#### Information Notice to Users



#### Manufacturer or authorized representative:

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This information leaflet contains important information which must be read and understood before the product is used. This document must be provided to the customer by the retailer in the respective country's language and must be kept with the equipment while it is in use. Low Stretch Kernmantle ropes, are strong, low stretch ropes intended for use in rope access, rescue and in speleology. The ropes have low extension during normal working procedure but have the capacity to withstand forces generated by a fall.

These ropes conform to the British Standard BS EN 1891: 1998 'Personal Protective Equipment for the Prevention of Falls from a Height – Low stretch kernmantle ropes'. This standard specifies performance criteria for rope to be used in combination with ascending, descending and safety devices. This system is for work positioning in rope access; lowering or raising casualties in rescue and as a means of ascent, descent and horizontal motion in speleology. Ropes complying with BS EN 1891:1998 shall not be used for free climbing. Ropes used for protection during any free climbing activity in rope access, rescue or speleology; different European Standards should be taken into account. For example, EN 892 Dynamic Mountaineering Ropes. The use of the equipment for protection from falls requires training and instruction in the appropriate and safe method of use for such equipment. All components used with the rope should be CE marked and appropriate for use with the diameter of Static Rope to be used. A competent person should inspect the rope, the anchorage, the fixings and any other components. The competent person should also approve the parts and rigging of the rope before use. As the user moves, the rope should be kept taut, away from any abrasive or sharp edges, hot surfaces or chemicals.

#### **INSTRUCTIONS FOR USE**

Important Notes and Warnings

- It is essential that these instructions are read and followed
- These products should only be used by trained and/or otherwise competent persons or the user should be under the direct supervision of such a person.
- Before and during use, consideration should be given as to how any rescue could be safely and efficiently carried out.
- Running the rope over sharp edges whilst under tension may cause serious loss of strength.
- The manufacturer cannot be held liable if the equipment has been abused or used incorrectly.
- All risks and responsibilities are borne by the user always.
- Users must be aware that poor physical and/or mental health can jeopardise safety under normal conditions and in emergencies.
- If the rope has been used to arrest a fall it shall be retired from use immediately.
- If in doubt of a ropes condition, replace it immediately.

#### **Anchoring**

The system that incorporates the Rope should include a reliable anchorage point, above the user, and any slack of the low stretch kernmantle rope between the user and the reliable anchorage point should be avoided.

#### Terminations

The recommended termination for polyamide ropes is a loop formed using a figure-of-eight knot. The manufacturer can supply the rope with a machine stitched loop or with spliced eyes in the end. The strength of these two types of termination are documented in the 'Physical Properties' table.

#### **Environment**

Static rope is intended for use in the human environment where the working temperatures range from minus 10 Centigrade to 40 Centigrade. Working outside these temperatures and even with them brings certain risks. Wet rope can freeze and become stiff. Heat can damage the fibers, externally fibers will be melted or welded together and visual inspection will reveal the damage. Internally generated heat can cause the fibers to fuse or wear. A sign is a dusty interior or reduced core yarn bulk. This is not easy to see and would only be caused by incorrect use of the rope.

#### Cleaning

Contamination can damage Core Fibers and any contamination should be avoided. Dilute reagents or dirt and effluent encountered in the human environment if contacting the rope should be washed out by repeated immersion in clean water. If necessary, the rope can be disinfected using a neutral proprietary textile disinfectant applied by using a lukewarm solution with agitation followed by rinsing in clean water and air drying in a naturally warm environment. Do not dry at a temperature exceeding 70°C.

### **Storage and Transport**

Ropes should be stored in a relaxed state, loosely coiled. Undo any knots and remove hardware. Dry the rope or store it in free air circulation at room temperature. This static rope is not bio degradable and will not rot. If stored in a dirty condition it can take on a smell, it is best to wash it first. Sunlight can degrade Nylon over time, and although only the cover is exposed and the core yarns are protected, long term exposure to strong sunlight should be avoided and the rope stored under shelter. Any change in the outside fibers due to the effect of sunlight will appear as wear when visually inspected. During transportation, the static ropes should be packed in sealed bags to prevent contamination, protected from mechanical damage, extremes of temperature and other factors documented in this leaflet known to adversely affect the rope's condition.

# **CE MARKINGS**

This Rope is CE marked. EC Type-examination for Directive 89/686/EEC by: Notified Body No. 0120 SGS United Kingdom Ltd, Unit 202b, Worle Parkway, Weston-super-Mare, BS22 6WA, UK.

#### Identity Tape

The rope is marked by with an internal marker tape that shows the rope type (A), the manufacturer, the year of manufacture and the material type being Polyamide or Polyester (dependent upon the rope used).

#### ID Label

The ID Label on the rope documents the ropes information: Rope classification, either A; the diameter of the rope in mm; the standard the rope has been accredited to being BS EN 1891; the name of the manufacturer; the CE mark; The number of the Notified Body; the Batch Code for traceability. If the rope has been cut from a longer length, then it should be marked with ID labels.

