

SpanSet®

01

Height Safety  
Lifting  
Load Control  
Safety Management



SpanSet Worldwide



SpanSet is here for you:

Switzerland, Australia, Austria, Brasil, China, France, Germany, Hungary, UK, Indonesia, Italy, Poland, Spain, Taiwan, USA

Table of contents

History of SpanSet	4	Industrial Climbing	41
		Rope Access	42
The Authority in Height Safety Solutions	4	Confined Space	44
		<b>01.3 Fall Arrest</b>	<b>46</b>
Hierarchy of Safety Measures	10	Definitions	48
		Anchors	50
Training	12	Connectors	51
		Harnesses	54
<b>01.1 Work Restraint</b>	<b>22</b>	Training	55
Definitions	24	Recommended Solutions	56
Anchors	26	Scaffold Solution	56
Connectors	27	Tradesman Solution	57
Harnesses	27		
Training	29	<b>01.4 Rescue and Evacuation</b>	<b>58</b>
Recommended Solutions	30	Definitions	60
Powered Access	30	Evacuation	62
Roofwork	31	1 <sup>st</sup> Response Rescue	63
		Emergency Response Teams	64
<b>01.2 Work Positioning</b>	<b>32</b>	Emergency Services	65
Definitions	34		
Anchors	36	<b>Other Services</b>	<b>66</b>
Connectors	37		
Harnesses	39		
Training	40		
Recommended Solutions	41		





# How the safety belt became a safety standard. The story of the SpanSet company.

**Fifty years ago the world was very different, cars had no seat belts. But the hour had come for a small Swedish ribbon weaving company.**

Today it is hard to imagine that a few decades ago, most cars were shipped without seat belts. In other respects, too, little attention was paid to accident prevention at that time, and so many collisions, from which today one would emerge unscathed, had fatal consequences.

In order to counter this, the Swedish car company Volvo approached the ribbon weaving companies AB Textilkonst and Klippan at the end of the 1950s, with instructions to develop a safety belt for its vehicles.

Volvo was already building very sturdy cars that withstood the harsh Swedish winters and other tests, but it wanted to continue to improve the safety of the occupants.

Together with Volvo engineers, Klippan developed the first car safety belt in the world, made of high-strength fabric ribbon. It was installed in models Amazon and 544 for the first time in 1959 and caused a lot of astonishment in the public, but also ensured an enduring image of Swedish inventions as both pioneering and durable.

**How we replaced ropes and chains**  
The car safety belt was a great success, and soon other manufacturers had also installed it. Thanks to the great demand, Erik Ehnimb, co-owner of Klippan, was able to found the SpanSet company in Malmö in 1966.

The ribbons produced by SpanSet were quickly and enthusiastically employed in many other areas, where up to that point chains and wire ropes had been used, as in the case of the transport of paper. The customers appreciated the enormous load-bearing capacity of the new lashing and lifting belts.

In 1967, Mr. Ehnimb founded SpanSet AG in Hombrechtikon in the Zurich highlands, and additional companies in Germany, Italy, France and England. Later, companies in Asia, America and Australia were added, thus forming a global distribution network.

SpanSet UK are based in a modern, purpose-built factory in Middlewich, Cheshire and has been in operation for over 40 years. The company's vast experience in webbing based products provided the perfect background to develop over 20 years ago the innovative range of height safety equipment. The range covers all applications from Fall Arrest and Work Positioning to Rope Access and the Gotcha Rescue Range.

SpanSet continue to live up to their international heritage of innovations in design with new developments in products and services. The new developments enable us to push beyond the basic European Standards for design in Height Safety equipment.



#### How our inventions became the norm ...

The SpanSet products with their load capacity have gained such a good reputation around the world that international safety standards have been orientated to it.

The development of standards for Height Safety equipment has been significantly influenced by SpanSet; for instance, in national working groups that determine what constitutes a standard and in which SpanSet is regularly included.

SpanSet were part of the team who drafted the standard BS8454:2006 for the delivery of Training and Education for Working at Height and Rescue and the first company to be audited to this standard by the BSI.

This is how something becomes the norm: by setting a standard. And doing so repeatedly for more than 40 years.

#### ... and our norm influenced new inventions

This also means that we are often called on during the development of a new product (after all, it will eventually be transported by our belts) and also increasingly offer support as a partner for safety training and consultation.

This is how SpanSet went from small ribbon weaving company to international forerunner when it comes to Height Safety, transportation and safety – through exceptional performance and recognition.

#### How we let one world first follow the next

In 1997, SpanSet launched the "Power" sling series as well as the new generation of roundslings with textile wire reinforcement in the protective jacket for maximum tear resistance – even back then capable of bearing up to 50 tonnes.

In 1992, the Horizontal Safety Line – the first temporary horizontal anchorage line to employ a webbing and ratchet system for pretension, and to give a predictable deflection during a fall.

The ABS pressure ratchet, another world first, appeared in 1995. This allows a gradual release of the tensioned ratchet, so that goods at risk of falling could be unloaded safely.

2001, The Gotcha range of rescue equipment. The first pre-assembled rescue kits offering remote attachment and recovery of a suspended worker. Followed by the WRAPPA, the first anchorage sling tested for attachment to a vertical tube on a scaffold structure.

In 2002, SpanSet launched the Tension Force Indicator (TFI) which is integrated in the tensioning ratchet and indicates the pre-tensioning force. Thus, the use

of lashing equipment became safer and more economical. The TFI is now incorporated into the Horizontal Safety Line above.

Also in 2002 SpanSet established the Modular Height Safety Training Courses. Moving training away from individually bespoke courses towards industry recognised standard qualifications. CAPCHA the overhead fall arrest system for curtain side vehicles and workshops was launched in 2004.

Working closely with clients in the offshore Oil and Gas industry SpanSet developed their first "collective measure" for work at height – a temporary decking system in 2004. This design has been developed and improved to become the first product in the Walkabout range of collective measures.

2005 the Proof Loader Kit was launched – the complete anchorage and testing system for workers to quickly establish and quantify their own anchor points in concrete or geological features. 2008, another first for SpanSet. The ATLAS 140 range – the first complete range of products developed specifically to meet the requirements of larger workers.

## SpanSet – a way to success that always results from being one step ahead!

We are quite proud of our achievements. After all, they have contributed to safer and easier working conditions around the world – and thus to fewer accidents and lower operating costs.

We were especially glad to hear the story of a policeman, who during a truck check replaced his official severity with a friendly smile after seeing that the cargo was secured with our products.

#### Meeting standards is good. Setting standards is better.

The SpanSet brand stands for something. Not only for meeting international safety standards, but for raising them again and again. For example, the new EU lashing standard would not exist without our lashing belts.

This is exactly what we stand for with our products, services and consultancy: for more security than is demanded today – namely, as much as is possible tomorrow.

That is our goal, that is our job and that is our passion. So that those who work with SpanSet can also trust in it in the future – just like the police.

## SpanSet – Certified Safety



How we make sure that  
our name will still be  
highly regarded tomorrow.





How SpanSet provide customers  
with working solutions from  
technical advice through to product  
supply and training



THE AUTHORITY IN HEIGHT  
SAFETY SOLUTIONS

Equipment Supply,  
Training and After Sales



THE AUTHORITY IN HEIGHT  
SAFETY SOLUTIONS

Our Quality Management:  
CE Marking, ISO 9001,  
Trade Industry Body Memberships

SpanSet is committed to the design and manufacture of products to meet our customers' needs. We attribute the success of our products to our good listening skills and our policy of continual research and development, covering all applications from basic Fall Arrest and Work Positioning to technical Rope Access and the Gotcha Rescue Range. By communicating with our customers from the procurement stage through to the training and implementation stages, SpanSet is able to ensure the right products and services are in place to satisfy our customers' demands. SpanSet's aim is to develop on-going partnerships with its customers to support existing products and to provide solutions to new challenges.

All SpanSet products have been developed to work as part of an overall safety solution, which includes products, installations, training, implementation, testing and servicing. By offering our customers an overall solution SpanSet is better able to meet the customers' needs and help them develop safer solutions for work at height.

This can be seen in our work at height kit and training packages, which are designed to give tradesmen a practical solution to their personal fall protection needs and enable them to comply with all the requirements of work at height regulations. It is also demonstrated in our CAPCHA vehicle height safety solutions where we are able to design, install, implement and maintain personal fall protection systems in curtain sided vehicles. Our contracts with the Ministry of Defence and Environment Agency demonstrates our ability to form partnerships with a large organization and to meet their continually evolving requirements for products, training and services.

The ISO System for the Registration of Firms of Assessed Capability - ISO 9001: 2000 - is intended to act as a completely independent and regulated audit of a firm's ability to operate an efficient and effective Quality System. This benefits the customer through the absolute assurance of product quality. It can also cut our customers' needs for supplier assessments and received goods inspection costs as well as improving business relationships with our customers. Our scope for registration includes the design, development and manufacture of fall arrest systems together with relevant training courses.

In addition to our commitment to ISO9001: 2000, SpanSet is also keen to prove compliance to any relevant Codes of Practice. Therefore after the publication of BS8454: 2006 (the code of practice for the delivery of education and training for work at height and rescue) SpanSet requested that the BSI audit our compliance to this standard. Our first audit was in February 2008 and BS8454: 2006 has now been included as part of our scope with ISO9001: 2000.

SpanSet has a track history of working with trade industry bodies and industry leaders to develop new ideas, equipment and methods of working safely at height. SpanSet is currently an active member of several trade industry bodies who influence workers in the use of personal fall protection equipment.

The Industrial Rope Access Trade Association is the international authority in the use of rope access techniques and SpanSet is a register member as a manufacturer and training organization.

The Work at Height Safety Association represents manufacturers, suppliers, installers and training companies involved in personal fall protection. SpanSet are a founding member of the organization.

The International Powered Access Federation offer guidance and training on the use of personal fall protection equipment in conjunction with powered access platforms, SpanSet are a member of the organization and drafted the training syllabus for harness users. SpanSet also provide training to IPAF instructors in this syllabus.

**LEEAA**  
Lifting equipment engineers association. the globally recognised trade association for all those involved in the design, manufacture, hire, repair, refurbishment, maintenance and use of lifting equipment. SpanSet lifting and rigging courses are delivered in accordance with LEEA codes of practice.

**Arqiva**  
Arqiva provides much of the infrastructure behind television, radio, satellite and wireless communications in the UK  
Customers include major broadcasters such as the BBC, ITV, BSkyB and the independent radio groups, major telecommunication providers including the UK's five mobile network operators, and the emergency services. Access to ARQIVA sites requires persons to be trained to an approved standard.  
SpanSet delivers approved courses for Tower climbing, rescue, roof top safety and RF safety.

**Achilles**  
Achilles works to identify, qualify, evaluate, and monitor suppliers on behalf of major organisations worldwide. Achilles works with more than 700 of the world's largest companies across a range of industry sectors. SpanSet have been audited as a supplier and training organisation by Achilles.







SpanSet Products –  
Fit for Purpose

SpanSet's philosophy in product design is to ensure that every product not only complies to the European Standards, but is fit for purpose and also meets the workers expectations. In many cases these two things can be very different, for example our TITAN range of lanyards for extreme environments and our ATLAS 140 range for larger workers. Both designs meet the appropriate standards, but have additional features which enable them to meet the workers more demanding expectations.

SpanSet harnesses have been designed with the worker in mind. Our design criteria, considers that a full body harness should be constructed from materials that conform to the shape of the worker with minimal restriction. - For Comfort. They should be easy to fit and adjust. For Security. In the event of a fall they should support the user in the right places without undue stretch or distortion as this is when the worker needs it most.

SpanSet Products are  
supplied with:

- Clear Instructions
- Serial Number
- Individual Certification and Inspection Record Card
- Pocket Inspection Guide

In addition to this all SpanSet Kits are supplied with aDirt- and UV-protective carrying bag

Why choose a SpanSet Harness

All SpanSet Harnesses offer:

- 1 High quality polyester webbing so that it is supple and conforms to the users shape
- 2 Highly corrosion resistant fittings, polished for ease of adjustment and fitting.
- 3 Additional reinforcement at high wear areas where required
- 4 Clear labeling showing the model, year of manufacture, standards tested to and individual serial number for traceability
- 5 Fitting instructions in pictorial form
- 6 Stitch patterns clearly visible for ease of inspection
- 7 Web tidies to secure loose ends
- SpanSet harnesses are hard wearing and durable in use – cost effective to purchase.



Why choose a SpanSet Lanyard

SpanSet lanyards have been designed with the application in mind. Our design criteria considers, that the lanyard should be of suitable configuration, adequate length for the task without compromising the workers safety, with connectors that allow ease of attachment to other compatible elements. Careful selection will ensure that the worker can carry out their task safely and effectively.

