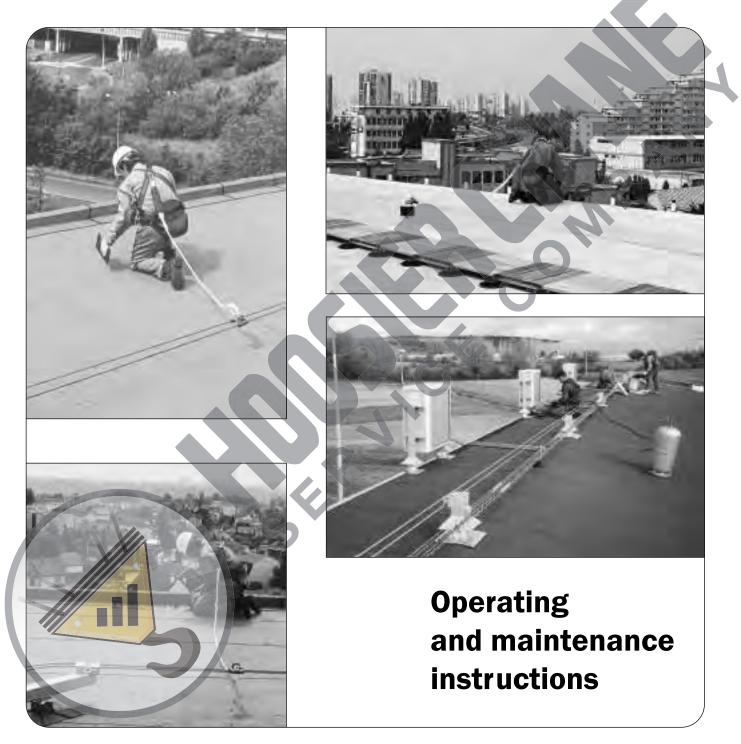


permanent horizontal lifeline system







Travsafe[®]

permanent horizontal lifeline system

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In order to ensure the continuous improvement of its products, Tractel Ltd. reserves the right to make any modification deemed-necessary to the equipment described in this manual.

The companies in the Tractel Group and their approved distributors will be pleased to provide you with literature on the range of other Tractel products: lifting and pulling equipment, site and building access equipment, fall protection products, electronic load indicators, accessories such as pulleys, hooks, slings, anchoring equipment, etc.

The Tractel network can provide you with an after sales and regular maintenance service.



🕂 GENERAL WARNING 🖄

- Before using the Travsafe® system, it is essential that users read this manual and comply with its instructions, in order to ensure safe operation. This manual must be kept and made available to all users. Additional copies can be supplied by Tractel on request.
- 2) The installer must supply a site-specific user manual. This manual will show the layout, the parts, the mounting methods, the structure, the loads and the rules of use. This design will take into account all applicable standards and regulations and be approved by an engineer licensed to work in the same state or province as the project.
- 3) Tractel accepts no responsibility for design and installation work not carried out by its own personnel or under its direct control, in particular for installation configurations not described in this document.
- 4) Anyone using or operating the Travsafe[®] must check that the personal protection equipment (PPE) to be used with the system is in good condition, compatible with this device and complies with current regulations.
- 5) Anyone whose activities or responsibilities involve operating, or require the use of, the Travsafe[®] system must be given the necessary instructions for safe use of the device with a risk-free demonstration.
- 6) Never use a system or fall arrest system, which does not appear in good working order. Conduct a visual check before each use (see section 16). If a fault is found, contact the installer or Tractel so that the device can be repaired before use.
- 7) The Travsafe[®] system must only be used for protection of persons against falling.
- 8) The Travsafe[®] system must never be used to protect a number of people greater than that indicated on the information plate which is fitted at safe access points to the system.
- 9) When any point of the Travsafe® system has been subject to stress as a result of a person falling, the whole system must be inspected by a competent person in accordance with the instructions in this manual before it is put back into use.
- 10) The person responsible for its use, the owner or manager of the building, must set out a rescue procedure for users who fall at any point on the device site-specific to the installation.
- 11) Inspect the Travsafe[®] system periodically in accordance with applicable industrial and workplace safety laws and regulations, but in no event less often than once every twelve months.
- 12) Do not use system components other than those supplied or recommended by Tractel. Do not use Travsafe® system components, which have been modified or altered in any way.

