXREELS

## SH, MP, HP, EZ-SH, EZ-MP, & EZ-HP Series Design Features

The following are features and benefits of our Standard Heavy Duty and EZ Coil™ Series Reel

**1. GUIDE ARM:** The Coxreels guide arm is stamped from heavy gauge steel with stiffening ribs for extra rigidity and strength. The guide arm acts as a shock absorber for the hose stop, thus eliminating the problems of bending and breaking of rollers in the hose guide. The guide arm is easily field adjustable for floor, wall, ceiling and pit truck mounting positions.

**2. HOSE GUIDE:** Nylon guide rollers are installed in the hose guide to eliminate friction and extend hose life. The four rollers are installed on four solid steel pins that are held in place between two stamped steel plates riveted together. This method assures the rollers will not come loose with vibrations.

**3. HOSE GUARD:** To protect the hose, our reels are supplied with a guard where the hose enters the drum. This is an extra cautionary measure taken to protect the hose from the occasional sharp edges left from the stamping process.

**4. AXLE:** The axle is machined from a solid 1.00 inch diameter round cold-rolled steel for strength. Unlike some competition, our axle has no hole through to weaken. The end of each axle is fitted with a stainless steel set screw. The setscrew is provided to guarantee integrity and to eliminate any corrosion at the axle/swivel connection. The swivel is mounted on the end of the axle, making it easy for service and repair, thus reducing the cost of repair should it be necessary.

**5. SWIVEL:** Our full flow balanced swivels are designed to rotate under minimum torque, insuring smooth hose retraction and maximum flow. The swivel is a self-contained assembly and can be replaced as a unit, unlike some of our competitors. Some competitive reels use the main shaft of the reel as the spool of the swivel. When their swivel becomes worn out and does not seal, it may be necessary to replace the main shaft of the reel and the swivel. This is substantially more expensive in material, and requires a total disassembly of the reel.

Our low and medium pressure swivels are machined from solid brass to minimize corrosion. Our high pressure swivels are machined from alloy steel for higher strength and zinc plated for rust protection. Buna “N” seals are standard. Viton and EPDM seals are available as an option. Stainless steel swivels are also available as an option with various optional seals.

Our oxygen-acetylene swivels are machined from solid brass. These swivels are designed for simultaneously conveying two gasses. They are also ported for safety and the double O-Ring seal design prevents leakage.

Swivel support brackets - This bracket is only found on the “SHW” series Coxreels. This bracket guides the swivel to rotate exactly as the hose rotates. This assures no stress on the hoses.

**6. BEARING HUB:** For the standard SH, MP & HP models the locking ring and drum are assembled onto a bearing hub, well balanced and supported with 1.5 inches of bearing surface on the axle with a 1.00 inch diameter “Oil Lite” self-lubricating bronze bearing. This single bearing requires no lubrication maintenance, and is simple and trouble free. The spring assembly is attached to the outer half of the drum for easy access and the spring arbor is locked onto the axle.

**\*Models equipped with EZ-Coils™:** The locking ring and drum are assembled onto the EZ-coil™ unit. Our trouble-free, patented design utilizes a roller clutch mechanism with a fluid dampening feature to provide a safe controlled speed for hose retraction. Even though the retraction of the hose is restricted the discharge of the hose is non-restricted, which allows the convince of discharging the hose at any speed. The spring assembly is attached to the outer half of the drum for easy access and the spring arbor is locked onto the axle.

**7. DRUM:** Our drums are spun out of heavy gauge steel. Each side is supplied with a formed bead in the flange for added strength. All Coxreels drums include the extra process of rolling the edges. Rolled edges allow ultimate safety and eliminate the chances of the operator or the installer being injured by the sharp edges of the drum ends, as found on some of our competitors products. The two piece steel drum is assembled onto the bearing hub with three screws and two studs of the spring assembly. This design provides a stout assembly to assure efficient service in the most demanding applications.

**8. BASE:** The base is made of 1/4 inch plate steel, single construction, to avoid any welding problems and to prevent the flexing effect found on most competitors reels.

**9. SECONDARY CENTER SHAFT SUPPORT BRACKET:** In Coxreels Supreme Duty line of reels we take extra steps of reinforcing the rigidity of the center shaft. This is accomplished by welding to the upright post, in which the center shaft is attached, a “box” bracket. The “box” bracket rigidly supports the center shaft at a second point approximately 1-1/2” away from the main support post.

**10. MOUNTING:** The mounting plate is 1/4 inch steel. We supply two (2) drilled holes for a secure installation and two (2) slotted holes for easy installation.

**11. SPRING MOTOR:** Coxreels spring motors are manufactured from the highest quality tempered spring steel. The steel edges are rounded to eliminate any imperfections and the start of any fractures.

