

**SpanSet GmbH & Co. KG**  
Juelicher Strasse 49-51  
52531 Übach-Palenberg  
Phone +49 (0) 2451 4831-0  
Fax +49 (0) 2451 4831-207  
Email [info@spanset.de](mailto:info@spanset.de)  
Web [www.spanset.de](http://www.spanset.de)



[www.spanset.de](http://www.spanset.de)

Subject to technical alterations. All rights reserved. No part of this catalogue may be reproduced or processed, duplicated or distributed using electronic systems in any form (print, photocopy, microfilm or any other procedure) without the written approval of SpanSet GmbH & Co. KG. This catalogue has been prepared with all due care; SpanSet GmbH & Co. KG accepts no liability for errors or omissions.

**SpanSet®**

**01**

**Height Safety**  
Lifting  
Load Control  
Safety Management



## SpanSet Germany

**For more than 45 years, people have been trusting us with their lives.**

It was not so long ago that the lives of thousands of people literally hung by a thread day after day – until Volvo begin to install safety belts in its cars. This innovation manufactured from a hard-wearing fabric ribbon, which marked the birth of the company SpanSet, has revolutionised safety technology. According to the motto „lighter, stronger, more flexible“, the range of products was quickly expanded and the quality continuously improved.

We have pursued this principle with consistency and passion, which has made us the innovation leader - in some fields even the market leader - in many areas of industry. When developing new products we always stay focused on the demands of our customers and users, whom we work closely with at all times. The best example of this is Safeline, a fixed-line roof fall arrest system made from rustproof steel that is used as a horizontal fall arrest system and is manufactured in line with customers' requirements for the specific application. We even find highly specialised solutions for very complex applications, such as special products for use in the wind power industry.

In doing so, we benefit greatly from our international orientation. Especially within the borders of the European Union our customers benefit from the close cooperation of the SpanSet group. With a close eye on the canon of the EN standards, we know what users in Europe need and what demands the legislation of the various countries places on those using personal protective equipment.

On the following pages you will find our products and solutions for fall arrest. You will be familiar with many of the products, while some products are new to our portfolio, and others have been optimised, such as the electronic product identification and maintenance system IDXpert®, which simplifies the mandatory inspections of your (not only personal protective) equipment for you.

Should you miss a product in our very comprehensive portfolio or if you are in search of a very special solution, simply contact us directly or contact one of our company representatives.

Patrick Schulte  
Managing Director

Hans-Josef Neunfinger  
Managing Director



# Table of Contents

<b>The company history</b>	<b>2-3</b>	Trilock karabiner	29	<b>Fall arrest accessories</b>	<b>43</b>
<b>The SpanSet-recipe for success</b>	<b>4-5</b>	Screw karabiner NZ09	29	Parking Point fixing point	43
		Twistlock karabiner	29	Tool lanyard	43
		Screw karabiner DZ09	29	MT-3 glove	43
<b>Height safety measures</b>	<b>6-16</b>			Extension strap	43
Safety solutions according to your needs	6	<b>Rope restraint lanyards</b>	<b>30-31</b>	Helmet	43
Assessing and planning work at height	7	WRI-09E03 restraint rope	30	Bags/duffel bags	43
Laws, provisions and directives	8-9	Horizontal work position line "Clima WPL"	30	Seat board	43
Take the right measures	10-11	Fall arrest system "Clima VL"	31		
Calculating the fall heights for the SP140 series	12-15	Rope restraint lanyard "WPLANY 2M"	31	<b>Rescue systems</b>	<b>44-45</b>
Education and training Height Safety	16			When a rescue situation arises!	44
		<b>Anchor devices and points</b>	<b>32-37</b>	D2 Evacuation and descender device	44
<b>Harnesses</b>	<b>17-20</b>	HD Tripod	32	GOTCHA™ Basic Kit	45
Why full body harnesses from SpanSet?	17	Winch for HD Tripod	32	GOTCHA Shark™ Kit	45
1X-harness	18	Bracket for SVLRB	32	GOTCHA™ CRD Kit	45
2X-harness	18	Bracket for winch	32		
2X-harness „EXCEL“	18	Attachement point "DUO" and "QUATTRO"	33	<b>Rescue systems accessories</b>	<b>46-47</b>
2X rescue harness	19	Single anchor point "Starpoint"	33	Suspension loop trauma harnesses	46
2-point harness „Atlas“	19	Free-standing anchor point „TETRAGON“	33	Suspension relief straps	46
Harness „Clima“	19	Roof hooks for pitched roofs	34	Casualty harness	46
„MWEF-Pro“/„MWEF-Pro 2“ harness	20	Proof Loader Kit	34	Rescue cracker	46
„ScaffPro“ harness	20	SpanAnchor	34	Rope clamp	46
		Anchoring beam	34	Footloop	46
<b>Harnesses jackets</b>	<b>21</b>	Beam hoist	35	„Buddy“ fall arrester	46
1X-harness jacket (EN 361) „Driver“	21	Beam clamp Corso	35	GRABBA Bag	47
2X-harness jacket (EN 361)	21	Beam clamp	35	Safe Lifting Kit	47
		BMS anchoring sling	35	Spanhoist 12.5	47
<b>Lanyards</b>	<b>22-28</b>	Xtracta series	36		
General functions and benefits of the SP140 range	22	Xtracta SPXT2	36	<b>PPE sets</b>	<b>48</b>
SP140 lanyard series	22-25	Xtracta SPXT5	36	Cherry picker sets	48
Rigid lanyard	24	Xtracta SPXT24	36	Vertical set	48
Elastic lanyard	24	Accessories for the SpanSet Xtracta series	37	Roofing set	48
Adjustable lanyard	24			Special set	48
3-loop system	24	<b>Horizontal safety systems</b>	<b>38-41</b>	„SafetySet E“ PPE set	48
Rigid Y-lanyard	25	Horizontal safety line „ERGO LINE“	38		
Elastic Y-lanyard	25	Tempoline	39	<b>Other product services</b>	<b>49</b>
3-loop Y-system	25	Safeline	40	Inspection service	49
General functions and benefits of the DSL2 range	26	HT8	41	Prints/patches	49
DSL-lanyards series	26-28				
		<b>Retractable type fall arresters</b>	<b>42</b>	<b>More from SpanSet</b>	<b>50-51</b>
<b>Karabiner</b>	<b>29</b>	Saverline	42		
Screw karabiner ML 2	29	Saverline with rescue lift	42		
Twistlock scaffold hook	29				



**How the seat belt became the  
standard for safety.  
The history of SpanSet.**



**50 years ago the world was very different, but not necessarily better. For example, cars had no seat belts yet. But the hour had come for a small Swedish belt weaving company.**

Today it is hard to imagine that a few decades ago, most cars were not equipped with 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 belt 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 the manufacturer 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 the

Amazon and 544 models 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 began to install it. Thanks to the great demand, Erik Ehnimb, co-owner of Klippan, was able to found the SpanSet company in Malmö in 1966. The straps produced by SpanSet were quickly and enthusiastically put to use in many other areas in which chains and wire ropes had previously been used, for example for the transport of paper rolls. The customers appreciated the enormous load-bearing capacity of the new lashing and lifting slings.