Each installation must be performed pursuant to a site-specific design. This design shall be approved by a local engineer and must be in compliance with federal, state, local, provincial and all applicable industry and workplace safety laws and regulations.

IMPORTANT

Any use of this equipment must comply in all respects with all applicable federal, state, local, provincial and industry, workplace safety and other laws and regulations. Do not allow use under any other conditions.

TRACTEL MAKES NO WARRANTY IN CONNECTION WITH THIS EQUIPMENT, OTHER THAN THOSE EXPRESSLY STATED HEREIN. ALL OTHER WARRANTEES, EXPRESS OR IMPLIED, ARE HEREBY DISCLAIMED.



IN AN ENVIRONMENT WHERE A FALL HAZARD EXISTS, SAFETY IS A MATTER OF LIFE OR DEATH FOR WORKERS AND BYSTANDERS. YOU SHARE SAFETY RESPONSIBILITY IN CONNECTION WITH THE OPERATION AND USE OF THIS EQUIPMENT, AND ARE RESPONSIBLE TO ENSURE ITS OPERATION AND MAINTENANCE IN ACCORDANCE WITH THIS MANUAL.

1. YOUR DUTY TO UNDERSTAND AND COMPLY

- 1.1 It is the worker's and their employer's responsibility to strictly conform to the following warnings.
- 1.2 Under whatever conditions, should you hand over any components of a fall arrest or travel restraint system to a party operating out of your control, you must provide a clean copy of this guide and draw the other party's attention that strictly following all the instructions therein is a matter of life or death.
- 1.3 Before using any fall arrest or travel restraint system, the worker and employer must become aware of all the requirements of federal, state, local and provincial safety regulations applicable to the use of the fall arrest or travel restraint system and any component thereof. Components of a fall arrest or travel restraint system must be compatible and approved in writing by Tractel Ltd.
- 1.4 Never use a fall arrest or travel restraint system or any components for any applications other than specified by the instructions supplied by Tractel Ltd. Do not alter or adapt the equipment in any way.
- 1.5 Any harness, shock-absorbing lanyard, rope grab, lifeline or hardware, which has been subjected to fall-arresting service, must be removed immediately from service. It must be destroyed and replaced. When the Travsafe[®] system is subjected to fall-arresting service, it must be inspected by Tractel or by Tractel's authorized installer.
- 1.6 The combination of the user's weight, clothing and tools must not exceed 310 lbs. (140 kg). If this weight is exceeded the performance and safety of the system cannot be guaranteed.
- 1.7 This manual is intended to meet the "Manufacturer's Instructions" as required by CSA Z259.2.1, ANSI Z359.1 and ANSI A10.14 and should be used as part of an employee training program as required by OSHA.

2. YOUR DUTY TO INSPECT AND MAINTAIN

- 2.1 Keep this guide available at all times for easy reference whenever required. Extra copies are available from Tractel Ltd.
- 2.2 Carefully take notice of all labels affixed to all components of the fall arrest or travel restraint system. Never use any equipment if the label normally fixed on fall arrest or travel restraint components is obscured or missing. Tractel Ltd. will supply extra labels for Tractel Ltd. products at customer's request.
- 2.3 Every time a fall arrest or travel restraint system is used, check prior to proceeding that the components of the system are complete, compatible and in good working condition.
 - 4 Careful and regular inspection of the fall arrest or travel restraint system's installation is part of the safety requirements. If you have any questions, contact Tractel Ltd.

YOUR DUTY TO TRAIN AND CONTROL PEOPLE

- Health condition of the operator must be compatible with a possible fall arrest operation of the system used. A worker must not be assigned to a job when a fall arrest or travel restraint system is required, if that worker is not: a) mentally and physically fit for the purpose, especially at heights or in confined spaces;
- b) free from the influence of alcohol or drugs;
- c) competent for the job to be performed;
- d) familiar with the equipment and all applicable safety rules, requirements or regulations;
- e) trained for working under the above requirements. Training sessions must be performed under safe conditions.
- 3.2 Except for the operations described in this manual, the maintenance of Tractel Ltd. equipment, as well as repair, must be exclusively done by authorized (written approval) Tractel Ltd. dealers or by Tractel Ltd.

