

Winch for Forklift

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

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

Often, winches are used offstage as part of the mechanics in order to move staging in big theatrical shows. Lots of times the winches are really 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 enabling the riders to be pulled swiftly across a body of water or of snow. This can stimulate a riding experience that is normally supplied by a wave runner, boat or a snow mobile.