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



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

### 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 developed on the basis of the products.

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 involved.

SpanSet was part of the team that drafted the BS8454:2006 standard for the provision of training and education for working at height, and was the first company to be certified to this standard by the BSI. This is how something becomes the norm: by setting a standard and by doing so repeatedly for more than 40 years.

### ... and how the norm influenced new inventions

This also means that we are often called upon for advice during the development of new products, especially if these products are eventually to be transported and secured by our systems. We also offer support as a partner for safety training and consultation.

This is how SpanSet went from small belt weaving company to an international forerunner in height safety, load control, lifting and safety management – through exceptional performance and recognition.

### One development follows the next

In 1992, the horizontal safety line was developed: the first temporary horizontal anchorage line to em-

ploy a webbing and ratchet system for pretension, and to offer predictable cushioning during a fall. The ABS pressure ratchet, another global novelty, appeared in 1995. This allows a controlled release of the tensioned ratchet, so that goods at risk of falling can also be unloaded safely.

In 1997, SpanSet launched the Power sling series as well as a new generation of round slings with textile fibre reinforcement in the protective sleeve for maximum tear resistance – capable of bearing up to 50 tonnes even in those days.

In 2001, the GOTCHA range was launched – a range of height rescue systems. The first pre-assembled rescue kit offers a descender device and enables the rescue of a suspended worker.

In 2002, SpanSet launched the Tension Force Indicator (TFI) which is integrated in the pull ratchet and indicates the pre-tensioning force. This allowed the use of lashing equipment to become safer and more economical. The TFI is also incorporated in the horizontal safety line.

SpanSet has also been offering height safety training courses since 2002.

SpanSet developed the first collective measures for working at height in close cooperation with clients in the international oil and gas industry. The developments and optimisations became the first product in the field of cooperation projects.

In 2005, the Proof Loader Kit was launched – a complete anchorage and testing system for workers to quickly establish and quantify their own anchor points in concrete or natural materials.

In 2008, SpanSet celebrated yet another premier: the ATLAS harness, the first complete range

of products developed specifically to meet the requirements of larger workers.

### SpanSet's recipe for success: Always be one step ahead!

We are very 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 inspection replaced his professional scepticism with a friendly smile after seeing that the cargo was secured with our lashing straps.

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

The SpanSet brand stands for something – not only for meeting international safety standards, but also for raising them time and time again. For example, we contributed significantly to the development of the European Standards 1492-1 and 1492-2 for lifting technology and of the guidelines of the VDI 2700 for load control. In the past, in the present and in the future.

This is precisely what we stand for with our products: service and advice for more safety – more than is demanded today and as much as is possible tomorrow.

That is our goal, our job and our passion. So that those who work with SpanSet can continue to place their trust in us in the future – just like the police.

### SpanSet – Certified Safety

---

## HEIGHT SAFETY MEASURES

---

- Safety solutions according to your needs
- Guaranteed quality



---

### The best for safety

#### **Safety solutions according to your needs**

SpanSet is committed to the development and manufacture of products that meet our customers' needs in the best possible way. We attribute the success of our products to our good listening skills and our policy of continual research and development. This applies to all applications from fall arrest and work position to technical rope access and the Gotcha height rescue system. By closely communicating with our customers from the procurement stage through to the training and implementation stages, SpanSet is able to ensure that the right products and services are in place to satisfy our customers' demands and needs. 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 a holistic strategy for safety solutions, which includes installation, training, implementation, testing and servicing. By offering our customers a comprehensive solution, SpanSet is able to meet the customers' needs and help them develop safer solutions for working at height. This is reflected in the development of rescue systems and training courses: these have been developed to provide skilled workers with a practical solution for personal fall arrest, thus meeting all requirements for working at height.

#### **Guaranteed quality**

Safety is no coincidence. It is the result of a consistent quality strategy. The key period in which the economy as a whole gradually became aware of this important factor was the 1980s. This decade marked the transition from the previous quality control system to systematic, industrial quality assurance. This is not simply another way of saying the same thing, but represents a quantum leap for the industry. In the previous conventional quality control, the final product was tested in terms of its relevant criteria, such as size accuracy, weight, functions etc. Any products that failed to meet these criteria were rejected, and this was no insignificant quantity. As part of an optimisation and controlling process, the industry asked itself how these large quantities could be prevented – while maintaining the same level of quality. The answer was simple: to ensure a consistent level of quality already during the production process and to thus prevent rejects right from the start.

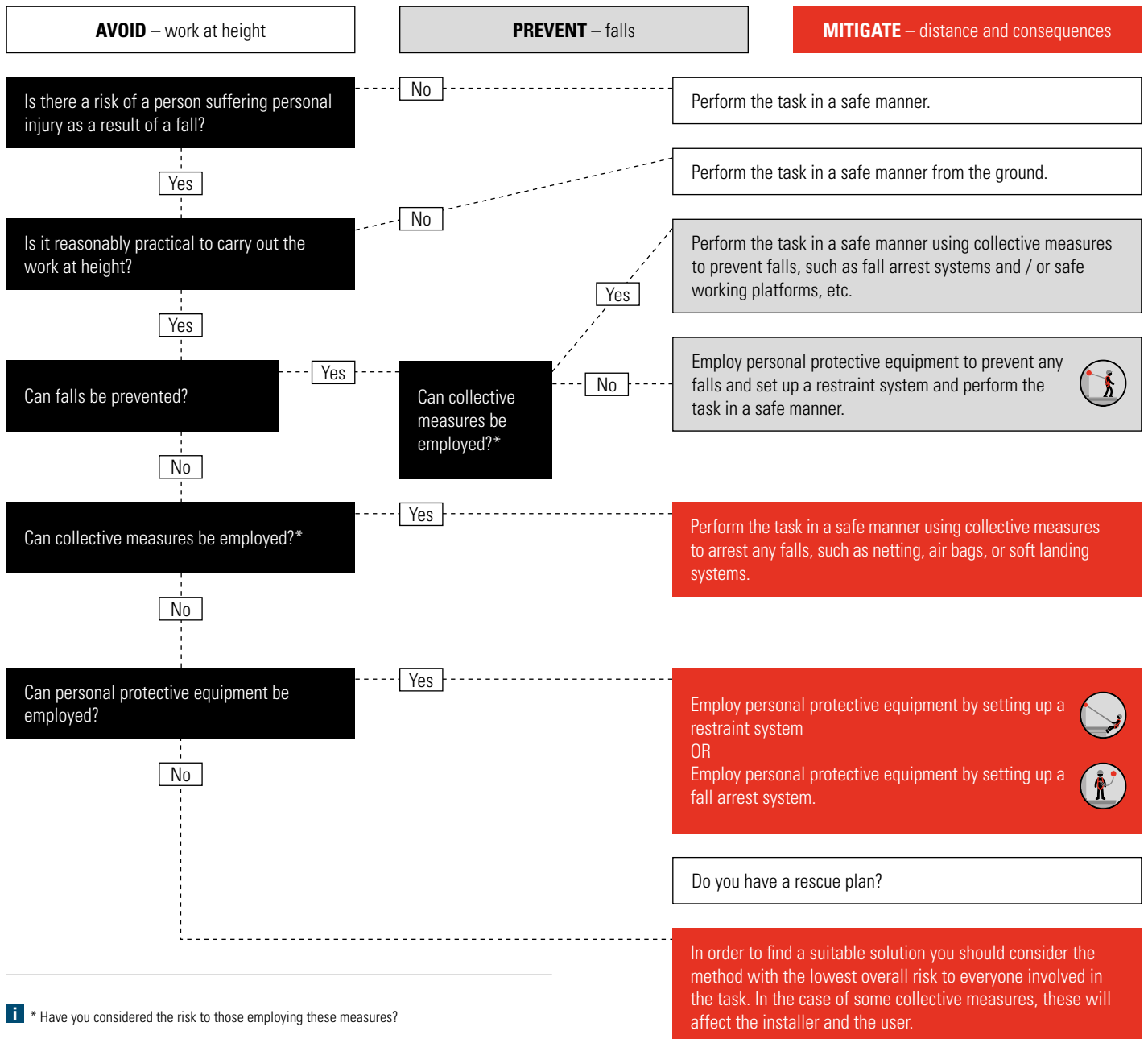
As easy as this answer is, as difficult its implementation is – after all, the possibilities of influencing the production process are seemingly endless. To do this, the starting points first have to be determined and then weighted. SpanSet already established the „Quality Assurance“ department back in 1989 – an separate and independent department equipped with state-of-the-art technology. This meant that quality assurance was finally and inseparably linked to the corporate philosophy. Already in 1994, this consistent implementation resulted in SpanSet's certification: TÜV Rheinland certified a quality management system in line with DIN ISO 9002/ EN 29002. A very welcome confirmation of our efforts, but no reason to have a rest. The SpanSet quality management system is currently DIN EN ISO 9001:2008-certified by TÜV Rheinland. And the process continues. Because quality is a path for which we believe there is only one direction: forward.