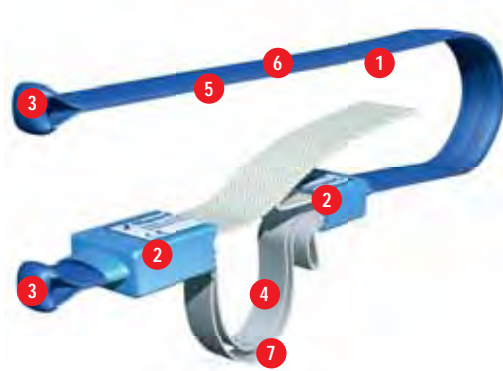
All T-PAK lanyards offer:

- 1 High quality polyester webbing
- 2 Clear labeling showing the model, year of manufacture, standards tested to and individual serial number for traceability
- 3 Additional reinforcement at high wear areas where required
- 4 Integral back-up security strap in the shock absorber
- A wide range of connectors and configurations available
- Lightweight and cost effective
- All T-PAK Lanyards are tested to EN355

The TITAN lanyard is designed with a new concept in mind. Our aim is to provide a lanyard that is 'up to the job' throughout its lifespan, that will help the worker to identify when to retire the lanyard, and incorporates additional safety features to safeguard the worker in extreme circumstances.

In addition to the benefits of T-PAK lanyards, all TITAN lanyards offer:

- 5 Fully sheathed lanyard for increased durability and strength. Extreme UV resistance
- 6 Innovative construction with colour change feature that defines when excessive wear has occurred whilst still providing full fall protection to the worker.
- 7 Double integral back-up security straps in the shock absorber for full security



The ATLAS Range –  
for larger Users

SpanSet ATLAS 140 range for workers up to 140kg (22 stone / 300lbs). The ATLAS 140 range is designed specifically with larger workers in mind, but is still able to safely protect smaller workers without risk. With the ATLAS range SpanSet is able to offer Harnesses, Lanyards, Fall Arrest Blocks and Guided Type Fall Arresters for workers up to 140kg. The ATLAS harness is designed to fit and support the torso of a larger worker, which is the critical function of a harness. ATLAS 140 Lanyards are able to limit the force and arrest distance of a 140kg workers fall, while still remaining within the EN355 requirements of a 6 kN maximum impact force and a 1.75m maximum deployment.

In addition to the benefits of T-PAK lanyards, all ATLAS lanyards offer:

- Protection to workers from up to 140kg
- Fully compliant to EN355 for 100kg and 140kg masses
- Kernmantle rope construction
- Available with 2m maximum working length

In addition to the benefits of the 2 Point Harness, all ATLAS Harnesses offer:

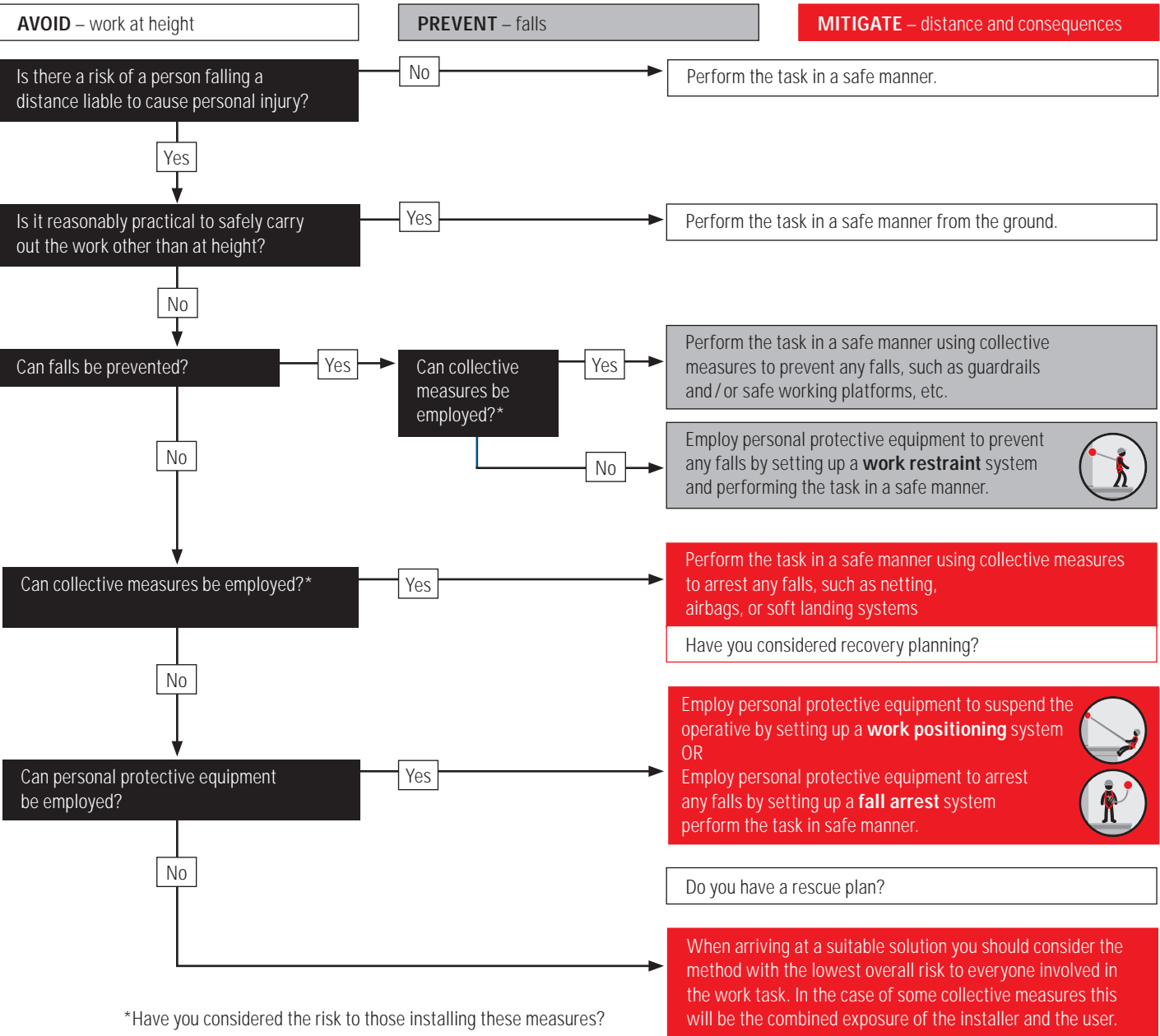
- Protection to workers from up to 140kg
- Fully compliant to EN361 for 100kg and 140kg masses
- More robust webbing construction
- Adjustable to fit a wider range of body shapes

# HIERARCHY OF SAFETY MEASURES

Assessing and Planning  
Work at Height



## Remember



# HIERARCHY OF SAFETY MEASURES

Guidance for Safe  
Work at Height



## The 3 Categories for the Use of Personal Fall Protection Equipment



**Work Restraint**  
This category of work covers techniques that restrict the movement of the user to prevent them approaching fall hazards. Careful assessment must be carried out first to identify all the relevant fall hazards. An effective technique will then provide an extremely high level of safety.



**Work Position**  
Techniques in this category utilise equipment to suspend the user in their 'work position'. As the user is then suspended at height, careful selection of the equipment and adequate training are essential in order to provide an effective solution. Work positioning techniques generally require an additional safety or back-up system. This must also be selected using the hierarchy, but it is quite common for fall arrest techniques to be chosen.



**Fall Arrest**  
Fall arrest is the only category that actually allows a fall to take place. The fall arrest system then reacts by arresting the fall in a controlled manner. Careful consideration must be given to ensure that the system selected is suitable for use in the intended orientation and that there is adequate clearance height below the user to prevent contact with obstacles during a fall.

## Risk Assessment

Where your risk assessment shows a worker can fall, you must carefully plan how you will protect them. There are 3 basic levels of protection; Avoidance, prevention, or mitigation. If work at height can be avoided then the risk of falling is eliminated.

If it is not possible to avoid working at height ways of preventing a fall should be addressed with preference placed on collective measure which protect all workers. Personal fall protection harnesses should only be used as a last resort. In some situations it is not possible to prevent the fall, for example when climbing between various working levels/platforms. In this situation the worker requires some form of protection from the effects of the fall. This could be done by reducing the fall distance, or by limiting the impact force felt as the fall is arrested. Again collective systems are given preference to a personal fall protection harness. It may not always be possible to provide fall protection to eliminate the risk of injury, therefore in these situations then you must take steps to reduce the risk of falling as much as possible, for example through competence training when workers are left with a step ladder as the only method of work.

If your risk assessment shows that it is acceptable to use personal fall protection your workers will have three ways in which their equipment can be used. It is therefore essential to properly identify environment constraints and the type of protection the workers require. The 3 techniques with which a harness can be used to protect workers are; Work Restraint, Work Position and Fall Arrest. The workers must properly understand the level of risk and function of their equipment in each technique.



SpanSet Training the link between  
users and products.





TRAINING

Modules and Overview

The Benefits of a Modular Training Scheme

Based upon our commitment to quality and service , it is SpanSet's aim to provide training and education that supports all of our height safety products and associated techniques. SpanSet's training courses provide the necessary knowledge of equipment and techniques to allow managers or users to operate safety systems effectively in designated environments.

The comprehensive, modular based range of training courses have been developed based on worker feedback. This clearly structured approach allows for planned progress to be made towards competency. Each module is a clearly defined block of theoretical information and practical training that can be combined with other modules to create a complete course tailored to your requirements.

By breaking the courses down into smaller parts the modular approach provides many benefits. Careful selection of modules maximises the relevance of courses to the trainees. A high quality of delivery can be easily monitored and maintained for consistency. Continual appraisal ensures trainees only progress once each section is successfully completed. Modules are valid for 3 years and additional modules can be added at a later date if required. The approach has made SpanSet height safety courses recognised as the bench mark for proof of competency across industry.

The Modular approach is under pinned by the foundation module HS1 which must be completed by all trainees. This session which is predominantly education based, sets out the background information required by all those involved in work at height. With the basics covered it is then possible to train workers in different more practical aspects of work at height. The end result is a combination of background information and practical training biased to the needs of the worker.



Height Safety for Industry

Having successfully completed the module HS1, the following practical based training modules can be added to enhance the overall course.

Title	Order Code
Height Safety Equipment Appreciation and Inspection	HS1
Practical Use of Personal Fall Protection Equipment	HS2
Occasional Industrial Climber	HS3
Advanced Industrial Climber	HS4
GOTCHA Kit Rescue Training	HS5A
SHARK Rescue Training	HS5B
CRD Kit Rescue Training	HS5C
GOTCHA POLE TOP Rescue Training	HS5D
Rooftop Safety / Work Restraint	HS6
Competent Person Practical Inspection and Record Keeping	HS7
Radio Frequency Awareness, Safety in Radio Frequency Fields	HS8
Management of Work at Height	HS9
Access, Egress and Rescue from a Confined Space	HS10

Work at Height on Vehicles

Title	Order Code
Vehicle Mounted Work Restraint System Module - Operator Training	STOPPA
Vehicle Mounted Fall Arrest System Module – Operator Training	CAPCHA
Load Restraint For Road Transport Vehicles	LR1

Industrial Rope Access

Title	Order Code
IRATA Level 1 – Rope Access Technician	IRATA 1
IRATA Level 2 – Experienced Rope Access Technician	IRATA 2
IRATA Level 3 – Rope Access Supervisor	IRATA 3



Police Height Safety Training

All training courses to begin with the foundation module PHS1 – Introduction to Height Safety and Equipment Awareness. The following practical based training modules can be added to enhance the overall course.

Title	Order Code
Introduction to Height Safety and Equipment Awareness	PHS1
Height Safety for Operations on Rooftops, Structures and Steep Ground	PHS2
Rescue and Recovery for Officers Operating at Height	PHS3
Practical Training for Operations at Height - Safe – Access – Egress – Rescue	PHS4
SARA (Search and Rope Access) Operative	SARAOP
SARA (search and Rope Access) Supervisor	SARASUP

Height Safety For Rescue Courses for the Emergency Services

All training courses begin with the HSR1 - An introduction to Personal Safety at Height and Equipment Awareness. The following practical based training modules can be added to enhance the overall course.