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- 3.3 Never let a fall arrest or travel restraint system be managed or used by anyone other than authorized and assigned persons to the job. While out of operation, keep systems installed or stored out of reach of unauthorized persons.
- 3.4 Training workers includes setting up rescue procedures should a fall occur during a job prior to putting the systems into operation. A qualified person or technical consultant according to work conditions must set up such procedures.
- 3.5 Every job must be placed under the control of a person having the required qualification and authority for checking that all the instructions prescribed by this manual are regularly and efficiently carried out.

4. YOUR DUTY BEYOND THE FALL ARREST OR TRAVEL RESTRAINT SYSTEM

- 4.1 Components of the installation other than the Travsafe® must meet the requirements of the applicable regulations. Lifeline and connectors must be compatible with the Travsafe® as defined by Tractel Ltd. in these instructions.
- 4.2 All requirements in strengths and resistance must be obtained with the necessary safety coefficients.
- 4.3 Prior to commencing the job, all the calculations, the design and subsequent work necessary to the above requirements must be made by a qualified person on the basis of technical information regarding the site.
- 4.4 The use of the Travsafe[®] is not suitable when the user is positioned on an unstable surface, such as fine grain material or particulate.

5. YOUR DUTY TO AVOID TAKING CHANCES

- 5.1 For any job to be performed, consider and control the specific risks related to the nature of the job and to the specifications of the site. Inspect the site before each use.
- 5.2 After inspection, should you decide that a fall arrest or travel restraint system or any component is no longer to be used, take precautions in disposing of it so that it cannot be reused.
- 5.3 During a rescue, the line or lines should be attached only to the single-mounted back D-ring and/or to both shoulder-mounted D-ring of the harness.

This booklet is neither a regulations compliance guide nor a general training guide for fall arrest or travel restraint systems. You must refer to instructions delivered by manufacturers of the pieces of equipment included in your system. Whenever calculations and specific installations are required, the worker should be professionally trained to that end and should secure relevant information prior to commencing such work.

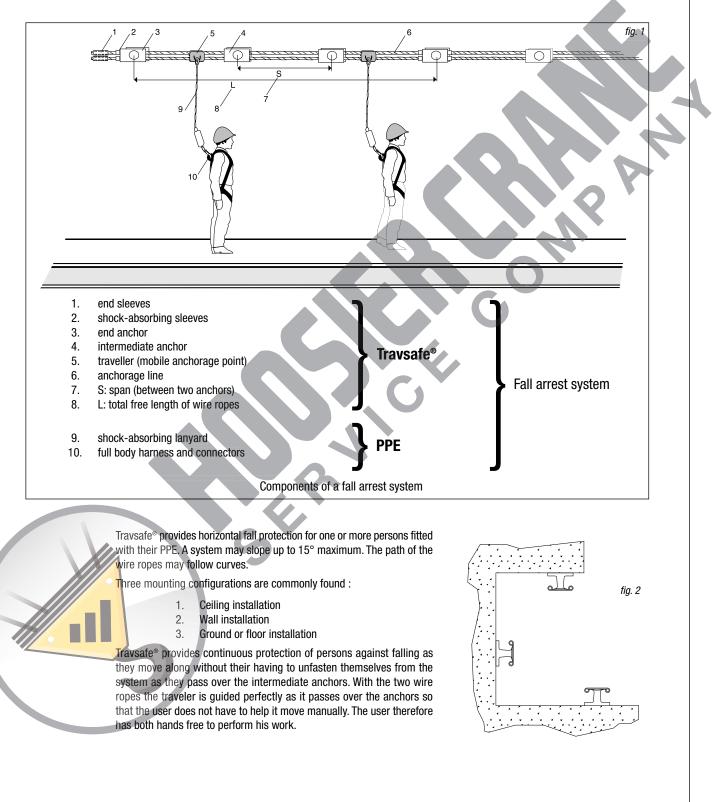
IMPORTANT

The installation of a horizontal lifeline system indicates that you are accessing part of a building or installation which presents a potential risk of falling from a height. We would therefore draw your attention to the fact that your movements must be performed slowly and smoothly. The route you are going to take should, as far as possible, be free from all obstacles. When you have finished, you should take care to leave the area clear of obstacles or obstructions of any sort for the next user.