## HEIGHT SAFETY MEASURES

- Assessing and planning work at height



### Assessing and planning work at height



**i** \* Have you considered the risk to those employing these measures?



## HEIGHT SAFETY MEASURES

- Laws, provisions and directives



### Laws, provisions and directives

EU Directive 89/686 is applicable in Europe. In addition to this, the Industrial Safety and Health Ordinance (BetrSichV), the Occupational Health and Safety Act (ArbSchG) and the provisions of the BG/ DGUV apply in Germany. All companies in Germany are obliged by law to systematically ensure occupational safety and health protection and to carry out a risk assessment for all workplaces and work equipment.

#### Hazard identification and field of application

When selecting and employing personal protective equipment against falls (PPEaF), the tasks to be completed, the local circumstances and especially the risks to be averted have to be taken into account.

#### The following general rule applies:

Whenever construction, installation, repair and maintenance works harbour the risk of falling, organisational or technical protective measures such as scaffolding, railing or safety nets must in the first place be provided.

Personal protective equipment against falls (PPEaF) is to be used wherever the technical precautions mentioned above cannot be put into practice or whenever this would involve a disproportionate effort.

As a general rule, precautions have to be taken as soon as there is a risk of falling. The BG/DGUV rules provide more detailed examples.

#### Inspection and maintenance

Inspections have to be carried out prior to each use and at least once a year, or even more frequently depending on the operating conditions and the operational situations. They are carried out by an expert and require the utmost care. Elements of the personal protective equipment (PPEaF) that are activated during a fall may only

be reused after an inspection. Webbing or connectors with visible defects must not be reused. Do not take a risk!

#### Discard age/product life cycle

The SpanSet standard products have a life cycle of ten years from the date of manufacture; this also applies if they are not used.

Products have to be discarded if they:

- do not pass a thorough inspection
- are subject to a fall or arrest a fall
- reach the expiry date (end of the life cycle)

#### Maintenance work

Only the manufacturer or a person authorised by the manufacturer may perform maintenance work. Personal protective equipment against falls for which product details cannot be ascertained and that do not bear a CE mark has to be discarded.

#### Store and care

Personal protective equipment against falls is to be stored in dry, clean and light-protected rooms.

#### Evaluation and analysis

We would be glad to assist you in evaluating and analysing the risks of falling at your workplace and offer you our professional advice and support in order to meet the complex requirements placed on safety and compliance with the legal provisions.

#### Check-up service

You can either send us your PPEaF for the yearly check-up or request our mobile check-up service. The inspected, intact products will be marked and registered, and you will receive an inspection certificate after each check-up. We also check third-party products. Just ask us!

#### Training

What use are the most perfect systems if they are not employed properly? For this reason, our commitment to safety does not stop with the development and manufacture of leading safety products. Both in our training centre in Übach-Palenberg and on-site at your facilities we offer

you a one-day basic height safety training. We look forward to teaching you about the various types of equipment, techniques and the correct use of PPE against falls and for rescue scenarios.

Find out more by visiting us at [www.spanset-seminare.de](http://www.spanset-seminare.de) or simply ask us for information!



Simply capture the code with the QR reader using your mobile phone.

[www.spanset-seminare.de/...höhsicherung](http://www.spanset-seminare.de/...höhsicherung)

#### Overview of the relevant EN standards

<b>EN 341:</b>	PPEaF – Descender devices for rescue
<b>EN 353-1:</b>	PPEaF – Guided type fall arresters including a rigid anchor line
<b>EN 353-2:</b>	PPEaF – Guided type fall arresters including a flexible anchor line
<b>EN 354:</b>	PPEaF – Lanyards
<b>EN 355:</b>	PPEaF – Energy absorbers
<b>EN 358:</b>	PPEaF – Work positioning, work restraint
<b>EN 360:</b>	PPEaF – Fall arresters
<b>EN 361:</b>	PPEaF – Full-body harnesses
<b>EN 362:</b>	PPEaF – Connectors
<b>EN 795:</b>	PPEaF – Anchor devices/anchor points
<b>EN 813:</b>	PPEaF – Sit harnesses
<b>EN 1496:</b>	PPEaF – Rescue lifting devices
<b>EN 1497/98:</b>	PPEaF – Rescue harnesses/rescue loops



---

## HEIGHT SAFETY MEASURES

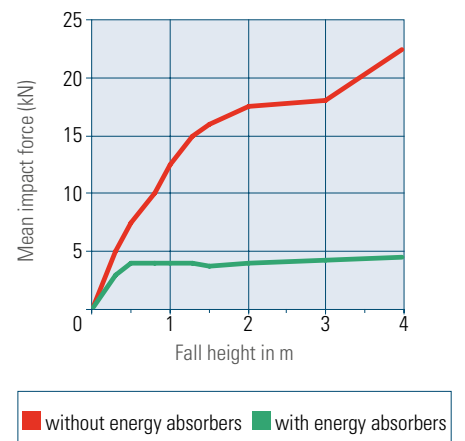
---

- Laws, provisions and directives

**When using personal protective equipment against falls, users must ensure that there is adequate clearance between the anchor point and the floor and that there are no dangerous objects or obstacles below the secured person.**

In principle, the length of the fall arrest has to be such that an impact is avoided. The ability of the human body to absorb energy when falling into a rope is limited, which is why only lanyards with energy absorbers may be used in fall arrest systems. At a vertical drop of 4 m, a person weighing 100 kg is subjected to a force of around 22 kN (approx. 2.2 tons!), which can have fatal consequences.