Title	Order Code
An introduction to personal safety at height and equipment awareness	HSR1
Basic height safety/practical application – Rooftops and Structures	HSR2
FR Kit user	HSR3
FR Kit instructor	HSR4
Line rescue operative	LROP
Line rescue supervisor	LRSUP

Height Safety Courses for the Wind Industry

Title	Order Code
Renewable UK Work at Height and Rescue wind turbines	REUK
Wind Turbine Hub rescue	WT1
Wind Turbine yaw platform rescue	WT2
Wind Turbine blade access training	WT3
Wind Turbine transition piece access and rescue	WT4

TRAINING

Modular Courses

Choosing The Right Module

SpanSet height safety and specialist access courses are designed to provide our clients with all the necessary information, instruction and training to operate both safely and efficiently at height. However SpanSet understand that our clients may have specific training requirements for which set courses will not cater. Should this be the case, or you are unsure as to the correct course to choose for your particular application, our training department will be pleased to discuss these issues with you, or to arrange a site meeting at your convenience either on your site or at the SpanSet training school.

REUK COURSES

RenewableUK is the trade and professional body for the UK wind and marine renewables industries. Members of RenewableUK range from small companies to the largest international corporations. SpanSet Is a RenewableUK member and is approved for delivery of the REUK work at height and rescue, wind turbines course.

IRATA COURSES

SpanSet is an Irata member training company and we are able to offer training courses to the Industrial Rope Access Trade Association (Irata) guidelines. These courses are to three levels and all levels include an assessment by an independent Irata approved assessor. climbing, rescue, roof top safety and RF safety.



TRAINING

Realistic Training Environments



TRAINING

Maintaining High Standards

SpanSet Training

The SpanSet Training School offers expert tuition provided by our own professional Instructors, each selected on merit, having achieved extensive experience and qualifications in their individual disciplines.

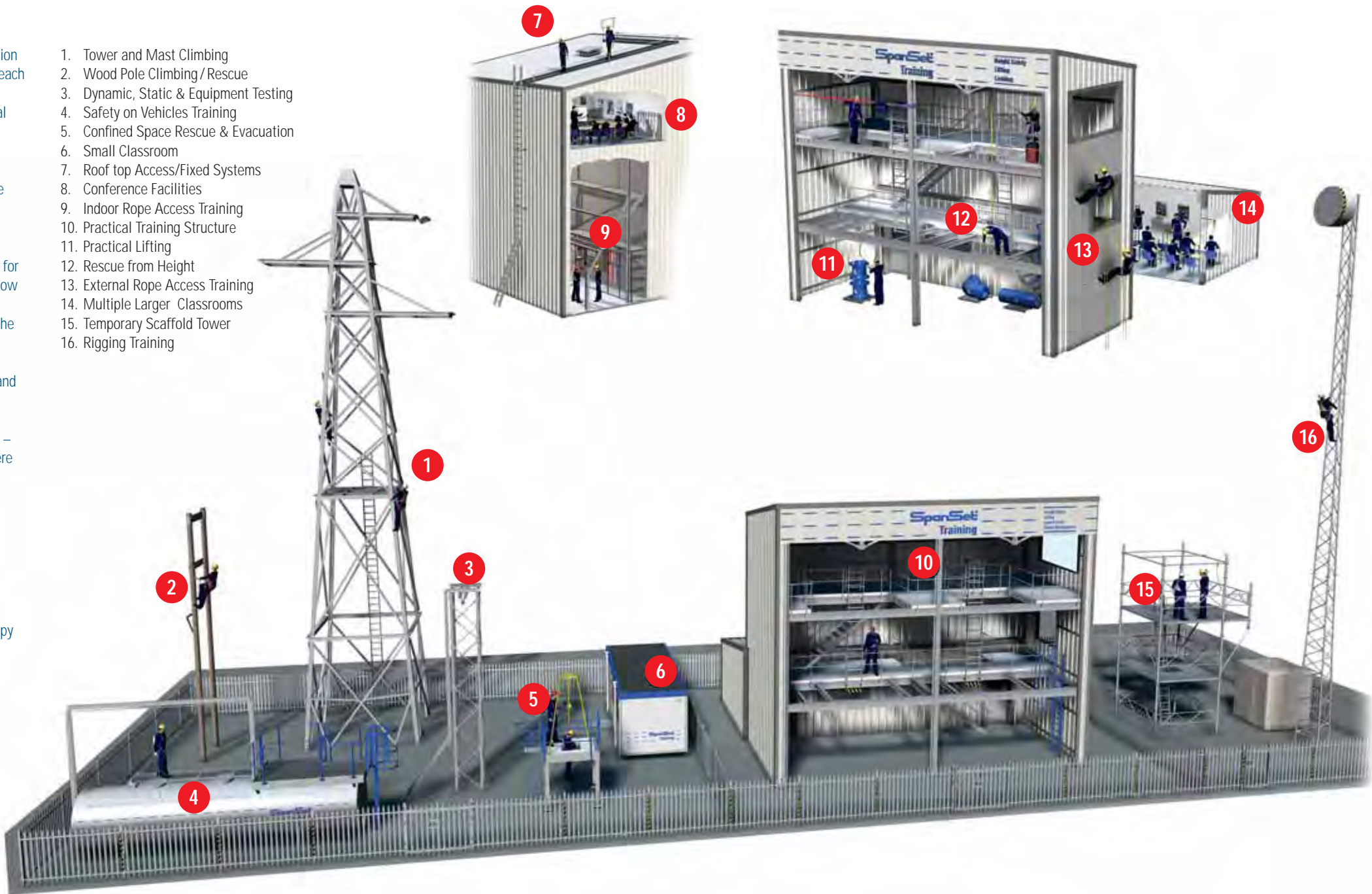
In addition to the expert tuition all SpanSet courses are backed by quality assurance to the highest level and comprehensive professional indemnity insurance.

The SpanSet training school has 6 classrooms for theory sessions and our extensive facilities allow us to recreate many common work at height situations. With indoor and outdoor facilities the practical areas include a tailor made work at height structure, a utility pylon, a selection of communication towers, rooftop training area and rope access area.

Located at the heart of the motorway network – which means it is easily reached from anywhere in the UK. Centrally located for the major conurbations of Manchester, Birmingham and Liverpool.

In some cases training is more effective when carried out at the actual work site. Subject to suitability and provided the area is safe for training, we are happy to carry out courses at a location of your choice. Our staff will be happy to discuss this and confirm the feasibility

- 1. Tower and Mast Climbing
- 2. Wood Pole Climbing / Rescue
- 3. Dynamic, Static & Equipment Testing
- 4. Safety on Vehicles Training
- 5. Confined Space Rescue & Evacuation
- 6. Small Classroom
- 7. Roof top Access/Fixed Systems
- 8. Conference Facilities
- 9. Indoor Rope Access Training
- 10. Practical Training Structure
- 11. Practical Lifting
- 12. Rescue from Height
- 13. External Rope Access Training
- 14. Multiple Larger Classrooms
- 15. Temporary Scaffold Tower
- 16. Rigging Training



ISO 9001 Auditing

SpanSet Limited are the first personal fall protection equipment manufacturer to be accredited by the British Standards Institute for Height Safety Training under our terms of registration to BS EN ISO 9001 providing training and subsequent certification. Our continued dedication to Quality is your Assurance that every SpanSet training course and product will meet your exact requirement and to be of the highest standard.

BS8454: Code of Practice

SpanSet was instrumental in the establishment of BS8454: 2006 code of practice for the delivery of education and training for work at height and rescue. Subsequently we were the first training organisation to be professionally audit by the BSI to this standard. Both facts demonstrate our commitment to the quality of training course delivery.



# 01.1

## Work Restraint


Definitions	24
Anchor	26
Connector	27
Harness	28
Training	29
Recommended Solutions	30
Powered Access	30
Roofwork	31




# WORK RESTRAINT

- 1. Anchor
- 2. Connector
- 3. Harness
- 4. Training


## Industry sectors that use Work Restraint techniques:




Roof Work



Powered Access



Vehicle Fall Protection



Facilities Management

## Work Restraint prevents falls before they happen

When a worker is required to approach an unprotected fall hazard, the safest method of access is a Work Restraint System. A Work Restraint System uses equipment to restrict movement, creating a safe working zone and preventing the worker from reaching the fall hazard. Care should be taken when setting up the system to ensure that the safe working zone is effective, as once in place the worker's level of awareness will decrease. An effective Work Restraint System provides an extremely high level of safety.

Work Restraint Systems can be broken down into 4 key components. An Anchor Point, a Connecting Element, a Harness and the Knowledge to use them all safely.

It is essential to ensure that all the components of your system are compatible. The equipment you select may also be suitable for use in a Fall Arrest or Work Positioning System. If you have any doubts as to the suitability of height safety equipment please contact SpanSet for advice.

### Why choose SpanSet for Work Restraint equipment?

As part of SpanSet's commitment to Height Safety Training, developing the safest work methods and equipment is vital. SpanSet have been heavily involved in promoting work restraint techniques since we began delivering training 15 years ago.

### Practical solutions for everyday work

SpanSet have developed a range of solutions for work on rooftops and near exposed edges. Our knowledge in this area has undergone a continual development in conjunction with a number of major clients and importantly from the experience received through our training department.

Our products range from temporary solutions through to permanently installed systems. We can supply both ready made solutions for typical work at height environments in the form of kits and bespoke systems made up from a combination of our compatible components/elements.

Work Restraint prevents falls before they happen



### 1. Anchor

The anchor point is the key to a safe personal fall protection system. The type of work that you do and the location you are working in will determine what anchor points are available for you to use and what anchorage devices are suitable. Anchors for work restraint need to be able to withstand at least 3 times the users mass (BS8437), however work restraint systems will normally use anchorage devices approved to EN795. When selecting a suitable anchorage it must be located in a position that will allow the system to prevent a fall.

### 2. Connector

The connecting element of a work restraint system must be of a suitable length to limit the workers movement to within the safe working zone. A fixed length lanyard can provide an effective solution, but the lack of adjustment will limit the situations it can be used in. Providing a worker with an adjustable lanyard or adjustable line will enable them to create effective restraint systems to suit their environment.

### 3. Harness

Work restraint systems can incorporate virtually any style of harness. The user of a work restraint system may find the use of a rear attachment beneficial as they can then approach the hazard or work area with the safety system outside their working zone. The use of Belts for restraint is not incorrect, however SpanSet recommend that for most situations a full body harness is preferable providing improved support and security.

### Training

Training is an essential part of your Work Restraint solution. To be confident that your employees will not be at risk of falling, they must understand the basic principles involved with planning, using and maintaining the equipment.

Workers who have little or no experience of work restraint systems or equipment are unlikely to operate them effectively. Workers must understand that the type of equipment on its own will not create a work restraint system, it is the way it is used to prevent falls occurring that is important.

By selecting the appropriate modules from our modular format you will be able to create a competent worker who is able to assess the task, select the right equipment, carry out pre-use checks and use the equipment safely.



WORK  
RESTRAINT

1. Anchor
2. Connector
3. Harness
4. Training



WORK  
RESTRAINT

1. Anchor
2. Connector
3. Harness
4. Training

Attachment Sling

Suitable for:



All Industry  
Sectors

The attachment sling is the simplest way to create an anchorage point on a suitable structural element. The round sling construction allows it to be used in a number of configurations when placing it around the structure. The continuous polyester sleeve around the product protects the load bearing fibres and makes it simpler to inspect than traditional webbing or wire rope slings. This product offers a factor of safety of 7:1 and is available in a range of sizes.

Order Code: ATSL 1M EWL



The simplest connecting element for use in a work restraint system is a Restraint Lanyard. SpanSet can supply fixed, or adjustable Restraint Lanyards. A fixed length lanyard is best suited to work in a specific location, where as an adjustable lanyard can cover a range of sizes for use in more locations, for example different sized powered access platforms. The maximum allowable length of any lanyard is 2m including connectors.

Order Code: RARL1129



Adjustable Rope  
Restraint Lanyard

Suitable for:



Powered Access



Vehicle Fall  
Protection

SAFELINE System

Suitable for:



Roof Work



Facilities  
Maintenance

In situations such as roofs where the operative needs to access a large area, or negotiate a number of fall hazards while gaining access to a task, a running anchorage line can be a useful solution. Permanently fixed running anchorage lines allow the user more freedom of movement, while still working within a clearly defined system access zone. These systems are tested to withstand the forces of a fall, but are more commonly planned, designed and installed to create a Work Restraint access system.