### **Rope Care**

A brand new unused rope conforms to EN 1891; the European standard for 'Personal protective equipment for the prevention of falls from a height – Low stretch kernmantle ropes'. The rope has been tested to conform to these requirements but once in use, it is the user's liability, to ensure the ongoing integrity of the rope and to decide the correct time for obsolescence. Ropes made from any material are susceptible to wear and tear and can be weakened to some extent by various agencies such as chemicals, heat and light. Please be aware that no matter what agency has weakened the rope, the effect will be more serious on the small sizes than on the larger sizes of rope.

The following care notes must be read and understood so that the user has an appreciation for what can damage the integrity of rope and what to inspect the rope for.

### **External Wear & Repeated Loading**

Over-time the rope will become worn from load holding, rubbing over abrasive surfaces or worn on the terminating hardware. Protective sleeves should be used if there is a possibility of the rope contacting sharp edges or surfaces likely to corrupt the cover fibers. Typically, the higher the load the more wear will occur to the point of fixing and the result will be seen as damage to the cover fibers. This wear will appear as a matt finish to the area where fibers become broken. This is acceptable wear and will not initially diminish the rope's safe holding capacity. As wear increases the yarns may become broken and eventually allow the core rope to show. Before wear reaches this stage the integrity of the rope is compromised and it should be replaced. This visual inspection is a reliable procedure for ropes wearing in a normal safe load holding situation. Any mechanical damage to the rope, crushing, cutting, burning, melting or pinching that has caused trauma to the construction may have compromised the integrity of the rope. In this case the rope should be replaced. It should be noted that 'A' ropes are able to take more wear without damaging their safety potential than 'B' ropes.

#### **Heat & Chemicals**

Heat may, in extreme cases, cause fusing. Any signs of this should merit rejection but a rope may be damaged by heat without any such obvious warning. The best safeguard is proper care in use and storage. A rope should never be dried in front of a fire or stored near a stove or other source of heat. Acidic and alkali contamination should be avoided as it will over time reduce the strength of the fibers possibly leading to early discarding of the safety rope. Nylon ropes will lose significant strength if subject to contamination by acids. If it is believed that the rope has been subject to contamination by any acid, it must be rendered unusable and disposed of immediately.

## Inspection and Obsolescence

The whole length of the rope should be checked before and after use by an experienced person to ensure continued serviceability. Use visual and tactile inspection to identify cuts, tears, abrasion damage and powdering due to ageing, contact with heat, acids, alkalis and other corrosives. If the rope has been subjected to a fall, contamination, damage or abrasion and there is any doubt about the integrity of the rope it should be taken out of use. A record card should be kept for each rope. The card should show the details of the rope, its identification, model, serial number, date of first use, date of purchase, year of manufacture, frequency of use, history of periodic examinations, who conducted examination, due date for periodic examination, and applications for which it is suitable. The name and contact details. The rope should be the property of only one user and the record card shall be maintained by this use to ensure they are aware of the use of the rope. The record card should also be used as a log to record the user's name, the date used and application, the conditions encountered in use and any relevant comments about the condition of the rope. Knowing your rope is an essential to ensure safe working. Only use a rope that is either new or has a known working life. A rope can look good but have compromised properties. Discard unknown ropes as unsuitable for safe working static rope. The rope has a maximum recommended shelf life of 10 years if stored correctly. It is impossible to quantify a maximum recommended life in use as the damage a rope is subjected to will depend on the manner and frequency of use.

## **Important Note**

Static Rope is intended for use by competent persons trained in the safe use of safety rope, components and technique. No one should be directed or allowed to work at a height without adequate protection from falls and instruction in the use and deployment of static rope and its rigging and have a competent person oversee the rigging before use.

#### Warning

Failing to follow these guidelines for the correct use and care of the static rope may give rise to a situation that could endanger the user's life. The manufacturer cannot be liable for the abuse or misuse of safety equipment. All risk is the responsibility of the user.

# **Physical Properties**

Parameter	STEIN 24-Strand	STEIN 16-Strand
Cordage Type	RT-24-D	RT-16-K
Cordage Style	Double Braid	Kernmantle
Nominal Size	11.7 mm	12.4 mm
Over braid	Polyester	Polyester
Over braid Style	24 plait	16 plait
Core	Nylon 6	Hi El- Polyester
Classification Applied	EN1891:1998 Type A	EN1891:1998 Type A
Mass	92.9 g/m	120.8 g/m
Static Strength (Un-terminated) *	22 kN (Minimum)	22 kN (Minimum)
Static Strength (Fig 8 Knot) *	15 kN (Minimum)	15 kN (Minimum)
Static Strength (Sewn Eye) *	15 kN (Minimum)	15 kN (Minimum)
Static Strength (Spliced Eye) *	15 kN (Minimum)	15 kN (Minimum)
Dynamic Performance	Sustained > 7 Drops	Sustained > 7 Drops

• These are the minimum requirements the product must reach as stated in BS EN1891:1998 Standard

The information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty. This also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to check its validity and to test products as to their suitability for the intended purposes. The application and use of our products by you on the advice given are beyond our control and therefore your responsibility. Our products are sold in accordance with our General Conditions of Sale. We reserve the right to change technical details without notice.

Further information is available by visiting our websites www.steinworldwide.com or www.fletcherstewart.com.

Alternatively, you can contact us via email info@fletcherstewart.com