EN-conform energy absorbers reduce the force to a tolerable level of max. 6 kN (approx. 600 kg). The production of fall arrest products has to be in line with the European standards. Each product has to be labelled and, among other markings, show the CE mark and the number of the EN standard to be complied with. In doing so it must be taken into account that these standards can vary depending on the product and application. For this reason it is important that the user chooses the correct products that meet the requirements of each application.



# HEIGHT SAFETY MEASURES

- Take the right measures



## Take the right measures

### Hierarchy of height safety measures for the use of PPEaF

Before commencing any work activities at height it must be ensured that the best possible and safest personal fall arrest solution was chosen. The decision for the correct work method calls for a careful evaluation of the available alternatives. A hierarchy of height safety measures offers decision-making support. The higher up in the hierarchy, the better and safer the solution is and the lower the potential risk for the user.

#### Hierarchy of height safety measures:

1. Prevention
2. Work restraint
3. Work positioning
4. Fall arrest

Whenever possible, avoid unnecessary work activities at height and always resort to fall arrest systems as the last possible option.

#### Training

When working at height or in confined spaces or in the event of rescue and salvage operations – it is absolutely essential that the user knows and understands the various types of equipment as well as the techniques and the correct use of personal protective equipment against falls. Without adequate training, the use of this material can become a risk.

### Work restraint



A work restraint system involves techniques that restrict the movement of the user. By means of a single secure anchor point, this system secures the person with a lanyard, thus preventing them from falling over the edge or from approaching areas with a risk of falling.



Horizontal

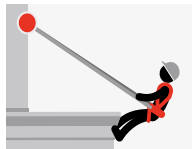


Gentle slope



Working platform

### Restraint system/ work positioning



When using the work positioning system, the user carries out the work in a suspended position and is secured by a lanyard with an adjustable length. If there is a risk of falling, an additional fall arrest system has to be used.



Masts



Towers



Industrial climbing

### Fall arrest



This is the only category that actually allows a fall to take place. By means of a harness and a suitable lanyard with energy absorbers or a fall arrest device, the user is secured such that the fall is arrested in a controlled manner.



Horizontal



Vertical



Towers

### Confined spaces

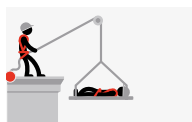


Both when descending into and climbing out of poorly accessible confined spaces with limited space, such as manholes, pits, and canals, the user has to be secured by a second person by means of anchoring devices and height safety devices, and it must be possible to rescue the user in case of an emergency.



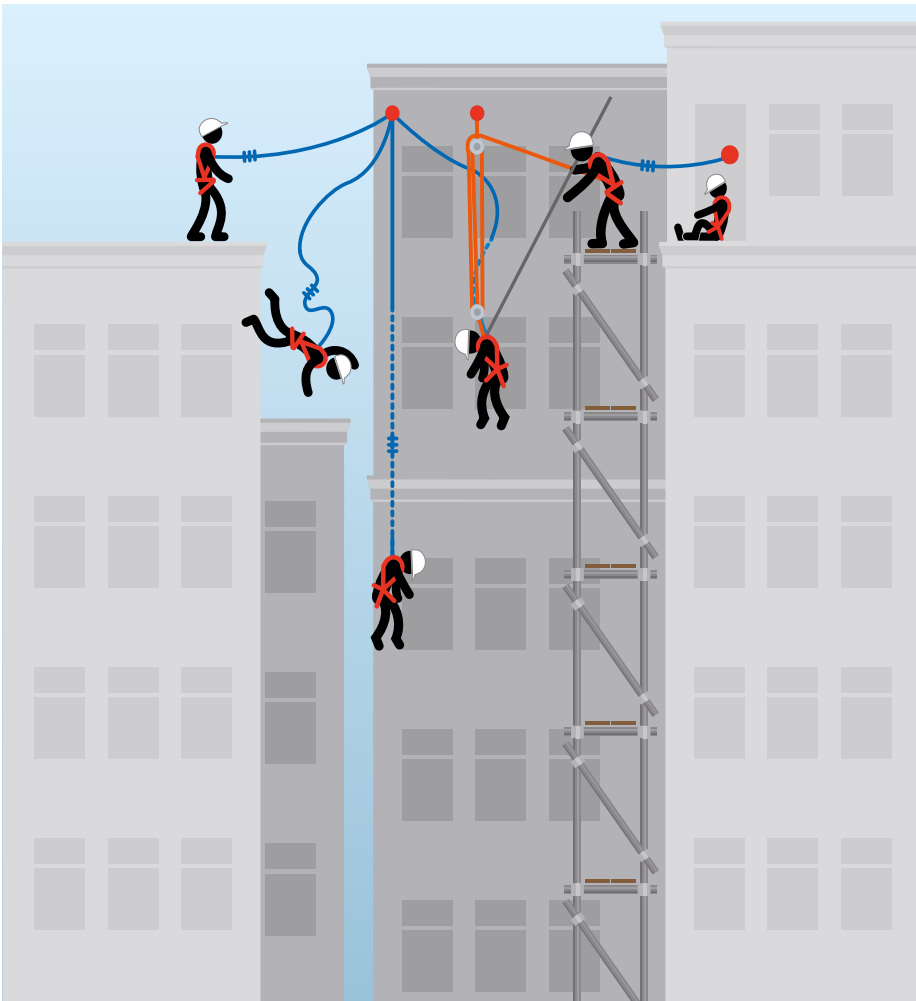
Confined spaces

### Rescue



When performing work at height, the issue of rescue must not be neglected. Depending on the position and situation, the rescue and retrieval of persons who were caught by a fall arrest system require special equipment or rescue techniques.

This aspect has to be taken into account when evaluating the appropriate height safety system.