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6. APPLICATION

6.1 Travsafe[®] is comprised of two sub-assemblies: the Travsafe[®] horizontal lifeline system hardware and the Personal Protection Equipment (PPE), as shown in *Figure 1*.



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7. REMINDER OF STANDARDS

7.1 The Travsafe® system meets or exceeds general OSHA and CSA standards as well as any other regulations. Consult governing federal, state, local or provincial regulations as revision may occur.

⚠ WARNING ⚠

The use of a lifeline device indicates that you are accessing part of a building or installation, which presents a potential risk of falling from a height. We would therefore draw your attention to the fact that your movements must be performed slowly and smoothly. The route you are going to take should, as far as possible, be free from all obstacles. When you have finished, you should take care to leave the area clear of obstacles or obstructions of any sort for the next user.

8. INSTALLATION

⚠ WARNING ⚠

The area selected to install the traveler on the wire ropes must not present a fall hazard. If this is not the case, the user must immediately inform the person responsible for safety. Personnel are strictly forbidden to attach themselves or to remove themselves from the Travsafe[®] system outside the area chosen to install the traveler.

8.1. Standard traveler

The traveler is the mobile anchorage point. It consists of a body on which two jaws are articulated. The jaws automatically grip the wire ropes in the event of a fall. A ring, which is an integral part of the traveler body, is used for attaching the shock-absorbing lanyard via a connector.

- The standard traveler slides onto the wire ropes at one of the end anchors.
- Hold the jaws of the traveler in front of the sleeves at the ends of the wire ropes.
- Slide the traveler over the sleeves and then over the end anchor.
- The end stop allows the traveler to pass over it when it is being attached to the line but prevents it from becoming unfastened accidentally. Once the traveler is engaged on the wire ropes the end stop automatically returns to the locked position by the operation of a spring.

⚠ WARNING ⚠

The operator must check that both wire ropes are correctly positioned in the jaws of the traveler.









Removing the traveler

Remove the traveler from the wire ropes at one of the end anchors. Open the end stop manually and move the traveler over the end anchor while holding the end stop open. Remove the traveler completely from the wire ropes. The operator must ensure that they are no longer in danger of falling before removing the traveler from the wire ropes.





8.2. Removable traveler

- The removable traveler is attached directly onto the wire ropes.
- The removable traveler consists of four parts : the body (1), the jaws (2), the plate (3) and the clip (4).

A WARNING A

The operator must check that both wire ropes must be positioned in the jaws of the traveller before the clip is locked.

Inserting the removable traveller

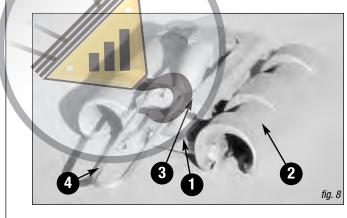
Detach the shock-absorbing lanyard, release the clip; lift the plate and open the jaws. Place the wire ropes in the jaws; close the jaws; lower the plate; lock the clip and connect the shock-absorbing lanyard.

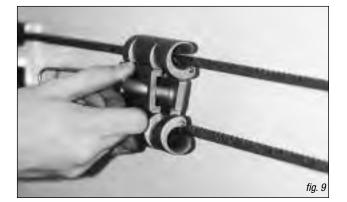
Removing the removable traveller

To remove the traveller from the wire ropes in the selected area, the user must detach the shock-absorbing lanyard from the traveller, then release the clip, lift the plate, open the jaws and remove the wire ropes.

