

1. Scope

This Technical Information Note deals with the issues associated with lifting of loads that have slings attached prior to arrival to site. The slings may have been fitted by the manufacture or supplier to assist loading and/or unloading.

2. Benefits of Pre-slung Loads

Materials such as re-bar, prefabricated panels and timber trusses are increasingly being delivered to site with slings already attached to the load. Pre-slinging of loads may also be used for items of equipment such as modular equipment, electrical panels and tower crane components.

The main reasons for pre-slinging are threefold:

- To reduce exposure time when working at height when the slinger/signaller accesses the truck bed to sling the load;
- To reduce the time taken to unload, which is of significant benefit on sites in congested urban locations;
- 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.

Note: Access to the truck bed will still be necessary in most instances to undertake pre-use inspection of the lifting accessories before the load is lifted - see **Section 6**. Slings may pre- may have been inappropriately attached, displaced, or damaged during transit - see **Figure 1**



Figure 1 – Example of loads arriving on site with knotted and 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 slings not having the correct pre-use checks before being attached to the load;
- c) Lifting slings deteriorating or being damaged during the journey to site;
- d) Lifting slings moving from the original point of attachment to the load during transit, affecting the ability of the load to be lifted level;
- e) Lifting slings not having a current report of thorough examination or a valid declaration of conformity;

Note: LOLER permits a declaration of conformity to be taken in lieu of a report of thorough examination for a sling that has not been used before

- d) Slings not marked with their Working Load Limit (WLL);
- e) One-trip slings being re-used for multiple deliveries. One-trip slings should be disposed of to prevent re-use, once the load has been unloaded;
- f) Bundles of loose rebar, scaffold tube or similar equipment lifted using single wrapped slings, not double wrapped with a choke hitch to avoid slippage;
- g) Slings potentially overloaded as slinging did not take account of load reduction factors;
- h) Textile slings being threaded through or wrapped around objects with sharp edges that can damage and cut the sling. Textile slings are at particular risk of damage from loads of rebar and other materials with sharp edges;
- i) Textile slings, of different types and/or capacities, being knotted together to form a longer sling to attach them to the load.

4. Types of Textile Sling

Two types of textile slings are available in the UK.

4.1 General purpose textile slings.

A general-purpose textile sling is a flat woven webbing sling or a roundsling that is designed to be used for multiple lifting cycles when lifting objects, materials or goods. It requires no deviations from the requirements, safety factors or working load limits specified in applicable European standards.

Their design life is based on multiple lifting operations across various goods. This is achieved with a suitable factor-of-safety to ensure that sufficient strength is maintained, taking into account in-service wear and tear, pre-use inspection and periodic thorough examination.

4.2 One trip textile sling

The term 'One Trip Textile Sling' is given to a sling that has been designed for the specific purpose of attaching to, and accompanying, a specific load (product) for its specified journey, from source to final destination.

The safety factors associated with one trip textile slings are often lower than that of general purpose textile slings. This deviation is generally permissible under legislation with adequate justification and supporting control measures, i.e. low utilisation with number of lifts monitored and controlled.

One trip textile slings should only be used to lift and transport a single load in accordance with the manufacturer's instructions and limitations for use, for example, a transport chain from supplier to final destination.

They should not be used as a general-purpose sling or outside the limitations of use specified by the manufacturer, or for numerous loads. To prevent further use of the sling, they must be taken out of service and disposed of in a safe manner.

Note: One trip textile slings should be disposed of in a secure manner that ensures that they are not reused. To avoid injury, they should not be cut up and destroyed using knives, saws or abrasive discs

4.3 Identification of one trip textile slings

In some cases, one trip textile slings are marked and can be identified by the following or similar information:

- ‘One trip sling’
- ‘Einweg hebeband’
- ‘Ne pas reutilizer’
- ‘Non riutilizzare’
- ‘Eslinga un solo uso’

- or similar translation for the country of use.

One trip textile slings can be any colour, including white, and may have an orange label. They tend to be thinner and narrower than their general-purpose counterparts for the same working load limit.