- Take the right measures

### What you need to know:

#### 1 When performing work at height, always follow the hierarchy of height safety measures:

- Prevention – Prevent unnecessary works at height
- Fixed-line access – Use walkways and scaffolding when available
- Working platforms – Whenever possible, use lifting platforms when working at height
- Collective safety measures such as scaffolding, handrails or safety nets have priority over personal protective equipment

#### There are three main categories for the use of personal protective equipment against falls:

-  Work restraint
-  Work positioning
-  Fall arrest

#### 2 If there is a risk of a fall, you have to be secured

- Never carry out work alone
- Take into account the available clearance

- Plan the rescue measures before commencing work

#### PPE against falls has to include:

- Anchor point acc. to EN 795
- Full-body harness acc. to EN 361
- Fall arrester / lanyard that:
  - arrests the fall
  - reduces the shock absorption impact to max. 6 kN
  - limits the braking distance
  - prevents collision with objects
- Safety helmet acc. to EN 12492 + EN 397

#### 3 Possible consequences of a fall for the affected person

The falling person can suffer an injury as a result of falling onto objects or structures. The resulting shock absorption impact can cause injuries. Prolonged free suspension in the harness can lead to problems.

#### 4 Prolonged suspension in the harness can lead to suspension trauma

If you are suspended in the harness after a fall, pressure points can develop, which can in turn restrict circulation. The key prerequisites for preventing a suspension trauma are: correct fitting and adjustment of the harness.

The chest part must never carry any weight, and the body weight has to rest on the seating part. If the harness is not installed correctly, an orthostatic shock can ensue: the blood collects in the lower part of the body, resulting in an insufficient supply of blood to vital organs.

#### The risk of an orthostatic shock can be prevented by:

- Correct adjustment of the harness; to check the harness for a correct fit, suspension tests can be performed.
- Rapid rescue from the suspended position; the necessary rescue equipment should be at hand for this. For these kinds of work activities, a safety person always has to be available, so never let anybody work alone.

#### First aid in the event of an orthostatic shock

If there is a risk of an orthostatic shock, the injured person must under no circumstances be put in a horizontal position after the rescue, as the backflow of larger volumes of blood into the upper part of the body can lead to cardiac overload. The injured person has to be supported in a crouching position and the doctor should be informed about the possible risk of shock.

#### 5 Rescuing the injured person

**The following general rule applies: rescue operations may only be performed by specially trained professionals.**

Inadequate skills endanger the injured person and the rescuer. In any case, attend to the injured person and call for additional help such as a doctor, fire department, etc. There are different ways of rescuing a person who has suffered a fall. Think about the correct method before commencing your work. Always avoid endangering other persons during the rescue operation.

## HEIGHT SECURING MEASURES

- Calculation of fall heights for the SP140 lanyard series



### Calculation of fall heights based on the EN 355

Each user must ensure that he has enough space below him to ensure he does not fall onto the next part/ground in the event of a fall.

#### But how much space is required?

The required fall height is calculated based on various aspects.

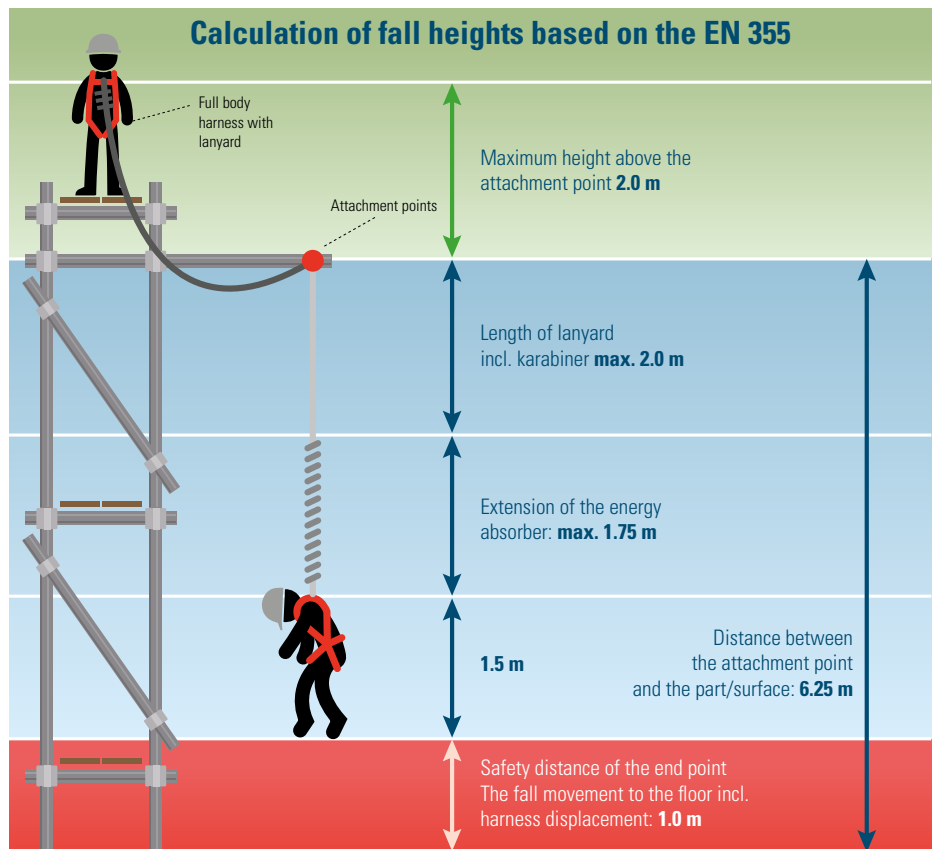
- The height difference between the attachment point and the attachment D-ring of the harness
- Length of the lanyard
- Tear length of the energy absorber
- Size and weight of the user
- 1 m safety clearance (this takes into account any differences in height of the users, harness displacements and a general safety clearance of 0.5 m below)

#### This is specified in EN 355

The path that the energy absorber 'tears' to reduce the stress on the user is always added to the length of the lanyard.

The EN 355 allows a maximum tear length of 1.75 m which equates to a maximum lanyard length of 3.75 m! In the example on the right, the fall height is therefore up to 6.25 m below the attachment point! If this fall height is not available, the user must either shorten the lanyard or select a higher attachment point.

The EN 355 stipulates a maximum tear length at a weight of 100 kg. Therefore, longer lengths must be assumed at higher weights!



#### SpanSet gives you more freedom!

Thanks to the individual calculation of the fall height, SpanSet gives the user much more freedom for using his personal protective equipment.

#### How does SpanSet do this?

The key factor is the SpanSet lanyard. SpanSet can state a defined tearing length depending on the weight of the user and the fall path for

products of the DSL2 and SP140 series. In an extensive series of tests, we verified the precision and consistency of the results without exceeding a load of 6 kN on the body.

We always achieve tearing lengths of less than 1.75 m regardless of the fall path, even for persons weighing up to 140 kg (see table at the bottom left on page 14) This also solves the prob-

## HEIGHT SECURING MEASURES



- Calculation of fall heights for the SP140 lanyard series

lem of people of greatly varying weights using the same lanyards. This improves safety for the user and the line manager/company owner.

SpanSet products allow you to calculate the fall height precisely and reliably. For the user, this means a considerably shorter fall path than comparable products. At the same time, it lies far above the recommendations of the professional association.

### More freedom means more flexibility!

#### Calculation of the fall path

The height between the two attachment points of the lanyard is important to determine the fall path.

