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Guidance on the use of One trip textile slings

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1.0 Introduction

This guidance document provides clarity on the responsibilities of the slinger, competent person, and duty holder with regards to the correct use of one trip textile slings.

It builds on these requirements to provide a globally applicable and accepted industry specific, best practice guidance to the safe use of One Trip Textile Slings.

This guidance document applies only to one trip textile slings. This document does not cover wire rope or chain slings, pre slung cargo slings or one trip textile slings used in the marine or port industry.

2.0 Definitions

For the purpose of this document the following definitions apply:

2.1 One Trip Textile Sling

The term 'One Trip Textile Sling' is given to a woven textile 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.

They must 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 destroyed.

2.2 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 applicable international 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. Design considerations and working load limit ratings are given in the relevant international standards and where relevant, suitable national legislation. E.g. EC Machinery Directive (MD), The Supply of Machinery (Safety) Directive (SOM(S)R), AS 1353.1 Flat synthetic-webbing slings - Product specification, ASME B30.9 - Slings

3.0 One trip textile slings

The following sections provide details in order to identify the most common one trip textile slings.

3.1 Overview

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 utilization with number of lifts monitored and controlled.

One trip textile slings shall 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. One trip textile slings are often used in large numbers for bulk shipments.

The main factor that one trip textile slings deviate from the requirements of general-purpose slings is their low utilization and therefore expected reduced life span. This often means that one trip textile slings have a lower factor of safety than that of a general-purpose sling.

It is therefore recommended that control measures are implemented based on a risk assessment of the planned lift utilizing the manufacturer's safe use instructions. Visual

inspection whilst on the load before each lift is strongly recommended. Where this is not practical to do so, the load shall be re-slung.

3.1.1 Unable to fully inspect slings

In the case where it is not reasonably practical to visually inspect a one trip textile sling or resling the load in the absence of such an inspection, then a controlled lift with a safe system of work based on a presumption that failure of the slings is likely, shall be implemented. The load shall then be moved into a location that allows the slings to be inspected or replaced safely.

Given their method of manufacture, re-introducing one trip textile slings into circulation considerably increases the risk of failure. To avoid further use of the sling, they shall be taken out of service and disposed of to prevent further use. **They must not be used as a general-purpose sling or outside of the limitations of use specified by the manufacturer.**

3.2 Identification

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. LEEA strongly recommends that users and duty holders read the label as this is the safest way to identify any textile sling.

If the label is missing or the information is illegible, then the sling must not be used.



Fig 1

This is a one trip sling made to the German national standard; DIN 60005, which is not a harmonised standard given presumption of conformity to the EU MD, (or SOM(S)R). These slings shall only be used in accordance with the specified limitations of use supplied by the manufacturer.



Fia 2

A Chinese sling with illegible instructions. They should be written in the recognized language of the end users location. Unless the limitations and safety information depicted on the sling or supplied separately is readily understood by the lift planner, then these slings should not be used as it would not be possible to build a robust risk plan given the unknowns.



rig. 3

Another Chinese sling that is totally illegible and with no clear information. The instructions should be written in the language appropriate to the sling's final destination at the end of the supply chain i.e. the recognized language of the end users location. This must not be used as stated above in Fig 2.

3.3 One trip textile slings displaying Conformity Marking

There is no harmonized standard for one trip textile slings, and therefore no presumption of conformity to either the EC Machinery Directive (MD), The UK's Supply of Machinery (Safety) Directive (SOM(S)R) etc.

However, one trip textile slings shall be conformity marked if required by the national legislation and independently placed on the market. The manufacturer must therefore carry out the required risk assessments and safety testing in accordance with ISO 12100. The manufacturer must be able to show how their product meets the Essential Health and Safety Requirements (ESHR's) of applicable national legislation.

If unused, newly supplied slings are to be used for the first time more than 12 months after the date stated on the Declaration of Conformity (DoC), then they must also be issued with a report of thorough examination before they are put into service. Users that are unsure as to the age of any lifting equipment being put into service, must contact the manufacturer or their agent.

Caution: In certain cases, the use of a conformity mark may be misleading. Some one-trip slings may be conformity marked incorrectly by claiming conformity to the harmonized standards EN 1492-1 or EN 1492-2. However, they may only have a Factor of Safety of 5 or less. This is incorrect and slings such as this are not to be used.

NOTE: For further information please refer to LEEA-064 Guide to conformity marking of lifting equipment for which there is no harmonised standard version

4.0 Planning of Lifting Operations using One Trip Textile Slings

All lifting operations must be planned in advance. To do so, the Competent Person must complete a risk assessment to identify any hazards which could otherwise affect the safety of the lifting operation. The best way to determine if the sling in question is a one trip textile sling or a general-purpose sling is by reading the label if it is safe and possible to do so (See section 3.2).

The risk assessment, together with the instructions for use, should enable the Competent Person to produce a safe system of work. This must include pre-use checks of the one trip textile slings to ensure they are in good condition.

