

Winch for Forklift

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

Normally, the rope is stored on the winch. There is similar machinery known as a capstan which does not store the rope. In sailing, when trimming a line on a sailboat, the crew member works the handle of the winch with one hand while tailing the other in order to maintain tension on the turns. Some 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 mechanism in order to transfer scenery in large theatrical shows. A lot of times the winches are really embedded in the stage floor and used so as to transfer large set pieces off and on stage.

Recently, winches have been fabricated in specific designs for water and snow sports. This new generation of winches is designed so as to pull riders rapidly across a body of snow or of water. This can stimulate a riding experience that is typically supplied by a snow mobile, wave runner or a boat.