We define the chest and back D-ring of your full body harness as the zero-point (see chart). Now measure how much higher/lower your attachment point on the building is. The maximum possible height difference can be  $\pm 2$  m.

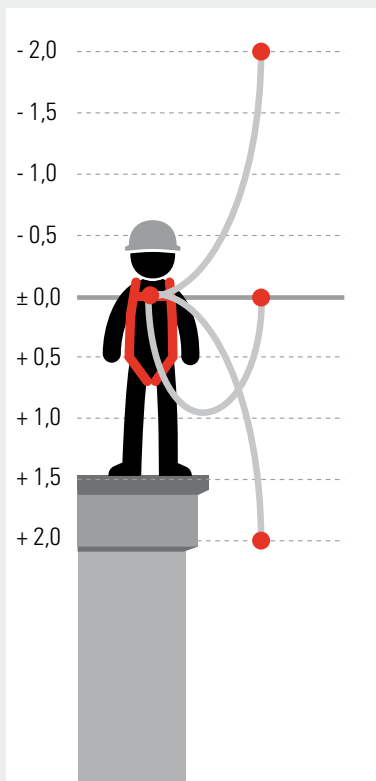
The tearing length of the SpanSet energy absorber with respect to the user's weight and the fall path is shown at the bottom left of the table on page 14. This is used to calculate the fall height (see chart below).

Identification of terms!

**The fall path** is the distance that the user falls before the lanyard becomes effective.

**The fall height** is the required path below the attachment point.

### Fall path

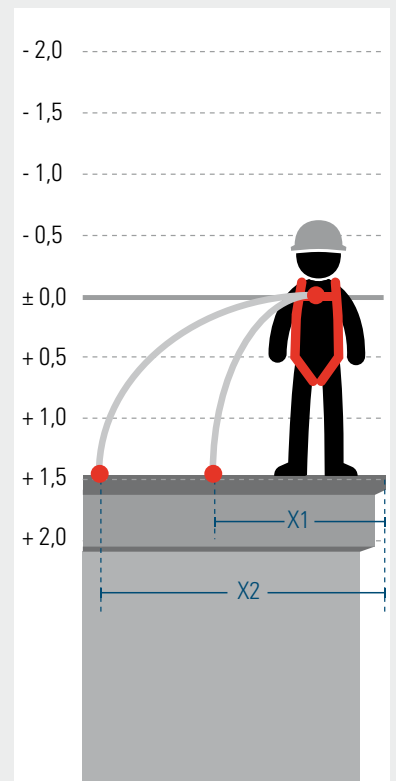


In the case of a straight fall, the fall path is calculated from the length of the lanyard plus/minus the height difference.

In the case of a fall over an edge, the fall path is calculated from the length of the lanyard plus the distance from the edge plus 1.5 m for the body height.

You can calculate your values here:

Length of lanyard	<input type="text"/>	<input type="text"/>	Length of lanyard
+/- position of attachment point	<input type="text"/>	<input type="text"/>	- Position of attachment point (X1/X2)
		<b>1,5 m</b>	+ Body
<hr/>			
= Fall path	<input type="text"/>	<input type="text"/>	= Fall path



## HEIGHT SECURING MEASURES

- Calculation of fall heights for the SP140 lanyard series (examples)

Comparison example:  
Calculation based on the EN 355 and with SpanSet products

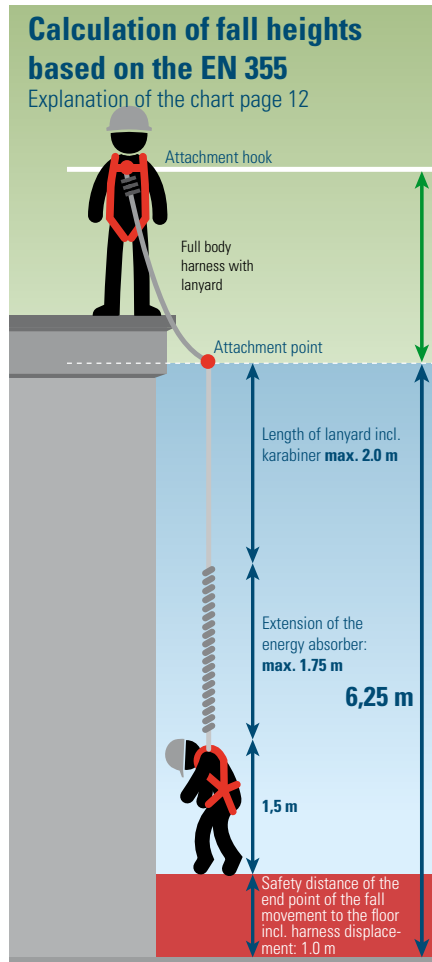
The reference point for the required fall height is always the attachment point on the building. This may be below or above the user.

For the fall height, now add the length of your lanyard to the tear length stated in the table below to the physical height (1.5 m) and the safety clearance.

According to the professional association calculation rules, there is a clearance of 6.25 m from the attachment point to the part/ground. Values for other fall paths and other body weights are not defined by this norm and can therefore not be determined for the user.

SpanSet goes one step further here! When using the SpanSet lanyard SP140, there are much shorter fall paths that may vary depending on the application (see examples 1–3).

This offers added flexibility.

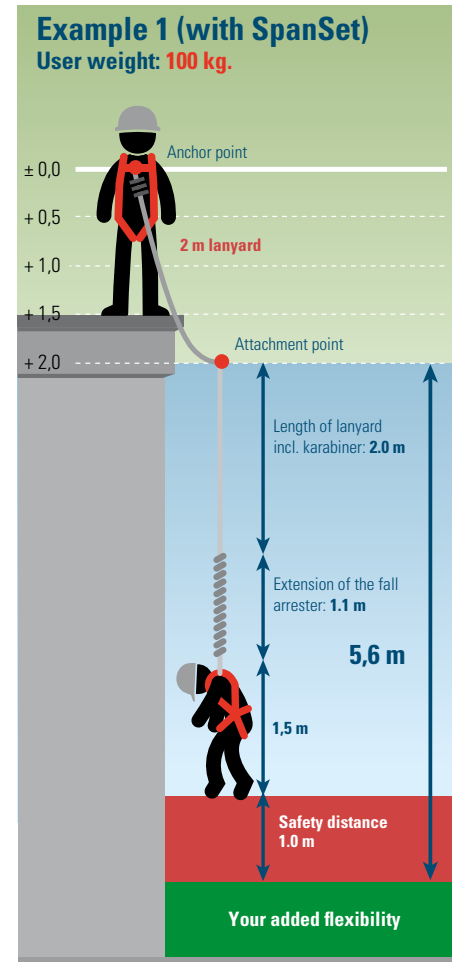


Total fall height acc. to EN 355: 6.25 m

### 1 Example 1:

Your lanyard is attached below your feet (+ 2 m) and you are using a 2 m long lanyard. User weight: 100 kg.