Order Code: SAFELINE



Fall Arrest Lanyards are tested to ensure that the forces applied by work restraint systems will not activate the shock absorber. As they are also suitable for use in fall arrest situations they can provide a flexible solution for workers in varied environments such as construction sites. The SpanSet loop lanyard combines the features of a fall arrest lanyard with the adjustment required to create effective restraint systems. The colour coded loops allow the user to set the lanyard to four different lengths. Alternatively the lanyard can be anchored to structural elements such as beams by passing it around and clipping back to one of the loops

Order Code: TP3L252



T-PAK 3-Loop Lanyard

Suitable for:



Facilities  
Maintenance



Powered Access

STOPPA

Suitable for:



Vehicle Fall  
Protection



Containerised  
Generators

The Stoppa system is a pre installed restraint system for access to the top of containerised units and vehicles. The system is designed to be permanently installed to the structure, with the dimensions specific to the installation. Once installed a worker only requires the Stoppa Belt to utilise the system and the fixed dimensions prevent the user from compromising their safety. The system allows the user free access to all intended areas without access to any fall hazards

Order Code: STOPPA



The CLIMA work position line is designed for use where the length of a standard lanyard is insufficient. The adjustment device can be positioned at any point along the length of the rope and locked in place to limit the users movement. The adjustment device can either be attached directly to the harness, or via a suitable lanyard. This items is tested to carry the weight of the worker so can also be used as part of a Work Positioning System.

Order Code: 5/2696 WPL 10M



CLIMA Work Position Line

Suitable for:



Roof Work



Slab Edge  
Construction



WORK  
RESTRAINT

1. Anchor
2. Connector
3. Harness
4. Training





WORK  
RESTRAINT

1. Anchor
2. Connector
3. Harness
4. Training

For information and booking:  
[www.spanset.co.uk/training.shtml](http://www.spanset.co.uk/training.shtml)

1-X Harness

- Suitable for:
-  Powered Access
-  Roof Work

There are many designs of harness, however for Work Restraint a simple fully body harness is the most appropriate design. This type of harness is lightweight and easy to adjust allowing a full range of normal movement. The rear attachment point allows the user to secure themselves to the system while keeping the connecting element out of their working area.




A foundation theory based module for anyone involved in work at height using Personal Fall Protection Equipment (PFPE). The course is designed to give operatives an understanding of the principles for the selection, use and maintenance of PFPE and the associated legislation. The course will also provide supervisors and managers with a valuable insight into the requirements of their staff when working at height. With all work at height training it is essential that the theory elements are combined with practical sessions. The module 1 can be combined with a wide variety of practical Modules to tailor the overall course to your requirements.



Height Safety Equipment  
Appreciation and Inspection

- Suitable for:
-  All Industry Sectors

Driver Harness

- Suitable for:
-  Vehicle Fall Protection
-  Powered Access

The DRIVER harness has been developed specifically to deal with the needs of professional drivers and those who work at height on or near vehicles. Designed to be comfortable enough to wear in the cab or when seated, highly visible for when you get out and protects you while working at height.

Suitable for use in MEWP's when combined with the DRIVER restraint lanyard or with overhead fall arrest systems in loading bays or on trailers.



This is a practical based module designed as an enhancement to Module 1 for those who access and work on rooftops or similar structures. It covers the use of permanent vertical and horizontal safety systems including pre use checks. The installation, use and pre use checks for temporary vertical and horizontal safety systems as well as adjustable work restraint systems. All trainees will carry out activities at height during this module.



Rooftop Safety and  
Work Restraint

- Suitable for:
-  Roof Work
-  Work Restraint

This is a theory based training course for workers who will be working near to, or be exposed to radio frequency radiation fields while accessing a work environment. National Grid Wireless has approved this syllabus as part of the requirements for access onto their sites. On completion of the course workers will have an awareness of the risks and methods of controlling them, along with the NRPB guidelines.



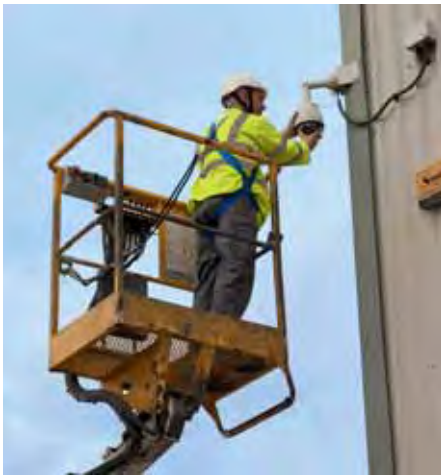
R F Awareness, Safety in  
Radio Frequency Fields

- Suitable for:
-  Roof Work
-  Telecoms

# WORK RESTRAINT

## Powered Access Solutions

- 1. Powered Access Platform
- 2. Connector
- 3. Harness
- 4. Training



When working in boom mounted mobile elevated work platforms it is recommended that users protect themselves using a Work Restraint System in addition to the safety rails that are built into the basket. It is also important that users of MEWPS are correctly trained in the safe use of the machine and the additional safety equipment. SpanSet recommends that you contact the International Powered Access Federation (IPAF) for details of courses and training providers [www.ipaf.org](http://www.ipaf.org). **The Work Restraint System that SpanSet recommends comprises of a full body harness and an adjustable restraint lanyard. The adjustable lanyard allows the kit to be used with a variety of different sized baskets.**

## Training

Training code: HS Module 1



- Module 1 - Height Safety Equipment Appreciation and Inspection (See p. 25)



Suitable for:



Powered Access

# WORK RESTRAINT

## Roofwork Solutions

- 1. Anchor
- 2. Connector
- 3. Harness
- 4. Training



Most roof work is likely to take place in an environment where Work Restraint techniques are desirable. Therefore the Roof Kit shown here is designed to be set up to limit a users movement and prevent them falling. It has also been considered that work on a roof will include access and egress. During this time workers may have to use fall arrest techniques and therefore the kit incorporates features to protect the user throughout the entire work task and egress. Both the Lanyard and work position line are adjustable so that users can create effective restraint systems. In addition the lanyard is designed for fall arrest use and in this case the adjustment will also allow the user to reduce the potential fall to a minimum.

## Roofwork Kit

Order Code: ROOF KIT

- Attachment sling for anchoring to steelwork
- Adjustable Work Position Line to limit movement and prevent falls
- Adjustable Fall Arrest Lanyard for use with fixed line systems
- 2-X Harness for safe access and security while working
- Training on pre-use checks and correct use



Attachment Sling  
(See Page 26)



CLIMA Work Position Line  
(See Page 27)



T-PAK Adjustable Lanyard  
(See Page 51)

2-X Harness  
(See Page 54)



Anchorage Point – Your platform will have a designated harness anchor point



Protective Carrying Bag



Rope Adjustable Restraint Lanyard  
(See Page 27)

## Powered Access Kit

Order Code: IPAF-5H-2L-2B

- Autolock karabiner for anchorage to the platform
- Adjustable lanyard to match the platform size being used
- Full Body harness for security
- Training on pre-use checks and correct use



1-X Harness  
(See Page 28)



## Training

Training code: HS Module 1 + 6



- Module 1 - Height Safety Equipment Appreciation and Inspection (See p. 25)



- Module 6 - Rooftop Safety and Work Restraint (See p. 25)

Suitable for:



Roof Work



# 01.2



## Work Positioning


Definitions	34
Anchor	36
Connector	37
Harness	39
Training	40
Recommended Solutions	40
Industrial Climbing	41
Rope Access	42
Confined Space	44




# WORK POSITIONING

- 1. Anchor
- 2. Connector (Support)
- 3. Connector (Access and Back-up)
- 4. Harness
- 5. Training


## Industry sectors that use Work Positioning techniques:




Telecoms



Utilities



Industrial Rope Access



Confined Space

## Work Position supports the worker in the right location

If a worker is required to be in a location where there is no platform and they have to climb or be lowered into place to work, then the safest form of personal protection is Work Positioning. A Work Positioning system uses equipment to hold, or suspend the worker in place to carry out the task, therefore reducing the potential for a fall.

If the worker is fully reliant upon a work positioning system for their primary support, then a secondary connection is recommended as a back-up. The secondary connection should be selected using the hierarchy to provide a combined solution offering the highest level of safety. It is common for an industrial climber to use a fall arrest system for protection during a climb, but once at their work site they add in a work position system to enable them to carry out the task using both hands. Work position systems when incorporated with a secondary system require staff with the correct aptitude and training in order to operate them effectively.

A basic Work Position system is comprised of 5 parts. An Anchor Point, a Connecting Device that Supports the worker, a Connecting Device for

Access and Backup, a Harness and the Knowledge to use them all safely.

**Why choose SpanSet for Work Positioning equipment?**  
For over ten years SpanSet have been developing and presenting training and equipment solutions including rescue for the telecoms industry. SpanSet have a wide range of courses and equipment solutions specific to this field, for example the rigging and lifting at height courses for telecoms riggers. In addition to the range already in place SpanSet are working closely with customers to provide bespoke solutions where required. SpanSet is a full member company of the Industrial Rope Access Trade Association as a manufacturer of equipment and a training organisation. As manufacturer SpanSet has worked with many IRATA operating companies to develop equipment solutions for a variety of applications. SpanSet also work with the Emergency Services and Military to provide bespoke solutions for their particular requirements in search and rescue.

**1. Anchor**  
The anchor points chosen together with their position and their strength can have a substantial effect on the effectiveness of a work position system. The anchor should be unquestionably sound, possibly being a structural element or one tested / certified to EN795. The chosen location of the anchor point or the use of a mobile anchor is important to allow the worker to position adjacent to the work task. Both the primary and secondary systems will require an anchorage and the strength of the anchor point must therefore be sufficient for the primary system (positional) as well as the secondary (potentially fall arrest).

**2. Connector (Support)**  
The primary connector for a work position system must be able to support the worker and hold them in the correct position to be able to work hands free. This means that the connector should be able to adjust easily to allow the worker to set the position effectively. The most common way to do this is with a work position lanyard. However many devices are available for work positioning that include different features suitable for specific applications.

**3. Connector (Access and Back-up)**  
The Secondary Connector must be able to support the worker in the event of the primary system failing or when climbing the secondary connector must be capable of supporting the worker should they fall. As a result of this it is common for the secondary connector to be a fall arrest system. Suitable fall arrest systems include flexible line fall arresters, guided type fall arresters and fall arrest lanyards. The main considerations in selection being how it works in conjunction with the primary system.

**4. Harness**  
The harness must be able to support the workers body in a comfortable position while they are working. The type of support offered by the harness depends whether it is being used to hold the worker in tension as they balance on a structure, or to suspend the worker freely from the structure. If the harness is used for climbing and working on a structure then it should be a full body harness with a suitable work-positioning belt. If the worker is suspended freely then the harness should support them in a seated position.

**Training**  
Training is an important part of a work positioning system because the techniques used are varied and can be complex. The ability to thoroughly risk assess and plan the whole process is vital. There are many stages to the work, from safe access, secure positioning, equipment maintenance and finally emergency planning. If these are not properly addressed then workers will be left at risk. SpanSet training courses are designed to address all when implementing a work positioning technique as part of your safe method of work. The key to an efficient work positioning system is being able to adapt the available techniques and equipment to suit the environment you will be working in. The SpanSet training modules help you to select the most appropriate courses and combined with the wealth of experience held by our training team ensure you get the best support when planning work positioning projects.





WORK  
POSITIONING

- 1. Anchor
- 2. Connector (Support)
- 3. Connector (Access and Back-up)
- 4. Harness
- 5. Training



WORK  
POSITIONING

- 1. Anchor
- 2. Connector (Support)
- 3. Connector (Access and Back-up)
- 4. Harness
- 5. Training

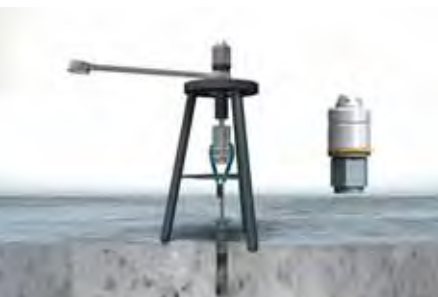
Connecting Device for Support

Proof Loader Kit

- Suitable for:
- Industrial Rope Access
  - Lift Installation and Service

The Proof Loader Kit consists of two SpanAnchors and a setting tool, which proof loads the SpanAnchor to ensure it is installed correctly. The SpanAnchor is a reusable expansion anchor device designed to be used in concrete. However by using the Proof Loader as a setting tool the SpanAnchor can be used in any suitable substrate. After use removal is simple ready for the next application.

Order Code: PROOF LOADER KIT



The most common method of Work Positioning is the use of a Work Position Lanyard. This is designed to work with the belt attachments on the harness to support the worker in place. This rope lanyard is easily adjustable up to 2m long and has a protective sleeve to prevent wear when passed around the anchor point.

Order Code: 5/2696-WPLANY 2M



It comes complete with a screwlink connector for semi permanent attachment to one side of the harness. A captive autolock karabiner for quick and secure attachment when at the work site.

