

Series TSR Tubing Storage Reel

Series TSR is a tubing storage and suspension system that provides exceptional versatility and convenience in a compact equipment package. Long loops of overhead tubing draped around the shop are eliminated. With the TSR reel the flex is retracted when not in use and only the amount necessary to reach the exhaust pipe need be extended. The reel supports the tubing for easy handling. Because Type HTX is so flexible it can be easily connected to a stack or exhaust pipe without struggling to position the vehicle to suit the exhaust system.

The Series TSR mounts over a repair bay and stores a single length of tubing in a compact space about 3 feet square. It will easily fit within the ceiling structure, making the TSR adaptable to many existing facilities as well as an original equipment item that does not require special design concessions.

The Series TSR reels are built with an uncompromising emphasis on strength and quality, with welded, heavy-gauge steel frame and drum. A cast-frame platform bearing supports a 1" diameter shaft that extends into the drum and is braced by four seam-welded gusset plates. The sealed rotating outlet fitting is made from a highly lubricative synthetic material, which contributes to the ease and consistency of operation. The low-resistance inlet and sealed internal duct provide efficient airflow through the reel.

The TSR comes as a complete assembly ready for mounting, including the frame, tubing drum, and specified retraction system (winch, spring or power). The TSR is of welded steel, rather than bolt-together tubular construction. The tube assembly with factory-installed fittings bolts securely to the gasketed reel inlet.

TSR Reels are available with a choice of operating mechanisms to extend and retract the tubing:

TSR-W: Closed-Circuit Winch System

Includes drum winch, 1/8" 7x19 aircraft cable, and pulleys

TSR-S: Spring-Operated Auto-Rewind

Ratchet stops allow positioning in convenient increments. A short pull on the adapter releases the tubing assembly to automatically rewind onto the drum.

TSR-P: Power-Operator

Fully motorized operation with 1/6 hp gear motor, sprocket-and-chain drive. Control options include wall-mounted remote switch, pendant-type remote or infrared wireless remote.

TSR reels can also be supplied complete with a Series CMW exhaust fan mounted directly to the reel and a micro switch control. For increased positioning flexibility or where mounting needs dictate, special TSR reels are available mounted to tubular booms with up to 270-degree rotation capability. Standard TSR reels are designed for overhead mounting and store 25 feet of 3", 4", 5", 6" or 8" diameter tubing. Custom reels are readily available for longer tubing lengths and/or larger diameters. For custom reels or unusual mounting conditions, consult factory or your local Car-Mon representative.

Specifications:

Series TSR Tubing Storage Reel

The tubing storage reel shall be the standard product of a U.S. manufacturer of carbon monoxide exhaust systems. The frame shall be comprised of 2 x 2 x 1/8" square tubular steel and shall be of welded construction. The tubing drum shall be constructed of 16 gauge steel welded to 12 gauge

steel end plates, forming an airtight cylinder. An internal duct, combined with a low resistance inlet, shall provide efficient airflow through the drum. The flange-mounted flexible tubing assembly shall be bolted to the air inlet of specified diameter; drawband connection is unacceptable. The drum shall be supported at one end by a 1" internally gusseted steel shaft through a heavy cast-frame platform bearing, and at the other end by a sealed rotating outlet fitting of a lubricious synthetic material. A crimped discharge collar of specified diameter shall be provided on the reel to facilitate duct connection. The tubing storage reel must be sufficient size to fully accommodate a minimum 25' of flexible tubing. The outlet fitting diameter, tubing length, tubing diameter, and overhead or wall mounting shall be as shown on the plans and specifications. The tubing storage reel shall be Series TSR-[W, S or P], as manufactured by Car-Mon Products, Inc. of Elgin, Illinois.

TSR-W: Closed Circuit Winch

The tubing storage reel shall be furnished complete with a closed circuit winch system comprised of a single drum winch, 1/8" 7x19 galvanized aircraft cable and appropriate pulleys.

TSR-S: Spring Operator

The tubing storage reel shall be fitted with an enclosed spring mechanism providing automatic rewind for storage of the flexible tubing assembly when not in use. Ratchet stops shall be provided so that the flexible tubing assembly can be partially or completely extended, allowing for convenient adapter positioning. A short pull on the adapter shall release the holding device and allow the tubing assembly to automatically rewind onto the drum. The reel shall be equipped with a spring loaded mechanical stop mechanism that will automatically stop the drum when the tubing is fully rewound.

TSR-P: Power Operator

The motor operator for the reel shall incorporate a 1/6 hp reversible gear motor controlled by an adjustable limit switch and a contactor relay. The gear motor shall operate on 115/1/60 current and drive the reel via a sprocket and chain system, providing an output RPM that will rotate the reel at a safe speed. The complete unit will be factory-mounted directly to the tubing storage reel. It shall have a removable enclosure allowing inspection or adjustment without removing the unit from the reel. The only equipment external to the motor operator enclosure shall be the standard surface-mount remote push button station, or optional hanging pendant-type or wireless remote push button control. There shall be a junction box with terminal block provided for field connection of 115/1/60 electrical power wiring, and a second junction box with terminal block for 115/1/60 field wiring of the remote control. The motor operator shall be provided by the manufacturer of the reel.

Surface-mounted Remote

A remote push button station shall be field wired to the control junction box on the reel. All internal wiring to be factory wired.

Pendant-type Remote

The control junction box shall be provided with pre-wired drop cord to a push button control, with strain relief fittings at both the junction box and the control. The length of the cord shall be sufficient to allow the control to hang seven feet above the floor.