In this case you require 6.25 m space below the attachment point as defined in EN 355. A fall height of only 5.6 m is required with the SpanSet SP140.



Total fall height: 5.6 m

### By how much does the lanyard extend after a fall with respect to the weight?

Fall path	User weight (body weight, tools etc.)				
	60 kg	80 kg	100 kg	120 kg	140 kg
0.0–0.49 m	0.07	0.10	0.14	0.17	0.22
0.5–0.99 m	0.15	0.21	0.27	0.35	0.43
1.0–1.49 m	0.22	0.31	0.41	0.52	0.65
1.5–1.99 m	0.30	0.42	0.55	0.70	0.86
2.0–2.49 m	0.37	0.52	0.69	0.87	1.08
2.5–2.99 m	0.45	0.63	0.82	1.05	1.30
3.0–3.49 m	0.52	0.73	0.96	1.22	1.51
3.5–4.00 m	0.59	0.83	1.10	1.40	1.73

### 1 This is how the fall height is calculated

2 m length lanyard  
+ 2 m attachment point

-----  
4 m fall path

According to Table page 14 fall path at 100 kg  
-> Ripping of the energy absorber = 1.1 m

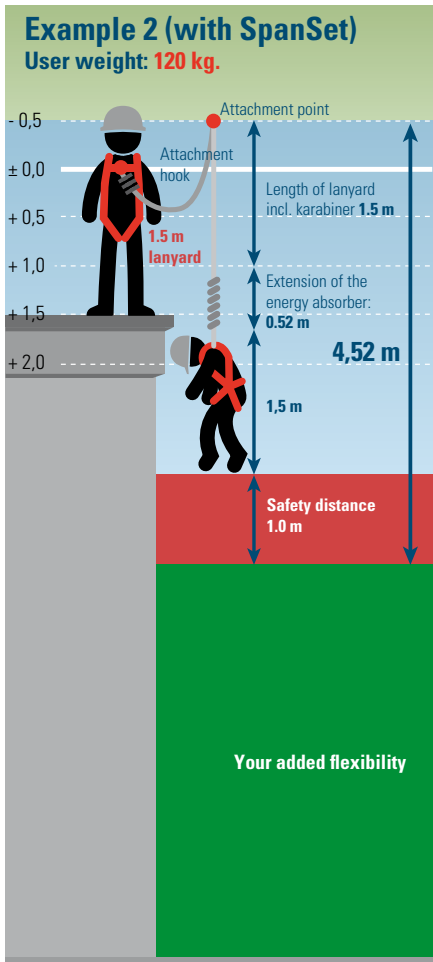
Calculation of the fall height:  
2 m length lanyard  
+ 1.1 m Ripping of energy absorber  
(acc. to Tab.)  
+ 1.5 m body (anchor point)  
+ 1.0 m safety distance

=====

**5.6 m**

### 2 Example 2:

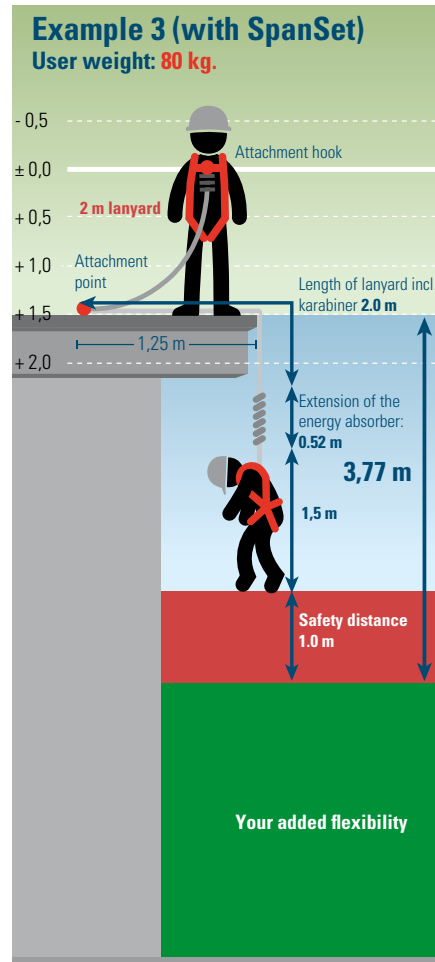
Your lanyard is attached to the attachment point 0.5 m above the attachment D-ring of your harness (- 0.5 m) and use a 1.5 m long lanyard. Fall path is therefore now only 1m. User weight: 120 kg. A fall height of only 4.52 m from the attachment point is required with the SpanSet SP140.



Total fall height: 4.52 m

### 3 Example 3:

Your lanyard is attached at your feet (+1.5 m) but is 1.25 m away from the edge and you are using a 2 m lanyard. Fall path is therefore now only 2.25 m. User weight: 80 kg. With the SpanSet SP140 you only need a fall height of 3.77 m below the standing surface.



Total fall height: 3.77 m

- Calculation of fall heights for the SP140 lanyard series (examples)

Please use edge protectors on 'sharp edges'.

**Caution:** The calculations and the table on page 14 only apply for the SP140 lanyard series.

Do you need any help?  
Call: +49 (0)2451 4831-0

We will be happy to help you to calculate the fall height.

### 2 This is how the fall height is calculated

1.5 m length lanyard  
- 0.5 m attachment point

-----  
1 m fall path

According to Table page 14 fall path at 120 kg  
-> Ripping of the energy absorber = 0.52 m

Calculation of the fall height:  
1.5 m length lanyard  
+ 0.52 m Ripping of energy absorber  
(acc. to Tab.)  
+ 1.5 m body (anchor point)  
+ 1.0 m safety distance

=====

**4.52 m**

### 3 This is how the fall height is calculated

2.0 m length lanyard  
- 1.25 m distance to edge (X)  
+ 1.5 m body (anchor point)

-----  
2.25 m fall path

According to Table page 14 fall path at 80 kg  
-> ripping of the energy absorber = 0.52 m

Calculation of the fall height:  
2.0 m length lanyard  
- 1.25 m distance to edge (X)  
+ 0.52 m ripping of the energy absorber  
(acc. to Tab.)  
+ 1.5 m body (anchor point)  
+ 1.0 m safety distance

=====

**3.77 m**

### Your individual fall height calculation.

Fall path determined from the  
calculation from page 13 =  m

According to Table page 14 fall path at  kg  
-> ripping of the energy absorber =  m

Calculation of the fall height:  
 m length lanyard  
-  m distance to edge (optional)  
+  m ripping of energy absorber  
(acc. to Tab.)  
+ 1.5 m body (anchor point)  
+ 1.0 m safety distance

=====

m



---

## HEIGHT SAFETY MEASURES

---

- Education and training Height Safety

---

### Education and training Height Safety

#### Objectives

The participant receives enough theoretical and practical training to allow him to be familiar with the operational limits of PPEaF and to minimise the risk when using such equipment. He is familiar with the applicable legal foundations and engineering practices, which allows him to assess the operational safety of the equipment and to know how to employ it correctly, as well as the necessary controls and the correct storage of the equipment.