CLIMA Work Position Lanyard

- Suitable for:
- Telecoms
  - Utilities

Tripod

- Suitable for:
- Confined Space

For vertical entry into a confined space the worker needs an anchor point located centrally above the access opening. A tripod, or davit system can be used for this purpose. The tripod is rated as an anchor point for the workers equipment, this could be either a recovery system only, or both a lowering system and a recovery system. For example the tripod can be used with a SpanHoist for lowering the worker and a Fall Arrest Recovery Block to rescue the worker in an emergency.

Order Code: 5/2987



This personal access kit can be used by a worker to raise and lower themselves to a work location. The kit can also be used by a second person to remotely raise and lower the worker. This kit can be used with a range of anchorage options, such as davits, tripods and attachment slings. To increase worker comfort this kit should be used with the CLIMA harness, or a work seat.

Order Code: SPAN-4-12.5



- Pulley features:
- One-way Friction Pulley for increased control when lowering,
  - Locking Cam for security and rescue hauling,
  - Lightweight Alloy construction.

- Footloop
- Multifunction, for use as a footloop to assist hauling, or a work restraint lanyard to prevent falls,
  - Adjustable from 1m to 1.6m,
  - Additional wear sleeving to reduce abrasion.

SpanHoist II Kit

- Suitable for:
- Confined Space



WORK  
POSITIONING

1. Anchor

2. Connector (Support)

3. Connector (Access and Back-up)

4. Harness

5. Training

Connecting Device for Access



WORK  
POSITIONING

1. Anchor

2. Connector (Support)

3. Connector (Access and Back-up)

4. Harness

5. Training

CLIMA Fall Arrest Lanyard


Suitable for:

Telecoms

Military


The CLIMA lanyard combines versatility with security. When climbing complex structures workers need to maintain at least 1 point of contact. The use of a double or “Y” lanyard such as the CLIMA lanyard achieves this. Many structures are difficult to attach conventional connectors to, being either too large for the connector or creating cross load issues. The CLIMA lanyard has karabiners with large openings to allow workers to clip solid state ladder rungs, but also has integral extension slings enabling the worker to anchor to large structural elements without fear of cross loads.

Order Code: TPDC2




This is a multi-purpose work position and fall arrest harness. With padded leg loops and central attachment point it is ideal for rope access use. The padded waist belt with twin attachment points is suitable for use with work position lanyards for industrial climbing. Gear loops and attachment rings on the belt allow workers to carry or store tools / equipment preventing drop hazards. The sternal and dorsal attachment points can be used with fall arrest or work restraint systems.


Order Code: CLIMA HARNESS STD  
CLIMA HARNESS LRG



CLIMA


Suitable for:


Industrial  
Rope Access

Telecoms

CLIMA Vertical Line


Suitable for:

Telecoms

High Bay Pallet  
Racking

This is a temporary flexible line fall arrest kit for use when accessing vertical ladders or structures, such as telecoms masts and stock picking cranes in pallet racking. The anchorage line can be positioned using the anchorage sling and tensioned using the rope cleat. The buddy fall arrester is supplied with a short attachment lanyard and can either be permanently fitted to the anchor line, or permanently secured to the workers harness. The kit comes in a shoulder bag for transport and storage.

Order Code: CLIMA VL 30M




The EXCEL 2XB + Belt is a lightweight work position and fall arrest harness. The harness incorporates additional padding for comfort and quick-loc buckles which combine to make fitting simpler. The padded waist belt with twin attachment points is suitable for use with work position lanyards for industrial climbing. Attachment rings on the belt allow workers to carry or store tools / equipment preventing drop hazards. The sternal and dorsal attachment points can be used with fall arrest or work restraint systems, such as lanyards, fall arrest lines or adjustable lines.


Order Code: EXCEL 2XB



EXCEL 2XB + Belt


Suitable for:

Telecoms

High Bay Pallet  
Racking


Vertical Line System

Suitable for:

Roof Work

SpanSet is able to supply permanently installed guided type fall arrest systems for protecting workers in environments where workers must climb to access their work place. Typically these systems are installed where the worker has to climb a fixed vertical ladder to access a work platform, however they may be used for access on structure such as towers and masts. Typical installations include High Bay Pallet Racking Cranes, Roof Access, Telecoms Masts and Wind Turbines.

Order Code: VERTICAL LINE SYSTEM



The ULTIMA harness is a full weight work position and fall arrest harness ideal for those whose work involves longer periods of work positioning. The waist belt has a broader profile, includes padding and additional stiffness for comfort, with twin attachment points suitable for use with work position lanyard when industrial climbing. Attachment rings on the belt allow workers to carry or store tools / equipment preventing drop hazards. The sternal and dorsal attachment points can be used with fall arrest or work restraint systems such as lanyards, fall arrest lines or adjustable lines.

Order Code: UEH – STD  
UEH – LARGE



ULTIMA

Suitable for:

Utilities

Military



WORK  
POSITIONING

1. Anchor
2. Connector (Support)
3. Connector (Access and Back-up)
4. Harness
5. Training

For information and booking:  
[www.spanset.co.uk/training.shtml](http://www.spanset.co.uk/training.shtml)

Height Safety Equipment  
Appreciation and Inspection

Suitable for:



All Industry  
Sectors

Occasional Industrial  
Climber

Suitable for:



Telecoms



High Bay Pallet  
Racking

Advanced Industrial Climber

Suitable for:



Utilities



Telecoms



A foundation theory based module for anyone involved in work at height using Personal Fall Protection Equipment (PFPE). The course is designed to give operatives an understanding of the principles for the selection, use and maintenance of PFPE and the associated legislation. The course will also provide supervisors and managers with a valuable insight into the requirements of their staff when working at height. With all work at height training it is essential that the theory elements are combined with practical sessions. The module 1 can be combined with a wide variety of practical Modules to tailor the overall course to your requirements.

Order Code: HS Module 1



This is a practical based module designed for those who work on towers, masts and pylons or similar industrial structures using pre installed safety systems combined with work position techniques. The course covers the care, use and maintenance of all the equipment including pre use checks for installed systems. During training delegates will be expected to carry out activities at a height in excess of 20m and provided with an overview of the requirements for rescue provision.

Order Code: HS Module 3



This practical base module is an enhancement to Module 3 and is intended for those who wish to supervise work on towers, masts and pylons, or similar structures. On completion of the course they should be able to carry out pre-use checks and set up temporary access systems, as well as climb using double legged fall arrest lanyards. Delegates will review the requirements for emergency planning and carry out evacuations and rescues of suspended casualties using a nominated rescue kit.

Order Code: HS Module 4



The industrial climbers kit is designed for those working on towers, masts, and pylons or similar industrial structures such as high bay racking. The kit will combine with permanently installed systems where available. The CLIMA fall arrest lanyard and CLIMA work position lanyard are ideal where the user has to provide their own security.



Industrial Climbing Kit

Order Code: IC KIT

- Padded EXCEL harness and belt for comfort while working
- CLIMA Energy absorbing lanyard with twin legs for climbing
- CLIMA fall arrest lanyard with integrated anchor slings
- Lightweight and easy to adjust CLIMA work position lanyard for support while working
- Training on pre-use checks and correct use



CLIMA Fall Arrest Lanyard  
(See Page 38)



EXCEL 2-XB Harness  
(See Page 39)



CLIMA Work Position Lanyard  
(See Page 37)



Protective Carrying Bag

WORK  
POSITIONING

Industrial Climbing Solutions

1. Anchor
2. Connector (Support)
3. Connector (Access and Back-up)
4. Harness
5. Training

Training

Training code: HS Module 1, 3 + 4



- Module 1 - Height Safety Equipment Appreciation and Inspection (See p. 40)



- Module 3 - Occasional Industrial Climber (See p. 40)



- Module 4 - Advanced Industrial Climber (See p. 40)

Suitable for:



Telecoms



WORK  
POSITIONING

Rope Access Solutions

- Complete Rope Access Kit
- Proof Loader
- Attachment Sling
- Semi-Static Rope



Why choose SpanSet for  
Rope Access Solutions

Industrial rope access techniques are a modern low impact solution for accessing difficult or remote areas. Utilising highly trained technicians, who work in carefully structured teams, the techniques combine effectiveness with a high level of safety. The Industrial Rope Access Trade Association (IRATA) of which SpanSet is a member is the lead body for rope access defining the best practice for the training and qualification of technicians as well as the operation of member companies and contracts. As a manufacturer and IRATA training member SpanSet is ideally placed to offer a range of solutions for Rope Access companies and technicians. For individuals and organisations starting in the IRATA scheme SpanSet is able to offer training, equipment and advice to support your development. Where as for existing Rope Access Operators SpanSet is able to provide cutting edge technical products to meet the rigorous demands of work environments and work with you to create unique solutions to customers access problems. After use removal is simple ready for the next application. The kit includes two SpanAnchors.

Industrial Rope Access Kit

SpanSet can provide complete rope access kits reflecting the equipment used by technicians on the IRATA training courses at SpanSet. Alternatively individual replacement components can be supplied to meet technicians requirements.

Order Code: ROPE ACCESS KIT



Proof Loader Kit

This portable anchorage kit, enables a rope access technician to quickly install and “test” their own anchorage point. The SpanAnchor is a reusable expansion anchor device designed to be used in concrete. However by using the Proof Loader as a setting tool the SpanAnchor can be “tested” and used in any suitable substrate. After use removal is simple ready for the next application. The kit includes two SpanAnchors.

Order Code:  
PROOF LOADER KIT



Attachment Sling

The attachment sling is ideal for rope access use, because it is lighter and more flexible than wire strops yet more durable than webbing slings. preventing abrasion or UV damage. Inspection is simple with full strength being retained if the sheath is in-tact.

Order Code:  
ATSL 1M EWL



Semi Static Rope

SpanSet are able to supply kernmantle rope in a number of diameters and specifications. SpanSet holds stock of 10.5mm and 11m semi-static rope and can supply other sizes, specifications and colours on request.

Order Code: ROPE 009



WORK  
POSITIONING

Rope Access Solutions

- Rope Access Footloop
- CLIMA Work Position Lanyard
- CLIMA Fall Arrest Lanyard
- Buddy



Rope Access Footloop

The Rope Access Footloop is designed to function as an adjustable footloop with a wear sleeve, however it is also tested to EN358 as a work restraint lanyard and so can be used for fall prevention in powered access platforms and while rigging anchors. The design and range of adjustment also makes it ideal for use when aid climbing, in counterbalance rescues and for assisted prussicking.

Order Code: FOOTLOOP ROPE ACCESS



CLIMA Work Position Lanyard

The CLIMA Work Position lanyard is ideal for rope access technicians who need to use a lanyard for positioning on a lattice structure, for example when stage lighting and sound rigging. The CLIMA WP Lanyard is a 2m adjustable rope lanyard with integral wear sleeve, auto-lock karabiner and single handed adjustment device.

Order Code: 5/2696-WPLANY 2M



CLIMA Fall Arrest Lanyard

The CLIMA Fall Arrest is the solution for rope access technicians who need to mix fall arrest climbing on steelwork with standard rope access techniques. This lanyard can be use in 3 configurations: short direct attachment for climbing vertical ladders, or in a mobile platform, intermediate attachment with integral slings for climbing lattice steelwork and full length attachment to wire anchorage line systems.

Order Code: TPDC2



Buddy

The Buddy is an EN353-2 fall arrest device. It can either be used directly attached to the harness for reduced clearance areas or with up to a 500mm long lanyard for more freedom. It is an ideal solution for rope access technicians wanting a back-up device which is capable of protecting 2 workers in rescue scenarios.

Order Code: 5/2697



Training

IRATA Training and  
Competency Structure

No previous experience required. Aptitude for working at height. Physically and medically fit. 5-Day training course with independent assessment.

Level 1 Rope Access Technician

Capable of performing a range of activities under the supervision of a level 3. Responsible for own personal rope access equipment.

Minimum of 12 months and 1000 hours of work experience in a variety of tasks as a level 1 rope access technician. Physically and medically fit. 5-Day training course with independent assessment.

Level 2 Rope Access Technician

Capable of rigging ropes and undertaking rescues, including hauling, under the supervision of a level 3 rope access technician.

Minimum of 12 months and 1000 hours of work experience as a level 2 rope access technician. Physically and medically fit. Appropriate first aid certificate. Written recommendation from an IRATA member company or assessor. 5-Day training course with independent assessment.

Level 3 Rope Access Technician  
(Supervisor)

Capable of site supervision for rope access work projects. Comprehensive knowledge of advanced rescue techniques. Conversant with relevant work techniques & legislation.