8.3. Personal protection equipment (PPE)

- Use PPE in accordance with local, state, federal or provincial legislation.
- Take the harness and put it on according to the instructions for use and maintenance supplied with the harness.
- Connect the various personal protection components in accordance with their use.
- Connect the ends of the assembled components to the harness and the traveller. Having completed these operations the user can move along the path formed by the Travsafe® wire ropes in total safety.







9. LIMITATION OF THE EQIPMENT

9.1 One worker per traveller.

9.2 Capacity

The traveller has a 310 lbs. (140 kg) rated working capacity. User's weight, clothing and tools may not exceed 310 lbs. (140 kg).

10. CONNECTION

10.1 A connection fault could lead to a risk of becoming unfastened in the event of a fall. The user must always check that the traveller is correctly installed on both wire ropes and that the additional items of personal protection equipment are correctly attached to the traveller, to the harness and to one another, before using the Travsafe® system. The user must pay particular attention to the various components such as the snap hooks, shock-absorbing lanyard and fall arrester.

11. OPERATION

11.1 The traveller is designed to pass over the intermediate anchors without any need for manual assistance from the user.

⚠ WARNING ⚠

The traveller must move freely over the anchors. Never apply force to the connecting device or traveller. Spraying the wire rope, the traveller and the anchors with oil such as KERNITE-K-AHT will help the traveller to run smoothly.

12. STORAGE

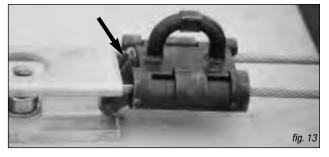
12.1 The traveller should be stored in a clean, dry location. The additional personal protection equipment should be stored according to the instructions in the manuals supplied with the equipment.

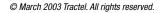
13. SAFETY DEVICES

13.1 End stop

The end anchors are fitted with an end stop, which prevents the traveller becoming accidentally detached from the wire ropes. The user must open the end stop manually to remove the traveller from the wire ropes. If the user lets go of the end stop, it automatically returns to the locked position by the action of its spring.







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Removable traveller 13.2

The removable traveller is fitted with an opening device which is designed in such a way that two deliberate manual operations are required one after the other for it to be attached to or removed from the wire ropes.

- open the snap hook and remove it from the ring
- ٠ release the clip then lift the plate.

13.3 Shock-absorbing sleeves used in limiting the forces in the event of a fall

The forces are limited by shock-absorbing sleeves placed at either end of the wire ropes and at regular intervals along the wire ropes. At these regular intervals sleeves are placed on both sides of the intermediate anchor.





In the event of a fall, the shock-absorbing sleeves slide along the wire ropes. The distance the shock-absorbing sleeves located at either end of the wire ropes can slide is limited by the end sleeves. The distance between these sleeves on assembly is 1 in. (25 mm). After a fall has been stopped this distance is less than 0.8 in. (20 mm). Therefore the position of the shock-absorbing sleeves also gives a visual indication of whether the Travsafe® has stopped a fall. If it has stopped a fall a competent person must inspect the system.

14. LABELLING AND PLATES

Read all labels and plates on the Travsafe® system. They must always be intact and easy to read. 14.1



15. MAINTENANCE

15.1 A Travsafe® traveller requires little maintenance other than periodic cleaning and inspection (see below section 16). However, for correct operation it is recommended that it is always kept in good condition, clean with no plaster, concrete, cement or paint splashes, etc. The maintenance of the traveller is limited to keeping it clean and lightly oiled (spraying). The wire ropes should be lubricated at least once every six months using an aerosol spray lubricant such as KERNITE-K-AHT (silicon based oil).

16. INSPECTION BEFORE USE

- 16.1 All equipment must be inspected visually before each use and periodically by a qualified person. If damage is found as described below (see 16.3 to 16.6), remove the item from service immediately and replace it. If any damage or questionable conditions are apparent that are not described below, remove the item from service immediately and call Tractel Ltd. for advice. The Travsafe® system must be inspected as required by applicable industry and workplace safety regulations, but not less frequently than once every 12 months.
- 16.2 Failure to remove equipment that has been damaged or is in questionable condition could lead to serious or fatal injury. A detailed record of inspection should be maintained. See page 15 for suggested record sheet.



