Tie Down Selection and Safety Information



The following information is designed to help you choose the right equipment to secure your cargo. If you are unsure about a particular product or application, please contact us. Product manuals and information that accompanies our products provide valuable information about installation, operation and specifications. Always read manuals and product warnings before using products. The most current product manuals and other reference materials are available at our Website www.lift-it.com or by contacting us.

Product Selection

It is the user's responsibility to evaluate the suitability of any cargo securing product for their particular application. Use of cargo control products in an unsuitable manner may result in a failure of your cargo control system or unsecured cargo. Cargo control system failure can result in cargo damage and injury or death to you, a bystander or another driver. All products shown in this catalog are designed and intended to be used only as cargo securing devices. Products are not to be used for lifting.

All tie down products shall be used in accordance with local, state, federal and industry regulations.

Work Load Limit Considerations

Work Load Limit information provided in this catalog is intended to help you make decisions when selecting your cargo control system. Equipment overload can result in cargo control system failure. When considering the Work Load Limit remember:

All Work Load Limits are for products in a new or as new condition.

Age, wear or damage to any tie down system can greatly reduce its strength. To ensure your system is working at capacity, always inspect prior to each use.

Load directions other than straight can result in a significant reduction in Work Load Limit. Unless otherwise specified, all Work Loads are based on a straight tensile pull.

Your cargo control system is only as strong as its weakest link. The ratings shown in this catalog are based on using track, beams, webbing and hardware as a system. Cargo control products must be attached to securing points of equal or greater strength to maintain the established Work Load Limits.

Determining Your Work Load Limit

When designing a cargo control system using component pieces always select components that meet your required Work Load Limits. Your cargo control system is only as strong as its weakest link. For example, if you have: webbing with a Work Load Limit of 4,000 Lbs., a ratchet buckle with a Work Load Limit of 3,670 Lbs. and end fittings with a Work Load Limit of 1,670 Lbs., and these components are sewn together using a sew pattern with a 2,000 Lbs. Work Load Limit, then the Work Load Limit of the system is only 1,670 Lbs. The strength of the sew pattern must support the required Work Load Limit. The only way to determine the strength of a sew pattern is to properly test it. The WSTDA (Web Sling & Tie Down Association) has established recommended practices for proper test methods. Preassembled Lift-It® cargo control systems are always sewn to support the stated Work Load Limit. Never use Lift-It® Tie Down components for lifting applications.

Note: All Work Load Limits shown in this catalog are based on 1/3 the break strength of the component or assembly in a new or as new condition.

Tensioning of Cargo Control Equipment

To avoid over tensioning, always select and use specified equipment to tighten our products. Equipment compatibility is described in this catalog. This equipment has been designed to avoid over tensioning. Use of any unspecified leverage increasing device, such as a cheater bar, can generate enough force to break a piece of cargo control equipment. The release of the energy when a piece of cargo control equipment breaks can cause serious injury or death to you or bystanders. If you are having difficulty securing a load, make sure your cargo control equipment is in working order or readjust and/or reposition your load.

PRODUCT SPECIFIC SAFETY STATEMENTS Winches and Winch Bars

AWARNING When tightening or loosening winches, always maintain a firm grip on the winch bar. Never release a winch bar without checking the pawl to ensure that it is fully engaged between ratchet teeth. Releasing a winch bar without the pawl being properly engaged can cause serious injury or death to the user or bystanders. Use slip resistant, handled winch bars, specifically designed to tighten or loosen winches. Winch bars shall be used to tension and release tie down assemblies. Use of any unspecified leverage increasing device, such as a cheater bar, can generate enough force to break a piece of cargo control equipment. The release of energy when a piece of cargo control equipment breaks can cause serious injury or death to you or bystanders. User shall stand clear of the winch bar handle during operation of the winch bar in case the winch bar slips. The tip of the winch bar shall be inserted through both holes in the winch end cap to prevent the winch bar from "slipping out" and overloading the tip and/or end cap. Winches shall not be loaded in excess of their Work Load Limit. Winches shall not be used as a pulling or lifting device. A minimum of 12" of webbing shall be inserted through the slot, and a minimum of two (2) wraps shall be on the winch mandrel.

Caution: Excessive wraps of webbing on the mandrel will reduce the Work Load Limit of the winch.

Strap Assemblies

AWARNING Webbing straps must be protected when used on rough or damaging objects. Straps that are cut, worn or damaged shall not be used and shall be replaced immediately. All strap assemblies shall be inspected prior to each use. The use of "Cheater Bars" or other means of increasing leverage on a ratchet buckle handle or winch, other than an approved device, can cause serious injury to the user and/or bystander. Webbing straps are rated for use at temperatures from 194°F/90°C to -40°F/C.

Chain Products

descriptions for proper tensioning accessories. Use of any unspecified leverage increasing device, such as a cheater bar, can generate enough force to break a piece of cargo control equipment. The release of energy when a piece of cargo control equipment breaks can cause serious injury or death to you or bystanders. If you are having difficulty securing a load, make sure your cargo control equipment is in working order or readjust and/or reposition your load. Work Load Limits and strength standards for chain products comply with National Association of Chain Manufacturers (NACM) Welded Steel Chain Specifications. Do not exceed Work Load Limits.

Tarp Ties

AWARNING Rubber Ropes and Tarp Ties are not designed to hold a load in place. Failure to properly secure a load can lead to cargo damage, injury or death.

Logistic Straps and Track Fittings

AWARNING Series E, A or F fittings are designed for use with Kinedyne Logistic Track. Load ratings may be reduced when used with other tracks or if the track fitting is not positively engaged. Your cargo control system is only as strong as its weakest link. All ratings for series E and A fittings are based on use with Kinedyne 11 gauge track. Note: Several types of Kinedyne track are not made with 11 gauge steel.

Logistic Track

<u>AWARNING</u> Welding galvanized material will form toxic fumes. Welding shall be done with adequate ventilation.

Lift-It Manufacturing Co., Inc.