WORK  
POSITIONING

Confined Space Solution

Tripod Bundle  
SpanHoist II  
Recovery Block



WORK  
POSITIONING

Confined Space Solution

2 Point Rescue  
Height Safety Equipment  
Appreciation and Inspection  
Access, Egress and Rescue  
from a Confined Space

Confined Space Solution

Confined space workers must consider rescue and retrieval as part of their planning. The incorporation of a harness can make rescue and retrieval simpler even where the task does not include exposure to work at height. Where the task includes work at height the harness becomes more integral to the overall solution for access, egress and recovery.

If the primary means entry to a confined space is by ladder, or steps, it is acceptable for a worker to be connected to a Recovery Block. In the event of a fall, or incapacitation the worker can be raised or lowered. This 'system' is for emergency use only and must not be used for man-riding i.e. suspension of a worker, unless it is a rescue situation.

If the only means of entry into a confined space is by 'man-riding' the worker must be raised & lowered by a lifting system, such as the SpanHoist. This operation must then be protected by a back-up system, such as a Recovery Block. This arrangement ensures that whilst in 'suspension' a worker is always protected by two separate systems.

Tripod Bundle

This tripod provides an EN795 class B rated anchorage for up to 2 workers. The crown includes 2 anchorage eyes which can carry a pulley to divert the lifeline of the recovery block, or suspend the SpanHoist system for lifting and lowering operations. The recovery block is normally mounted onto the leg of the tripod using a special bracket. The tripod has a maximum height of 2.3m and diameter of 1.55m. The tripod is easily setup and dismantled, with all connections made by push pin fittings.

Order Code: 5/2993



SpanHoist II

This is a preassemble kit for personal, or assisted access into confined spaces. The kit is designed to allow a worker to be lowered, or lower themselves into a confined space. The worker can then raise themselves up out of the confined space, or the worker can be remotely raised. In the event of a recovery the kit can be operated by a rescuer remotely from the anchor point to lift the casualty out. The kit includes one way pulleys for efficient lifting and controlled descents as well as a footloop and locking mechanism for security.

Order Code: SPAN-4-12.5



Recovery Block

This is a retractable type fall arrester with steelrope lifeline for use as a back-up and recovery system when accessing a confined space. The device has an active fall arrest mechanism that will engage in the event of a fall. It is also includes a rescue winch mechanism that can be activated in an emergency to recover an unconscious casualty.

Order Code: 5/2942



The 2PR is a confined space and fall arrest harness. The sternal, dorsal and overhead attachment points mean that the harness can be effectively combined with a wide range of equipment for different confined space applications. The overhead attachment comes with a stowage point for when not in use and can be used to raise or lower the worker in an upright position. The overhead attachment is suitable for use with hoists, winches or recovery blocks. The sternal and dorsal attachment points provide a choice of attachment for secondary systems.

Order Code: 2PR



2 Point Rescue



A foundation theory based module for anyone involved in work at height using Personal Fall Protection Equipment (PFPE). The course is designed to give operatives an understanding of the principles for the selection, use and maintenance of PFPE and the associated legislation. The course will also provide supervisors and managers with a valuable insight into the requirements of their staff when working at height. With all work at height training it is essential that the theory elements are combined with practical sessions. The module 1 can be combined with a wide variety of practical Modules to tailor the overall course to your requirements.

Order Code: HS Module 1



Height Safety Equipment  
Appreciation and Inspection



This practical based module is designed for those who intend to use full body harnesses for confined space access, egress and rescue. On completion of the course they should be able to carry out pre-use checks and use of confined space access equipment to raise, lower and rescue a worker from a confined space. The course covers use of tripods and davits as anchorages, winches and rope hauling systems for lifting and lowering and recovery type fall arrest blocks for rescue.

Order Code: Module 10



Access, Egress and Rescue  
from a Confined Space





# 01.3

## Fall Arrest


Definitions	48
Anchor	50
Connector	51
Harness	54
Training	55
Recommended Solutions	56
Scaffold Solution	56
Tradesman Solution	57




# FALL ARREST

- 1. Anchor
- 2. Connector
- 3. Harness
- 4. Training


## Industry sectors that use Fall Arrest techniques:




Scaffolding



Wind Energy



Tower crane erection and maintenance



High Bay Pallet Racking

## Fall Arrest limiting the distance and effects of a fall

Where a worker requires freedom of movement to climb between platforms, or move around on a structure, then it may not be possible to remove the risk of a fall completely. In these situations it is important to mitigate the consequences of the fall as far as possible. This is a common situation in areas where workers build, maintain or dismantle structures such as Scaffolding, steel frame buildings, tower cranes or racking systems.

Fall arrest systems work by keeping the fall distance and impact forces to within known limits. Different items of equipment achieve this in different ways and understanding this enables users to select the most appropriate method for their application. The fact that this type of protection allows the worker to fall also means that consideration must be given to rescue or recovery of a suspended worker.

The training required for the use of fall arrest equipment should include both theoretical and practical sessions so that users can match their understanding to real life applications. The theory side must look at all aspects from planning through to implementation and rescue.

All fall arrest equipment will limit the impact forces applied to the user to below 6kN. Some

equipment achieves this by limiting the potential fall thus preventing the user gathering momentum. Alternatively equipment can allow the fall to occur and slow the falling user down over a known distance by dissipating the energy generated.

When considering clearance heights users should take into account obstacles such as plant, machinery, structural elements as well as platforms or floor levels. Items that limit the fall distance generally require anchorages above the user to be effective, but are better suited where clearance height is a problem. Where the only anchorages are at or below the users foot level then equipment that can dissipate energy are generally more appropriate, but they will require increased clearance height.

Rescue planning may seem daunting, but SpanSet pioneered the provision of rescue solutions designed for one worker to rescue another. Rescue solutions range from improvised methods utilising available access equipment, to the complex and bespoke techniques of the emergency services and through to simple pre assembled kits. The key is selecting the right one for the user and their application.

### 1. Anchor

The anchor point for a Fall Arrest System must be able to withstand the shock load generated as the fall is arrested. Therefore in every situation SpanSet recommends that the worker selects an anchor point that is unquestionably sound, or an anchor device which is tested to EN795.

### 2. Connector

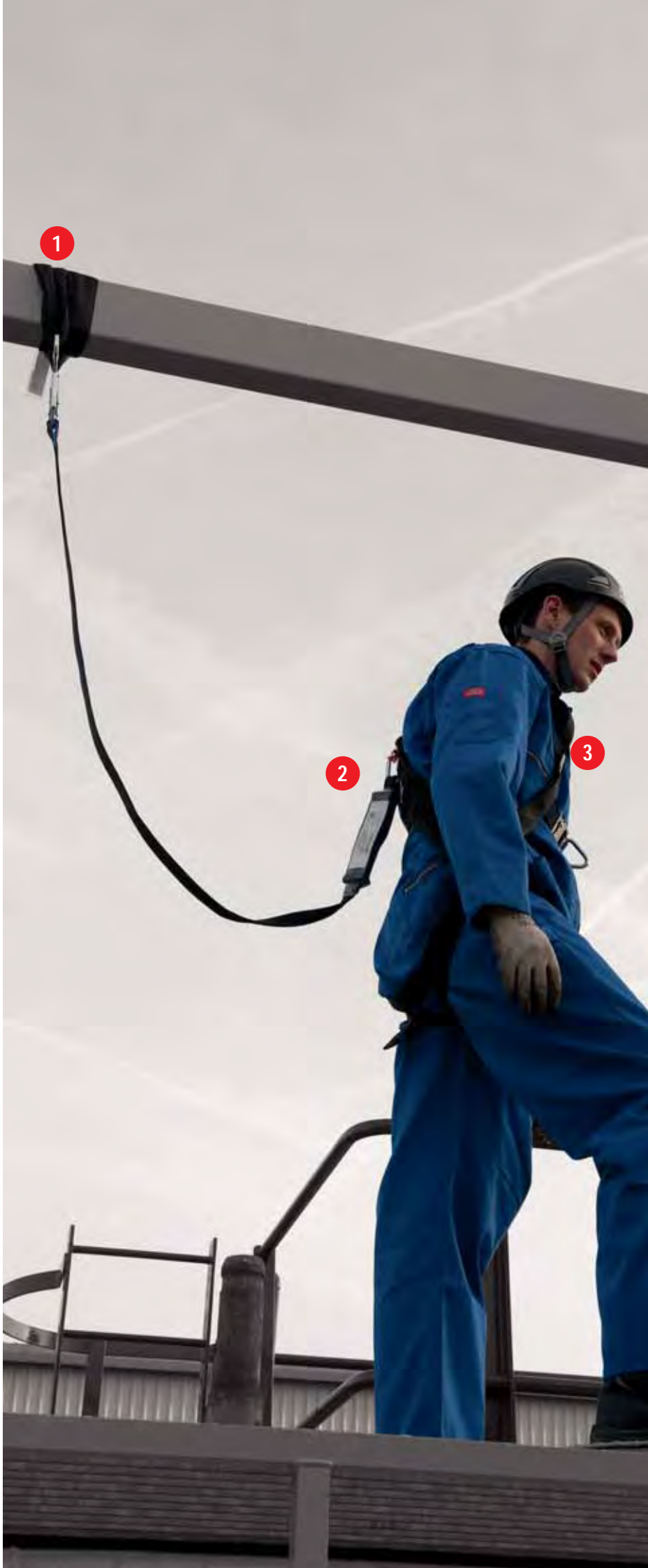
The connector in a fall arrest system performs the critical function of arresting the workers fall. The aim is to have as little “slack” as possible, so that the connector will begin to arrest the fall as soon as possible. However some connectors also include energy absorbing elements that are able to reduce the impact force of the fall when there is significant “slack” in the system. The choice of connector may be influenced by the clearance height available below the user

### 3. Harness

The harness must be able to support the workers body in the correct position as the fall is arrested. The European standard ensures the harness will always be strong enough to do its job, however it is essential that the worker has the correct size of harness for it to function properly. It must also be practical and comfortable in use while the worker is moving and carrying out their normal tasks.

### Training

Training is the essential final element in a Fall Arrest System, because of the inherent risks of incorrect use. The worker must be certain that each of the components already described has been chosen correctly and that they are fully competent in their use. If the worker is not able to understand the correct use, or the potential consequences of misuse, then the employer has a legal responsibility to address this through training. There are no second chances when a worker falls. SpanSet has a range of modular training courses that are designed to be added together to achieve the appropriate level of training for your work force.





FALL ARREST

1. Anchor

2. Connector

3. Harness

4. Training



FALL ARREST

1. Anchor

2. Connector

3. Harness

4. Training

Fall Arrest Lanyards

Horizontal Safety Line


Suitable for:

Construction

Steel Erection

The Horizontal safety line is a temporary anchorage line tested to EN:795 class C. The line can be attached to structural elements such as steel columns for example using attachment slings. It is adjustable and can be set at lengths of up to 20m. The line is tensioned with the integral ratchet and a tension force indicator shows when installation is correct. The line can be used with most work restraint, fall arrest or work position systems.


Order Code: HSL-HH  
HSL-LL



Patent Number:  
GB 2 269 623B

The T-Pak Adjustable fall arrest lanyard offers increased security when compared with standard fall arrest lanyards, combining the flexibility of a full length fall arrest lanyard with the adjustment required for work restraint. By adjusting the length the lanyard can be used for work restraint applications such as protection when working in mobile platforms. Alternatively shortening the lanyard length can be used to reduce the potential fall, thus increasing the users safety. SpanSet recommend captivated auto lock karabiners for security, but other connector options are available.

Order Code: TPA027



T-Pak Adjustable Fall Arrest Lanyard


Suitable for:

Roof Work

Powered Access

WRAPPA

Suitable for:

Scaffolding


The Wrappa sling was specially designed to provide scaffolders with the ability to create overhead anchors while building scaffolds. The Wrappa can be attached to any suitable vertical scaffold tube. The colour coding clearly identifies that it has been placed correctly. It can be manoeuvred to the ideal height. Fall protection equipment such as fall arrest lanyards can be anchored to the Wrappa and if subjected to impact forces it locks in position.

Order Code: WRAPPA



The T-Pak Elasticated fall arrest lanyards are designed for use where the worker needs a full 2m lanyard and an adjustable lanyard is not practical for example climbing structures. The elasticsation prevents any slack in the lanyard forming a trip hazard by bunching when it is not in tension. Double Legged fall arrest lanyards are used where the worker needs to move from one anchor point to another, for example traversing, or climbing a structure. This lanyard has a screw link for security at the harness end and a double action scaffold hook at the anchor end for work on scaffolds.