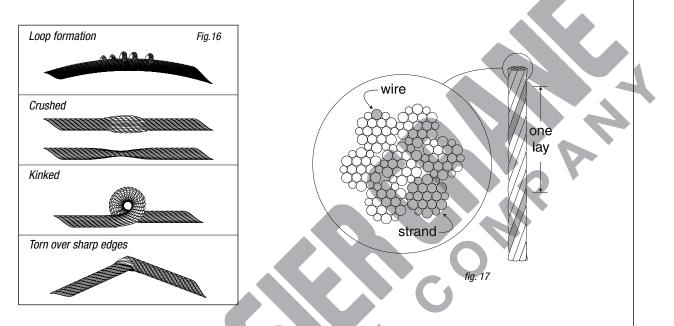
16.3 Shock absorbing sleeve

Check the position of the shock-absorbing sleeves, a distance of 1 in. (25 mm) between sleeves should be present, to ensure that the fall arrest system has not been subject to a significant force (*figure 15*). Shock-absorbing sleeves at intermediate anchors (and corners) should be tight against the anchor (*figure 13*).



16.4 Wire rope

Inspect the wire rope on its entire length in order to detect damage such as loop formation, or wire rope that is crushed, kinked, torn over sharp edges, broken or cut wires etc. (*figure 16*). Note the location and concentration of broken wires. Replace the wire rope if more than 6 wires are broken in one lay, or more than 3 wires are broken in one strand in one lay (*figure 17*)



16.5 End stop

Check that the end stop is operating correctly and that it returns to the locked position by the action of its return spring.

16.6 Traveller, hardware and supports

Carefully examine all components for the following defects: a) damaged, distorted or broken items; b) sharp edges, burrs, cracks, corrosion or worn parts; c) loose connectors

17. WARNING AGAINST HAZARDOUS OPERATIONS

17.1 If the Travsafe® system is used in accordance with the instructions in this manual and the site-specific user's manual it is totally safe. However it is helpful to warn the operator against incorrect operation and use as described below:

THE FOLLOWING IS PROHIBITED :

Installing a traveller or similar device or item other than that sold by Tractel on the wire ropes.

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Fallstop Division

- Modifying the installation to settings beyond any calculation or control.
- Hanging from the wire ropes other than as a result of an accidental fall.
- Testing the system by a deliberate fall.
- Pulling on the wire ropes of the Travsafe® system for whatever reason.
- Pulling on the traveller, either directly or using personal protection equipment, in an attempt to release it from an obstacle or to release it from the wire ropes other than an end anchor provided for that purpose (except for the removable traveller, for which the proper procedure must be followed).

/ Ltd.

18. OPERATING PROBLEMS

- 18.1 If the traveller is installed on one wire rope only, the operator must remove it completely and restart the operation until it is installed correctly.
 - If the traveller becomes stuck between two intermediate anchors, the user must move backwards in order to release it using a backwards pulling movement (the reverse of the preceding movement). This backward pulling force should be gentle and gradual. Under no circumstances should the operator pull it sharply.

19. STANDARDS AND REGULATIONS

19.1 It is essential to check and insure that all the items of a fall protection system are in accordance and compatible with all applicable industry and workplace safety laws and regulations.

20. MANDATORY INSPECTION

20.1 Any employer providing personal fall arrest equipment to their employees must ensure that the obligations under the occupational health and safety regulations are fulfilled and that the employees have been fully and properly trained in the safe operation of the equipment.

