



1. Scope

This Technical Information Note deals with the issues associated with lifting pre-slung loads on site.

2. Benefits of Pre-slung loads

Loads of material, particularly re-bar and timber trusses, are increasingly being delivered to site with lifting accessories already attached to the load. Pre-slinging of loads may also be used for items of equipment such as chillers, generators and electrical panels, together with tower crane components.

The main reasons for pre-slinging are threefold:

- a. To reduce the need for work at height by reducing the exposure time when the slinger/signaller accesses the truck bed to carry out pre-use checks of the lifting accessories before the load is lifted, compared with the greater time required to attach slings to the load on the truck bed. These pre-use checks are of particular importance as pre-slung lifting accessories can become damaged during transit (see **Figure 1**).
- b. To reduce the time taken to unload, which is of significant benefit on sites in congested urban locations;
- c. To reduce the risk of crushing when slinging an unstable load, such as rebar, or where gaps between bundles have closed up during transit, making the passing of slings underneath difficult.

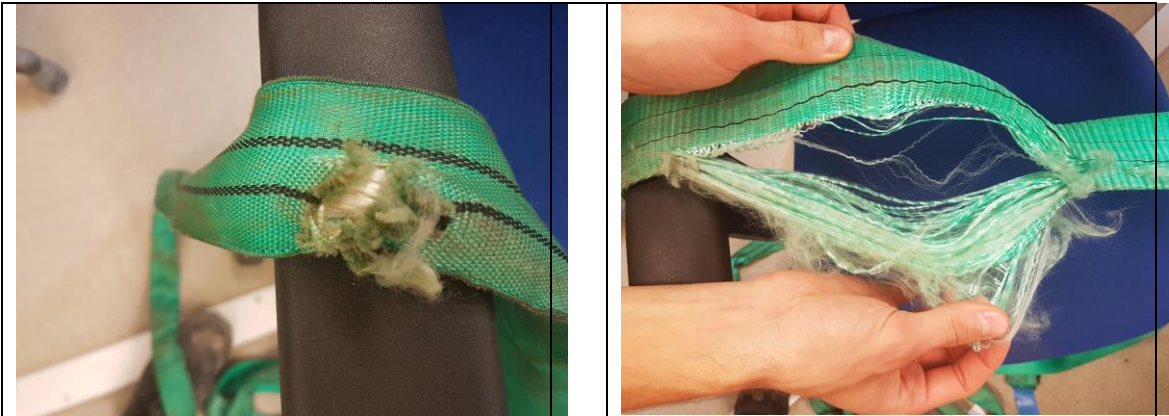


Figure 1 - Examples of loads arriving on site with damaged lifting slings

3. Issues with Pre-slung Loads

- a. Loads not being slung in the supplier's depot by a competent slinger to ensure that the load can be unloaded safely from the transport;
- b. Lifting accessories not having the correct pre-use checks before being attached to the load;
- c. Lifting accessories deteriorating or being damaged during the journey to site;
- d. Lifting accessories moving from the original point of attachment to the load during transit, affecting the ability of the load to be lifted level;
- e. Lifting accessories not having a current report of thorough examination;
- f. Single-use slings not marked with their Working Load Limit (WLL);



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Lifting of Pre-slung Loads

- g. Single-use slings not destroyed to prevent re-use, once the load has been unloaded,;
- h. Reused single-use slings failing due to wear, damage and material failure (see 4.);
- i. Webbing slings are at particular risk of damage from loads of rebar and other materials with sharp edges;
- j. Bundles of loose rebar, scaffold tube or similar equipment lifted using single wrapped slings, not double wrapped with a choke hitch to avoid slippage;
- k. Loads incorrectly slung, not taking account of lifting accessory load reduction factors (e.g. single leg slings chocked and used at an angle to the vertical);
- l. Using fibre slings or wire rope slings which are more susceptible to damage than chain slings.

4. Single-use slings

Unlike multi-use webbing slings, single-use slings are not covered by a European Product Standard, due to the inability of the Technical Committee responsible to agree on suitable safety factors. Single-use slings are therefore CE marked to the machinery directive, rather than a harmonised standard. The effect of this is that the capacity (WLL) of single-use slings is not indicated by a universally accepted colour code, as with multi-use slings. Some single-use slings also have a reduced factor of safety of 5, rather than the normal factor of safety of 7 for multi-use slings to EN 1492.

Consideration should be given to the practice on some sites where pre-slung loads using single-use slings are lifted from the transport to the ground alongside and then re slung before lifting to other locations on site.

5. Lifting Pre-slung Loads

When planning the lifting of pre-slung loads attention should be paid to the following points:

- a. All pre-slung loads should be accompanied by a current report of thorough examination for the lifting accessories used in the pre-slugging process;
- b. All pre-slung loads should be accompanied by information giving, as a minimum, the weight of the load and the position of its centre of gravity;
- c. Before lifting, the lifting accessories on all pre-slung loads should be physically checked by the slinger signaller to ensure that they are adequate for the load to be lifted, are in a safe condition, have been attached correctly and are in the correct location;
- d. Once the slinger signaller has satisfied themselves of item c, a test lift should be carried out to visually check from ground level, the load distribution and slinging arrangements;
- e. On successful completion of the test lift, the load may be lifted from the transport to its destination.