Order Code: TPDE680



T-Pak Double Elastic Leg Fall Arrest Lanyard


Suitable for:

Scaffolding

Tower Crane Erection and Maintenance


CAPCHA

Suitable for:

Vehicle Fall Protection


CAPCHA is an overhead tensioned wire anchorage system originally designed for installation into curtain sided vehicles and vehicle workshop bays. The system is rated to 2 man use and is typically supplied with a retractable type arrester attached to a shuttle that runs freely along the wire. Workers can retrieve the lifeline by using a pull down cord, so that they are protected as soon as they leave the ground. By using a DRIVER harness, or a harness with an Extension Strap, the worker can easily attach the lifeline to the rear attachment point on their harness.

Order Code: CAPCHA




Atlas lanyards are the first full length fall arrest lanyards available for workers up to 140kg and are designed for use with the Atlas harness range. These products are designed for workers up to 140kg, who are not catered for by the basic European Standard of 100kg. The energy absorbing pack has been designed to arrest the fall of a worker weighing 140kg within the normal requirements of EN355. It also performs safely for workers of less than 100kg, so there is no danger in a smaller worker picking up this lanyard. The ATLAS lanyards are available in a variety of configurations matching the options available for the T-Pak range.


Order Code: TITAN ROPE 140/030



ATLAS Lanyard

Suitable for:

Scaffolding

Steel Erection



# FALL ARREST

- 1. Anchor
- 2. Connector
- 3. Harness
- 4. Training

Retractable Arresters  
(Blocks)



## Mini block

Suitable for:



Vehicle Fall Protection

The Mini Block is a compact retractable fall arrester designed for applications where the worker or where a lightweight unit is required.

Supplied with 2.5m of webbing the Mini Block is ideal for use in areas with low clearance weights.

Order Code: ERL2



## Lightweight Fall Arrester

Suitable for:



Vehicle Fall Protection



Scaffolding

This light weight retractable type fall arrester is ideal for applications where weight and size are critical. The Lightweight Fall Arrester is longer than a Mini Block, but more convenient than a full weight device. The webbing lifeline remains in constant tension ensuring that the device is able to limit the clear height required and the impact force on the worker in the event of a fall. Simple for the worker to inspect this device only requires an annual service.

Available in 3.5m, 5.5m,7m and 12m lengths.

Order Code: 5/2963



## Heavy Duty Fall Arrester

Suitable for:



Capcha



Oil & Gas

This retractable type fall arrester is designed for aggressive environments where the shock proof aluminium housing and galvanised steel lifeline are able to perform better than plastic and webbing versions. The large anchorage handle makes carrying easy and the device can either be mounted on a large scaffold hook, or an attachment sling.

Available in 12m, 18m, 24m and 33m lengths.

Order Code: 5/2974



# FALL ARREST

- 1. Anchor
- 2. Connector
- 3. Harness
- 4. Training

Guided Type Arresters  
(Vertical Line Systems)

This is a temporary flexible line type fall arrest kit for use when accessing vertical ladders or structures, such as telecoms masts and stock picking cranes in pallet racking. The anchorage line can be positioned using the anchorage sling and tensioned using the rope cleat. The buddy fall arrester is supplied with a short attachment lanyard and can either be permanently fitted to the anchor line, or permanently secured to the workers harness. The kit comes in a shoulder bag for transport and storage.

Order Code: CLIMA VL 30M



## CLIMA Vertical Line

Suitable for:



High Bay Pallet Racking

SpanSet is able to supply permanently installed guided type fall arrest systems for protecting workers in environments where workers must climb to access their work place. Typically these systems are installed where the worker has to climb a fixed vertical ladder to access a work platform, however they may be used for access on structures such as towers and masts. Typical installations include High Bay Pallet Racking Cranes, Roof Access, Telecoms Masts and Wind Turbines.

Order Code: VERTICAL LINE SYSTEM



## Vertical Line System

Suitable for:



Telecoms



Oil & Gas

The Buddy is a an EN353-2 fall arrest device for use on EN1891 semi-static rope. The device can be used with an addition lanyard up to 500mm long. This device is suitable for use as a back-up in a work positioning system, or can be used as the primary protection in a fall arrest access system. The Buddy is the device used in the CLIMA vertical Line system.

Order Code: 5/2697



## Buddy

Suitable for:



Industrial Rope Access



# FALL ARREST

- 1. Anchor
- 2. Connector
- 3. **Harness**
- 4. Training



# FALL ARREST

- 1. Anchor
- 2. Connector
- 3. Harness
- 4. **Training**

For information and booking:  
[www.spanset.co.uk/training.shtml](http://www.spanset.co.uk/training.shtml)

## 2-X Harness

Suitable for:



Facilities  
Maintenance



Tower Crane  
Erection and  
Maintenance

The 2X harness is the tool of choice for many industrial workers. Light in weight and constructed from high quality webbing, with polished fittings it is comfortable to use, providing security and support when required. The construction includes a stiffened rear triangle for shape and pictorial fitting instructions on the label that combine to make the harness simple to fit. The front and rear attachment points are ideal for work restraint or fall arrest applications and variations are available with additional features such as wear protection on the shoulders for Scaffolders. The 2X is aimed at users of up to 100kg. Larger users should consider the Atlas Harness.

Order Code: 2-X



A foundation theory based module for anyone involved in work at height using Personal Fall Protection Equipment (PFPE). The course is designed to give operatives an understanding of the principles for the selection, use and maintenance of PFPE and the associated legislation. The course will also provide supervisors and managers with a valuable insight into the requirements of their staff when working at height. With all work at height training it is essential that the theory elements are combined with practical sessions. The module 1 can be combined with a wide variety of practical Modules to tailor the overall course to your requirements.

Order Code: HS Module 1



## ATLAS

Suitable for:



Steel Erection



Scaffolding

The Atlas harness is a 2 point full body harness designed for larger users. European Standards are currently based around testing using 100kg masses. The Atlas harness conforms to all aspects of the standard using both 100kg and 140 kg masses. With a heavier duty construction wider range of adjustment front and rear attachment points the Atlas harness is suitable for work restraint and fall arrest applications. Users selecting the Atlas harness should ensure that all other components in their system are also rated for a larger user. SpanSet have a full range of suitable products and will be happy to provide advice.

Order Code: ATLAS 136



This practical module is designed for workers who are using temporary fall arrest equipment to access or protect their work. On completion of the course they will be able to carry out pre-use checks, install and use their own personal fall arrest equipment and systems. The course is aimed at workers from a range of different environments, for ample construction, offshore energy, or facility maintenance.

Order Code: HS Module 2



## EXCEL 2-X

Suitable for:



High Bay  
Pallet Racking



Wind Energy

The EXCEL 2-X is a premium harness for those who require additional comfort and features. The padded back and shoulders spread the pressure from the webbing across the body. The quick-loc buckles and defined structure provided by the padding make fitting fast and simple. The front and rear attachment points are ideal for work restraint or fall arrest applications. The EXCEL 2-X is aimed at users of up to 100kg. Larger users should consider the Atlas Harness

Order Code: EXCEL 2-X



This training module is a theory and practical enhancement of the foundation Module 1. The course is intended for workers who will be made the nominated competent person for maintenance of personal fall protection equipment. On completion of the course workers will be able to inspect simple personal fall protection equipment, maintain records for the equipment and have an awareness of the manufacturing and testing requirements for new equipment. Trainees should also be assessed by their employers to ensure they also have the required experience and aptitude.

Order Code: HS Module 7



## Practical Use of Personal Fall Protection Equipment

Suitable for:



Roof Work



Vehicle Fall  
Protection

## Competent Person Practical Inspection and Record Keeping

Suitable for:



Roof Work



Vehicle Fall  
Protection



FALL ARREST

Scaffold Solutions

1. Anchor

2. Connector

3. Harness

4. Training



During the erection and dismantling of scaffold structures it is often necessary to use personal fall protection. The choice of equipment should take into account the demands of the scaffolder as he carries out his work. The Spanset Scaff kit comprises of a full body harness with a rear attachment and reinforced shoulder pads. This helps keep equipment out of their working area and adds comfort / durability when carrying scaffold tubes. The lanyard incorporates a steel scaffold hook and is 1.75m in length plus connectors. Users can attach the lanyard directly onto tubes and have sufficient reach to carry out most activities.

For many workers carrying out routine tasks Work at Height can form a part of their role. Providing adequate protection for these workers can be difficult as the work often varies depending upon their task. The SpanSet Tradesman solution provides a variety of options in one compact kit. The harness has front and rear attachment points and is simple to fit. The lanyard supplied has coloured adjustment loops that allow workers to reduce falls or even prevent them altogether making it ideal for fall arrest or use in mobile platforms. To ensure the lanyard can be anchored securely it is supplied with an autolock karabiner and a sling for attaching to larger structures.



FALL ARREST

Tradesman Solutions

1. Anchor

2. Connector

3. Harness

4. Training

Training

Training code: HS Module 1+2



- Module 1 - Height Safety Equipment Appreciation and Inspection (See p. 25)



- Module 2 - Practical Use of Personal Fall Protection Equipment (See p. 51)

Suitable for:



Scaffolding

Scaffold Kit

Order Code: SCAFF KIT

- Autolock karabiner for anchorage to the platform
- Adjustable lanyard to match the platform size being used
- Full Body harness for security
- Training on pre-use checks and correct use



Lanyard Parking Point



Protective Carrying Bag



1-X Harness  
(See Page 28)



Rope Adjustable Restraint Lanyard  
(See Page 27)

Tradesman Kit

Order Code: TM KIT

- Attachment sling for anchoring to steelwork
- Work Position Line to limit movement and prevent falls
- Adjustable Fall Arrest Lanyard for use with fixed line systems
- 2-X Harness for safe access and security while working
- Training on pre-use checks and correct use



Attachment Sling  
(See Page 26)



Protective Carrying Bag



2-X Harness  
(See Page 54)



T-PAK 3 Loop Lanyard  
(See Page 27)

Training

Training code: HS Module 1 + 2



- Module 1 - Height Safety Equipment Appreciation and Inspection (See p. 25)



- Module 2 - Practical Use of Personal Fall Protection Equipment (See p. 51)

Suitable for:



Roof Work



# 01.4

## Rescue and Evacuation

Definitions	60
Evacuation	62
1 <sup>st</sup> Response Rescue	63
Emergency Response Teams	64
Emergency Services	65



# RESCUE AND EVACUATION

Evacuation  
1st Response Rescue  
Emergency Response Teams  
Emergency Services

## Industry sectors that require Rescue & Evacuation:



Construction



Telecoms



Offshore Oil and Gas



Emergency Services

## Emergency Response – Why SpanSet can help you find a solution?

If you have selected a method of working that could result in a worker being suspended in a harness, for example fall arrest, or work positioning techniques, then you must consider the rescue implications.

Rescue for personnel suspended at height is an issue that needs addressing for workers, whether they are at 2m or 200m. Traditionally a great deal of emphasis has been placed on this area by those working in extreme environments and quite rightly so. It also applies however to areas that appear more straightforward, but in these areas it is seldom addressed.

Unconsciousness or death can occur to a suspended casualty even though they may not be injured after their initial fall. This is due to a decrease in the effective circulation of oxygenated blood around the body caused by a combination of factors, such as body position, compression by the harness and a lack of muscle pumping of venous blood.

If the worker is able to move, or relieve the pressure points, then the side effects can be

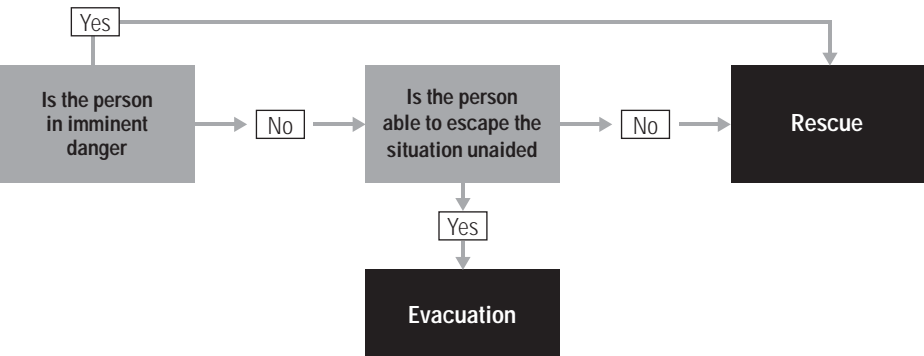
dramatically reduced. However in the case of an unconscious worker the side effects continue unchecked and rescue is the only option. The time it takes for this condition to affect a person can vary greatly, so having an effective solution at hand for a speedy resolution is essential.

There are several approaches to rescue provision, 1st Response Rescue, Emergency Response Teams and the Emergency Services, each approach having its own merits and disadvantages. The rescue equipment can also take many different forms all with different levels of risk, training requirements, aptitude and commitment.