21. WARRANTY

- 21.1 Tractel Ltd. warrants the subject equipment for a period of one (1) year to be free of defects in material and workmanship. Tractel Ltd., or our authorized agent, will repair, adjust or replace defective parts during the warranty period commencing at the time the equipment is either declared operational by Tractel Ltd. authorized personnel and/or substantial completion of the project has been achieved. Tractel Ltd. obligation hereunder shall not include making any replacements, repairs or adjustments necessitated by mis-use, normal wear and tear, accidents, power malfunctions or fluctuations, unauthorized alterations, wind, rain, sleet, snow or ice or by failure to service and maintain the equipment, in accordance with the recommendations of the Operating Manual. On any warranty service call made by Tractel Ltd. or its authorized agents, where investigation reveals the problem was not a result of defective material or workmanship, the customer will be billed for all expenses, travel time, and work performed at Tractel Ltd. prevailing service rates.
- 21.2 This warranty to repair applies only to new equipment, which after shipment, has not been altered, changed, repaired or treated in any manner whatsoever unless such alteration, change, repair or treatment has been previously authorized in writing by Tractel Ltd. or has been performed by the authorized service representative of Tractel Ltd.
- 21.3 The life and fitness of wire rope systems depends on use, handling, operating circumstances and operating environment. These circumstances are beyond the control of Tractel; therefore, cable used in any engineered systems is not covered by this warranty.
 - 4 Additional equipment supplied to the purchaser at the time of installation is not covered by this warranty. This includes but is not limited to full body harnesses, lanyards, carabiners, self-retracting lifelines or other personal fall protection equipment. These items are covered under separate Tractel warranties.

This warranty to repair is the only warranty either express, implied or statutory upon which the said equipment is sold; the company's liability in connection with this transaction is expressly limited to the repair or replacement of defective parts, all other damages and warranties, statutory or otherwise being hereby expressly waived by the customer.

21.6 No representative of Tractel Ltd. has authority to change this warranty or this contract in any manner whatsoever and no attempt to repair or promise to repair or improve the equipment covered by this contract by any representative of Tractel Ltd. shall waive any consideration of the contract or change or extend this warranty in any manner whatsoever. Any agreement outside of or contradictory to the foregoing shall be void and of no effect.

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Fallstop Division

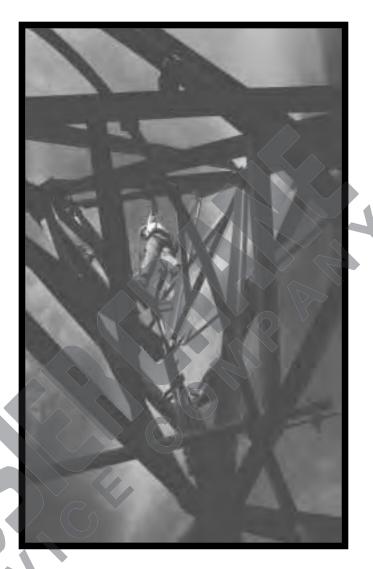
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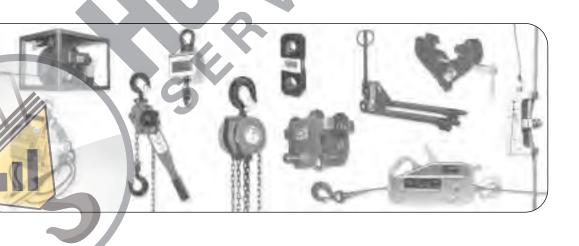
Installation location

Purchase date	Service entry date	User's name		
Inspection check list				
END SHOCK ABSORBING SLEEVES	DISTANCE O	F INCH RUSTED, WORN, OTHERWISE DAMAG	ED	P
TRAVELLER	CLEANLINE CLEANLINE OPERATION CORRODED,		ED	
Fasteners	STRIPPED T	HREADS, BENT, WORN, LOOSE, OTHER	RWISE DAMAGED	
WIRE ROPE	BROKEN WI	HED, KINKED OR OTHERWISE DAMAG RES (SEE <i>FIGURE 17</i>) IE IF MORE THAN <mark>6</mark> WIRES IN ONE LA IIRES IN ONE STRAND IN ONE LAY, AR	γ,	
End sleeves	Corroded,	RUSTED, WORN, OTHERWISE DAMAG	ED	
PLATES	DIRTY, ILLEO	GIBLE, OTHERWISE DAMAGED		
Comments				
AUTHORIZED SIGNATURE			DATE	
3				

Training Solutions

Tractel Training Solutions mission is to ensure that your employees will work safely and efficiently, our specialists offer training seminars in fall protection, material handling equipment as well as access and building maintenance systems.





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