The most reliable method of identification is to look at any labels attached to the sling. If the label is missing or the information is illegible, then the sling must not be used.



a) This is a ‘one trip sling’ made to the German national standard; DIN 60005, which is not a harmonized standard given presumption of conformity to the European Machinery Directive or UK Supply of Machinery (Safety) Regulations.

The manufacturer has applied a CE mark and provided information as to the capacity of the sling when used in different configurations.

The sling is identified in German “Einweg Hebeband” as being a one trip sling. This sling may be acceptable if appropriately attached to the load and in good condition.



b) A sling with instructions written in a foreign language. Unless the sling is accompanied by written instructions in English, it is unlikely they would be readily understood by the slinger.

Figure 2: Examples of one trip textile slings



c) A sling that displays even less information than the sling in photograph b)

Figure 2 (cont'd): Examples of one trip textile slings

4.4 Conformity assessment and marking of slings

The UK Supply of Machinery (Safety) Regulations require all types of slings, including one trip textile slings, to be conformity assessed and marked. Slings should be provided with a Declaration of Conformity and be UKCA or CE marked.

Slings that do not display a UKCA or CE mark should not be used.

One trip textile slings are commercially available that have been conformity assessed and are UKCA or CE marked.

5. Lifting Pre-slung Loads

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

- a) Instructions should be provided to suppliers as to the minimum requirements for pre-slung loads that are to be delivered to site. This should include the type of slings that will be accepted at site;
- b) Suppliers should provide, preferably in advance of the load arriving, evidence that slings have been inspected prior to attachment and have either a current report of thorough examination or a declaration of conformity (UKCA or CE);

Note: LOLER permits a declaration of conformity to be taken in lieu of a report of thorough examination for a sling that has not been used before

- c) All pre-slung loads should be accompanied by information giving, as a minimum, the weight of the load. Complex items, such as tower crane jibs, should have the centre of gravity marked;
- d) 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 - see **Section 6**;
- e) Once the slinger/signaller has satisfied themselves of item d), a test lift should be carried out to visually check from ground level, the load distribution and slinging arrangements. As the slinger may not be able to fully inspect the slings, the lift should be undertaken on the presumption that the sling may fail during the lift. Persons should be excluded from the immediate vicinity of the lift;
- f) On successful completion of the test lift, the load may be lifted from the transport to its destination;
- g) The load should be kept as close to the ground as possible during the lift to minimise the consequence if the sling were to fail. Loads should not be lifted over persons.

6. Pre-use Inspection of Slings

It is essential that slings are inspected by the slinger prior to every lift to detect if they have deteriorated, to confirm that they are appropriately attached and are safe to use.

When undertaking the inspection, the slinger should confirm that:

- Instructions for safe use of the slings have been provided or the slings are provided with labels that are legible;
- The sling is not damaged;
- The sling is not trapped under the load;
- The sling has been suitably pre-slung around the load in such a way which avoids a hazardous condition;
- The sling is accompanied with adequate paperwork, i.e. valid report of thorough examination or declaration of conformity and instructions for safe use in English;
- The sling has markings that are readily understood;
- The sling has markings that identify any limitations of use, i.e. working load limit etc.

If any issues are identified during the inspection, the planned lifting operation should be suspended until the load has been re-slung in an appropriate manner.

Where it is not possible to safely inspect the slings or re-sling the load, the load may be lifted in a controlled manner from the delivery vehicle to a location where the sling can be safely inspected or replaced with a new sling. The lift should be undertaken on the presumption that the sling may fail during the lift. An exclusion zone should be established in the immediate vicinity of the lift.

7. Additional Information

LEEA-078-1	Guidance on the use of One trip textile slings - Lifting Equipment Engineers Association
BSEN 1492-1	Textile Slings- Safety- Flat woven webbing slings made of man-made fibres for general purpose use
BSEN 1492-1	Textile lings- Safety- Round slings made of man-made fibres for general purpose use
BS7212-5:2019	Code of practice for safe use of cranes – Part 5: Tower cranes