It is therefore important to identify the solution that is right for your application. In order to do this you must consider all the variables such as the equipment they are using, where they are using it and the capability of the users. The GOTCHA™ Rescue Range has been designed to provide simple, pre-assembled solutions for a variety of applications.

## Another aspect of emergency planning that can be confused with Rescue is Evacuation.

A useful definition between Rescue and Evacuation is:



## Choosing the right rescue solution for your workers

**1st Response Rescue**  
+ Available as an on-site rescue solution  
+ Immediate response  
+ Often application specific  
+ Can be carried out safely by a fellow worker or supported by the Emergency Services  
- Requires a commitment from fellow workers  
- Workers require training and refresher opportunities for it to be effective  
This is a great solution for short term tasks or for contractors who need to provide a self contained solution for work at height.

**Emergency Response Teams**  
+ Available as an on-site rescue solution  
+ Fast response  
+ Should cover all issues on the specific site  
+ Carried out safely by staff selected and trained for the purposes identified  
+ Able to work alongside the Emergency Services  
- Requires a commitment from the site to set up a team and maintain its currency  
- Requires constant appraisal to ensure new work tasks can be covered  
This can be an expensive option, however larger sites may prefer this option as the team are able to cover many different work areas or tasks.

**Emergency Services**  
+ Equipped to cope with a wide range of situations  
+ Professional personnel  
+ Skills and knowledge regularly refreshed  
- Should not be considered as a first response solution for work at height  
- Availability cannot be controlled by the site  
- Response times will vary depending upon external factors  
- Site specific issues may only be possible with consultation  
The Emergency Services provide an excellent service, but are only able to address issues that they are aware and trained to perform. This is an option that many workers rely upon without actually checking that the service is capable of meeting their expectations.

- 1. Casualty**  
What we know:
- They are suspended from an anchor point
  - They are wearing a full body harness
  - They are at risk from the effects of suspension
  - Whilst suspended it is virtually impossible to provide even basic first aid
- 2. Rescuer**  
What is required:
- They must address their own safety first
  - They must be able to act calmly and effectively
  - They must have regular practice in the techniques for rescue
  - They should reassure the casualty
- 3. Equipment**  
What is required:
- It must recover the casualty to a point of safety with minimal risk to the casualty or rescuer
  - It must be simple to operate
  - It must be designed for the job it is being asked to perform







GOTCHA EVAC II

- Suitable for:
-  Facilities Maintenance
  -  Powered Access

The GOTCHA EVAC II is a pre-assembled kit that can be used for personal evacuation or assisted evacuation of a casualty from high or remote locations. The kit comes complete with an anchor sling capable of attaching to a wide range of structures, all terminations are sewn for security. There is an integral rope protector that can be set at any required location and the descent device allows the user to control their own rate or stop as required. This kit is commonly used by experienced workers on high level access platforms, such as cradles or tower cranes.

Order Code: SHARK TC





The GOTCHA ORIGINAL was the first pre assembled remote rescue kit. Designed for rescuing a suspended casualty from Fall Arrest lanyards, Rope Safety Lines and Fall Arrest blocks, all possible from a point of safety. Casualties can either be raised or lowered to the nearest point of safety, with casualties initially raised to release their original attachment preventing the need for cutting. The kit comes complete with an anchor sling capable of attaching to a wide range of structures, all terminations are sewn for security, the kit is adaptable for different heights of anchor point, colour coded for simplicity and includes an extension pole for delivery or the optional GRABBA for use with Rope Safety Lines or Fall Arrest blocks.

Order Code: GOTCHA KIT





Patent Number: GB2376009

GOTCHA ORIGINAL Kit

- Suitable for:
-  Scaffolding
  -  Oil and Gas

GOTCHA CRD Kit

- Suitable for:
-  Tower Crane
  -  Wind Energy

The GOTCHA CRD is a pre-assembled kit that can be used for personal evacuation, assisted evacuation of a casualty from high or remote locations and rescue of a suspended casualty. The kit comes complete with an anchor sling capable of attaching to a wide range of structures, all terminations are sewn for security, and the descent device operates automatically at a constant speed requiring no input from the user. This kit is commonly used by less experienced workers who occasionally access high level working platforms and require a simple rescue or evacuation solution.

Order Code: GOTCHA CRD 100M





The GOTCHA SHARK kit is designed for industrial climbers. The kit comes complete with an anchor sling capable of attaching to a wide range of structures, all terminations are sewn for security, there is an integral rope protector that can be set at any required location and the descent device allows the user to control their own rate or stop as required. In use the rescuer attaches to one attachment, descends to the casualty, attaches them to the second attachment and cuts the casualty free using the unique bladeless cutter. The kit is designed for loads up to 300kg, so when used for two persons still retains excellent levels of control. This kit is commonly used by those working on structures such as towers or pylons where safe egress at the base is guaranteed.



Order Code: SHARK 66M



GOTCHA SHARK Kit

- Suitable for:
-  Telecoms
  -  Utilities

CRD Rescue Kit Practical Training

- Suitable for:
-  Powered Access
  -  Wind Energy

This is a practical based module designed for workers at height and who need to use a pre-assembled rescue and evacuation kit as part of an on site emergency provision. On completion of the course they will be able to do pre-use checks of the equipment, set up equipment for their personal use, carry out evacuation of themselves and a conscious, or unconscious casualty. They will also be given an awareness of different harness options for casualties not wearing a full body harness. Where possible the training will be carried out in a location that replicates the workers own environment.

Order Code: Module HS5C



This is a practical based module designed for tradesmen who work at height and need to use a pre-assembled rescue kit as part of a 1st response rescue solution. On completion of the course they will be able to do pre-use checks of the equipment, set up equipment for their personal safety, carryout a recovery of both conscious and unconscious casualties and have an awareness of post rescue care. Where possible the training will be carried out in a location that replicates the workers own environment.

Order Code: Module HS5A



GOTCHA Rescue Kit Practical Training

- Suitable for:
-  Roof Work
  -  Scaffolding





GOTCHA Casualty Harness

Suitable for:

Tower Crane

Emergency Services

The GOTCHA CASUALTY Harness has been specifically designed for rescue or evacuation where the casualty is not wearing a harness. The harness is simple to fit to both conscious or unconscious casualties with colour coded straps for simplicity, it covers a wide range of sizes from small children to large adults and has a large grab handle on the rear to help orientate the casualty. The harness can be fitted in two ways, as a sit harness for rescue of conscious casualties or by placing it under the casualties arms and knees for additional support when unconscious.

Order Code: CASUALTY HARNESS

The cracker is an ultra lightweight compact hauling assembly. The 6:1 pulley system provides a large mechanical advantage to a rescue who needs to transfer the casualty's weight from one attachment to another. The assembly packs away into it's own integral pouch for easy transportation and deployment. The system is supplied with a compact rope clamp to allow the cracker to be attached to a kernmantle rope. The total weight is only 600g.

Order Code:CRP-6

Cracker

Suitable for:

Industrial Rope Access

Emergency Services

GOTCHA FR Kit

Suitable for:

Offshore Oil and Gas

Emergency Services

The GOTCHA FR kit is designed for professional rescue personnel and enables them to create a wide variety of rescue solutions from a single pre assembled kit. The kit comes complete with an anchor sling capable of attaching to a wide range of structures, all terminations are sewn for security, the kit can be set to lower a casualty or rescuer, but can be quickly changed to create a 3:1 pulley system for raising. It is possible to create tension lines such as aerial runways, carry out cross hauls and by the use of multiple kits allows identical back-up systems to be created.

Order Code: GOTCHA FR Kit

SpanSet is able to offer experienced line rescue teams the option to specify their own bespoke kits from a range of high quality components. Kit will be supplied in waterproof role top kit bags with carry handles, shoulder straps and tamper tagging facility. For further information please contact our Technical Sales Team.

Order Code: HSR5

Bespoke Line Rescue Kits

Suitable for:

Industrial Rope Access

Emergency Services

GOTCHA FR Kit Training

Suitable for:

Offshore Oil and Gas

Emergency Services

The practical based module is designed to enable ERT members or emergency staff to use the FR kit to tackle any situation they are required to provide cover. Team members will be trained to carry out pre-use checks and use personal fall protection equipment to ensure their safety while conducting a rescue. On completion of they will be able to apply the basic functions of the kit to achieve a number of line rescue techniques including: lifting, lowering, work positioning for rescuer, tension lines and cross hauling. Team member will also discuss the implications of suspension on a casualty and the appropriate post rescue care.

Order Code: HSR3

This training module is a theory and practical session designed for Emergency Services personnel who wish to use line rescue techniques to operate safely and conduct emergency recoveries at height. The course covers the pre-use checks and use of personal protection techniques to ensure safe access, egress and work while at height. On completion of the course personnel will be able to select, assemble and use compatible components for a range of rescue techniques. A focus will be placed on using quantified components to create simple systems that can be applied using a range of techniques.

Order Code: HSR5

Line Rescue Training

Suitable for:

Emergency Services

64

65



OTHER SERVICES

Inspection  
Service  
Installations



Annual Inspection & Testing Service

European Standards dictate that all items of PPE for work at height and all safety systems undergo a periodic examination by a competent person. In addition, in the UK, “BS 8437:2005 Code of practice for selection, use and maintenance of personal fall protection systems and equipment for use in the workplace.” Section 13.1.2 –States “Formal inspection procedures should be put in place by employers to ensure that personal fall protection equipment is given a detailed inspection (“thorough examination”) by a competent person before first

use and at intervals not exceeding 6 months (or 3 months where the equipment is used in arduous conditions), and after circumstances liable to jeopardise safety have occurred. SpanSet can perform the thorough inspections required by legislation and/or equipment manufacturers. We can also provide training for Competent Persons and therefore the combination of your staff and our services can increase the safety and ensure compliance.

Installations

For some tasks the measures you employ may be temporary, providing safe working conditions for the duration of the works and removed upon completion. This approach has limitations in that installation and removal of a temporary system may include some risk and can be time consuming. In the case of tasks carried out regularly or repeatedly in locations where access is required more often a permanently installed safety system offers a better solution. The advantages are that

once installed a permanent system provides safe conditions for all users. It is simple to use, easy to maintain and is unobtrusive having very little impact on the surrounding environment. SpanSet installations – the total solution from survey, quoting, supply, installation to periodic testing and maintenance to all BS 7883:2005 – Code of practice for the design, selection, installation, use and maintenance of anchor devices conforming to BS EN 795.



More from SpanSet

SpanSet also design, manufacture and supply a range of

- Safeline Systems
- Vehicle Fall Protection Safeline Systems
- Textile Lifting Slings
- Load Control Equipment

Safeline Systems

Safeline Systems are stainless steel cable anchor systems used as horizontal running lines.

These systems are bespoke designs for the application and can be installed onto roofs, access gantries for cranes and many other locations where a guardrail system is not practical.

A range of brackets enable the system to be fitted to different base materials and to follow any route required.

SpanSet support a network of approved installers who are able to survey, design, install and maintain a Safeline system for you

Vehicle Fall Protection Systems

“STOPPA” is a unique restraint system providing “hands free” secured access over the entire working area of the vehicle.

“CAPCHA” overhead fall arrest system provides an easy to use solution, helping to reduce the risks posed by falls from vehicle trailers.

“CAPCHA” overhead base system – the versatile CAPCHA system can also be adapted to those situations where a permanent height safety arrangement is required at a fixed base.

Textile Lifting Slings

SpanSet offer an extensive range of Lifting Slings including the patented roundsling in the 1970's to the new generation Power Star Websling, the novel Joker hook and also the high capacity 100 tonne MagnumPlus roundsling.

Load Control

The SpanSet name has fast become the acknowledged industry term for industrial load securing systems and as a manufacturer we can offer a wide selection of ratchet lashing systems including the patented ERGO ABS ratchet with a unique step by step tension release system giving you control over the load.

As a company we deal directly with Fleet Engineers and other Transport Professionals offering a range of Garment Rails, Shoring Poles, Winches, Decking Beams and Track.

Training

SpanSet provide training courses to support their extensive product range.

- Working at Height on Vehicles
- Safe Slings & Lifting Appreciation
- Practical Slings Beneath the Hook
- Rigging & Lifting For Workers at Height
- Lifting Equipment – Practical Inspection & Record Keeping
- Load Restraint for Road Transport Vehicles

OTHER SERVICES

More from SpanSet





SpanSet Ltd.  
Telford Way, Middlewich  
Cheshire CW10 0HX, UK  
Tel: +44 (0) 1606 737494  
Fax +44 (0) 1606 737502  
[www.spanset.co.uk](http://www.spanset.co.uk)