

Forklift Winches

Winch for Forklift - A winch is a mechanical device which specializes in winding out or pulling in or winding up or letting out the tension of a cable, wire rope, rope or a wire cable. In its most basic form it is constructed of a spool along with an attached hand crank. More complex winches are found at the heart of machinery like for instance elevators, steam shovels and tow trucks. Occasionally the spool can be called the winch drum. Elaborate designs have gear assemblies that could be driven by hydraulic, electric, pneumatic or internal combustion drives. Several winches could consist of a solenoid brake or a mechanical brake or a pawl and ratchet mechanism so as to prevent it from unwinding unless the pawl is retracted.

Usually, the rope is stored on the winch. There is similar piece of equipment called a capstan which does not store the rope. In sailing, when a line is trimmed on a sailboat, the crew member operates the handle of the winch utilizing one hand while tailing the other so as to maintain tension on the turns. Various winches have a cleat or stripper to maintain tension. These designs are called "self-tailing" winches.

Often, winches are used offstage as part of the mechanics in order to transfer backdrop in large theatrical shows. Many times the winches are actually embedded in the stage floor and used to move huge set pieces off and on stage.

The new generation of winches have been created for snow and water sports allowing the riders to be pulled rapidly across a body of water or of snow. This could stimulate a riding experience which is normally supplied by a boat, snow mobile or a wave runner.