When users encounter the following issues with one trip slings, they are advised that it is best practice to replace the sling with a suitable replacement, where reasonably practical to do so (Refer to section 3.1.1 where it is not):

- The one trip textile sling label or instructions for use are illegible or missing;
- The one trip textile sling is damaged;
- The one trip textile sling is trapped under the load;
- The one trip textile sling has been pre-slung around an unsuitable load or pre-slung in such a way that has been identified which could create a hazardous condition.
- The one trip textile sling does not have adequate paperwork, i.e. manufacturers certificate and instructions for safe use in the language relevant to where it is being used
- The one trip textile sling does not have markings in the recognised language of the end user's location
- The one trip textile sling does not have markings that identify any limitations of use, i.e. working load limit etc.

Once the load arrives at its final destination, the one trip textile sling must be removed from the load and be taken out of service to eliminate the risk of the sling being incorrectly re-used. Where this is not possible the one trip textile sling must be cut in a manner to make the sling unusable.

The planning of lifting operations is covered by the LEEA COPSULE section 1.8

5.0 Employer's obligations

In the majority of countries around the world, the duty of every employer is to provide such information, instruction, training, and supervision as is necessary to ensure, so far as is reasonably practicable, the health and safety of his employees. In order to provide adequate information for the correct use of the equipment the duty holder should always refer to the manufacturer's instructions for use, they may also want to compliment this by referring to approved codes of practice.

It is the duty of an employer to ensure that any work equipment that's provided for use in their location is accompanied with adequate instructions. These instructions must be written in a language or languages relevant to where the sling will be used. They must be clear on the conditions in which and the methods by which the work equipment may be used.

The employer must check that the equipment meets with any Essential Health and Safety Requirements for their country of use. They fulfil this requirement by accepting the appropriate conformity declarations or certificates and conformity marking on the product if required.

Employers must also ensure that they receive specific instructions from the manufacturer and implement them without prejudice.

The duty holder shall only put one-trip textile slings into service if the intended use does not exceed the utilization specified by the manufacturer. Therefore, it is the manufacturer's responsibility to risk assess their product, taking into account the worst-case loading conditions, mode of use, intended journey and any other hazards that may arise which could otherwise affect the safety of the lifting operation. The manufacturer must list these limitations within their instructions for use and the duty holder must select slings based on this information.

Note:

The duty holder is responsible for the one trip textile slings and must ensure that they are used within the specified limitations as laid down by the manufacturer.

The employer is also required to adequately maintain and inspect all work equipment so as to prevent the occurrence of defects that will affect the safety.

One trip textile slings must not be repaired. Any damage shall result in the immediate withdrawal and disposal of the sling. However, they are to be checked before every lifting operation over the specified journey of the goods.

The employer is to check the condition of all lifting equipment and accessories so far as reasonably practicable to do so and consider the use to which they are to be put. This applies to all lifting equipment and accessories including general purpose and one trip textile slings, intermediate bulk containers (IBCS), and also rope, webbing or chains used in pre-slung loads.

On completion of the specified journey, one trip textile slings must be taken out of service and ideally destroyed.

6.0 Summary

The user must be able to identify one trip textile slings and know the differences compared to general purpose textile slings for the location of use (physical size, factor of safety, colours, etc.)

The correct documents must be provided prior to the one trip textile slings being put into use and the slings should be correctly marked. (Declarations or Certificates of Conformity, Manufacturers Certificates, Conformity Marks, Instructions for Use, language of labels, etc.)

One trip textile slings must be used correctly – They must only be used to lift and transport a load in accordance with the manufacturer's instructions and limitations for use. They must not be reused for other loads.

A lift plan must be in place using the information supplied by the manufacturer of the one trip textile slings. Further guidance can be found in LEEA COPSULE Section 1.8

One trip textile slings are to be inspected prior to each lift. If this is not possible refer to section 3.1.1 of this guidance.

The employer or duty holder, must be aware of their obligations with regards to one trip textile slings i.e. the supply of equipment and instructions for use, training for users, etc.

Once the load arrives at its final location, to avoid further use of one trip textile slings, they must be removed from the load and taken out of service. For pre slung loads, where this is not possible, the one trip textile sling must be cut in a manner to make the sling unusable.

Where one trip textile slings have been removed but are intact, they must never be reused and should ideally be destroyed, taking account of current environmental requirements.

7.0 References

SOM(S)R	Supply of Machinery (Safety) Regulations
2006/42/EC	EU Machinery Directive (MD)
EN ISO 12100	Safety of machinery. General principles for design. Risk assessment and risk reduction
EN 1492-1	Textile Slings- Safety- Flat woven webbing slings made of manmade fibres for general purpose use
EN 1492-2	Textile lings- Safety- Roundslings made of manmade fibres for general purpose use
AS 1353.1	Flat synthetic-webbing slings - Product specification (Australia)
ASME B30.9	Slings (USA)
LEEA COPSULE	Code Of Practice for the Safe Use of Lifting Equipment
LEEA 064	Guide to conformity marking of lifting equipment for which there is no harmonised standard