Our manufacturing methods and techniques assure a quality edge, skin and a long cycle life. Our spring arbor provides even loading on the inner end of the spring. The outer end wraps around a solid steel stud giving it a secure fit.

Coxreels spring assemblies are fully enclosed and replaced as a cartridge, should service be required. This is superior to competition in safety and handling.

Our non-corroding de-clutching arbor eliminates the possibility of spring damage should the reel be reverse operated, or due to spring backlash.

**12. LOCKING RING:** The locking ring is 1/4 inch steel plate and has eight latching positions for each rotation of the drum, allowing for complete operator control of usable hose lengths.

**13. LOCKING CAM:** Coxreels locking cam is manufactured from stainless steel and mounted on a hardened steel shoulder bolt. This assures a stronger and longer lasting mechanism. An optional brass locking cam is available for those special applications where a non-sparking mechanism is required. Non-sparking mechanism is standard on all oxy-acetylene reel series "SHW".

The Coxreels locking cam is designed so that it will not lock in the opposite direction during accidental high-speed rewind. We position the locking cam 10 to 15 degrees off center so that the inertia of the locking cam has to overcome before it can lock in an unwanted position, possibly resulting in damage to the locking mechanism.

**14. LOCKING CAM SPRING:** To avoid any rusting and ensure a long life, a stainless steel spring is used to hold the cam in position. All Coxreels reels can be easily converted to constant tension for automatic hose retrieval.

**15. HOSE RETENTION:** Two steel hose clamps hold the hose assembly to the reel drum. This design eliminates the hose slipping when pulled all the way out, which could cause the hose end fitting to be pulled out. The optional hose clamp position eliminates hose latch out when fully extended.

**16. HOSE STOP:** Adjustable hose bumper stops are made of solid molded material in two parts, which are bolted around the hose end. This allows the desired hose length to be maintained outside the reel. The bumper will not slip when the hose is retrieved and hits the arm guide rollers.

**17. FASTENERS:** Coxreels uses vibration-proof, reusable, self-locking fasteners. Although this type of fastener is substantially more expensive, it assures the reel will not loosen up and come apart.

**18. PAINT:** Coxreels paints each component part individually with a very durable polyester powder coat finish. This finish provides for excellent Ultra Violet (UV) protection and a high

quality, chip and scratch resistant finish that fights weathering. Coxreels uses state-of-the-art painting equipment.

Each individual part is treated before painting through a three-stage process. This process of cleaning, de-greasing, iron phosphate pre-treating and a final water rinse to remove any existing impurities allowing for maximum paint adhesion.

Powder coating is the finest metal finish technology available today. An environmentally friendly process, the powder coating operation in our plant creates no air pollution.

**19. HOSE ASSEMBLY:** Air and water hose assemblies are manufactured with the highest quality components. Full length barbed shank end fittings are inserted into the hose, then a heavy brass ferrule is crimped to the hose outside diameter, securely holding the connection. Brass ferrules give a professional appearance and do not have sharp edges like band type clamps that can injure the operator and cause property damage. Our medium pressure hose is SAE 100R1 hydraulic hose. Our high pressure hose is SAE 100R2 hydraulic hose. Medium and high pressure hoses are crimped with high pressure hydraulic couplings. These high pressure couplings have a long barbed steel shank that slips inside the hose, and heavy duty sleeve which slides over the outside of the hose before crimping permanently to the hose.

**20. PACKAGING:** Our packing consists of a full size wood base inside a double wall corrugated box. Also included are full width top flaps and a formed top insert to position and eliminate any shipping damage to our reels. This packaging has been tested in shipments to various parts of the world.

**21. RELIABILITY:** Besides improving reliability of components as described above, we have eliminated welding to our major structural parts, to improve the looks and increase the product reliability.

**22. QUALITY:** Coxreels continuously strives for total quality. We are constantly improving processes and designs to enhance the quality of our reels. We seek suppliers that follow similar stringent quality guidelines as we do.

The Coxreels team is committed to total quality. Our products are accepted worldwide and we are committed in serving global market needs.

**23. CUSTOMER SATISFACTION:** Our commitment to our customer satisfaction is of paramount importance to us.

- We intend to provide the customer with full service and support necessary to insure maximum acceptance of our product.
- We work closely with our customers, distributors and marketing groups to insure that we are correctly filling the customers requirements and needs.

- We have developed a system to ship our standard products on time every time to our customers, and non-standard reels on a reasonable schedule.

**24. GLOBAL MARKETS:** Coxreels markets extend beyond the United States. Canada, Mexico, South and Central America, United Kingdom, Asia and Australian markets continually specify Coxreels for their demanding requirements.