#### Target group

All persons who carry out work at height, who have to wear harnesses and lanyards during their work or who deal with height safety concerns.

#### Contents

Transfer of knowledge and application concerning height safety and PPEaF. Selection procedure of fall arrest systems and practical exercises.

#### Duration

1 to 2 days

**We would be pleased to make you an offer tailored to your needs and requirements.**

**Ask us about it!**



Simply capture the code with the QR reader using your mobile phone.

[www.spanset-seminare.de/...hohensicherung](http://www.spanset-seminare.de/...hohensicherung)



## FULL BODY HARNESSES



- Why full body harnesses from SpanSet?

### All Span Set fully body harnesses offer:

- 1 Very strong and supple polyester fabric that adapts to the body shape.
- 2 Hooks and buckles in galvanised or rustproof steel (depending on the model) are highly corrosion resistant and easy to adjust.
- 3 Additional reinforcements at places subject to greater wear
- 4 Clear, conforming identification with traceability code and additional protective film as wear protection above the label
- 5 User instructions with pictograms
- 6 Colours of the seam patterns contrast clearly to the straps to facilitate testing of the full body harnesses
- 7 Belt slide to secure the strap ends
- 8 Lifespan 10 years after production date



### Why use harnesses from SpanSet?

SpanSet follows two major principles in the development of its products: On the one hand we make sure that a product complies to the European standards, while on the other hand we ensure that it is fit for purpose and meets the requirements of daily work.

These two goals can be very different, for example our ATLAS lanyard and our ATLAS harness for larger workers: While both designs meet the respective standards, they have additional functions that are tailored to the particular requirements of the user. SpanSet harnesses have been designed with the worker in mind.

According to our design criteria, the harness should be constructed from materials that conform to the shape of the worker and offer the largest possible freedom of movement and optimal comfort of wear. The harnesses should be easy to put on and adjust. In the event of a fall – in an actual worst-case scenario – they should support the user in the right place without undue stretch or distortion.

### SpanSet harnesses are supplied with:

Clear instruction manual  
Unique serial number  
Individual certification and inspection record  
Pocket guide

### Locking systems

SpanSet harnesses come with two different locking systems.

The practical quick-release buckles make the harnesses even faster and easier to put on. To ensure your safety, a green dot becomes visible when the buckle is closed correctly. The lock system does not allow for unwanted opening.

The tried-and-tested tri-glide buckles are easy and quick to adjust. They are resistant to soiling, for example by cement dust.



Quick-release buckles



Tri-glide buckle

A range of practical details and sophisticated functions clearly show that SpanSet harnesses were designed on the experience of practical application, and offer maximum safety with high comfort of wear.

No matter at what height you are working: our harnesses are a reliable partner at every level.

## HARNESSES

- 1X-harness
- 2X-harness
- 2X-harness „EXCEL“



### 1X-harness (EN 361)

Particularly light-weight and easy-to-fit harness with an anchor point on the back, with tri-glide buckles.

Article number	Weight [approx. kg]	Fall arrest attachments	Work positioning attachment points	Size
D038977	1,1	1	–	Standard



### 2X-harness (EN 361)

Particularly light-weight and easy-to-fit harness with one front and rear fall arrest attachment, optionally with **1** tri-glide buckle or **2** quick-release buckles.

Article number	Weight [approx. kg]	Fall arrest attachments	Work positioning attachment points	Size
<b>1</b> D038060	1,1	2	–	Standard
<b>2</b> D021357	1,1	2	–	Standard



### 2X-harness (EN 361) „EXCEL“

Particularly light-weight and easy-to-fit harness with one front and rear fall arrest attachment, with quick-release buckles and comfortable shoulder and back padding.

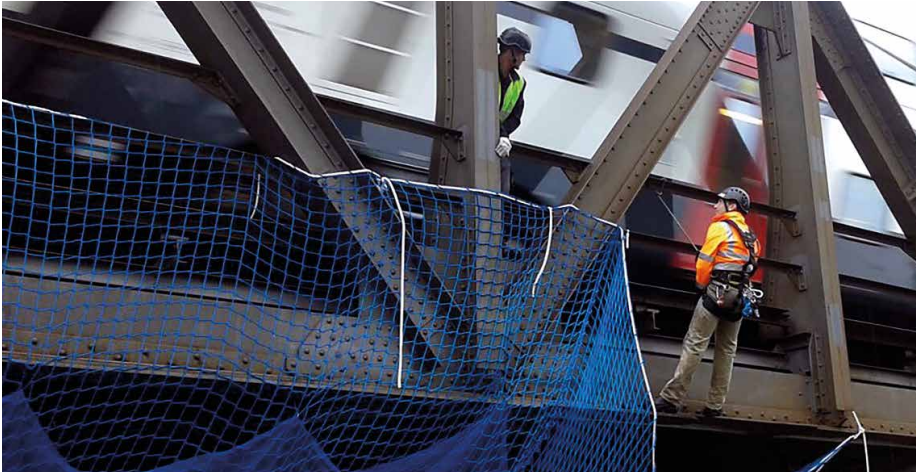


**Optional:** with waist belt pursuant to EN 358 with 2 work positioning attachment points for the work position lanyard and 3 tool attachment rings

Article number	Weight [approx. kg]	Waist belt	Fall arrest attachments	Work positioning attachment points	Size
D027105	1,1	–	2	–	Standard
D039760	2,1	✓	2	2	Standard



## HARNESSES



- 2X rescue harness
- 2-point harness „Atlas“
- Harness „Clima“

### 2X-rescue harness (EN 361)

Harness with one rear and front fall arrest attachment, with a tri-glide buckle. With an extension strap with a work positioning attachment point to allow for retrieval of the injured person in a vertical position. If not required, the extension strap can be easily attached to the back by means of a Velcro strap.

Article number	Weight [approx. kg]	Fall arrest attachments	Work positioning attachment points	Size
D042614	1,3	2	–	Standard



### 2-point harness (EN 361) „ATLAS“

Persons with size XL and weighing up to 140 kg need an extra large and robust harness. „ATLAS“ has been specially designed for larger sizes and tested accordingly. One rear and front fall arrest attachment, optionally with **1** tri-glide buckle or **2** quick-release buckles.

**Optional:** with a waist belt according to EN 358 or back padding (see 2X-harness (EN 361) „EXCEL“)

Article number	Weight [approx. kg]	Waist belt	Back padding	Fall arrest attachments	Work positioning attachment points	Size
<b>1</b> D003346	1,3	–	–	2	–	XL
<b>2</b> D035726	1,3	–	–	2	–	XL
<b>2</b> D042916	1,3	–	✓	2	–	XL
<b>2</b> D046310	1,3	✓	–	2	2	XL
<b>2</b> D047935	1,3	✓	✓	2	2	XL



### Harness (EN 813) „Clima“

Designed for professional applications for which work can be performed while temporarily suspended or seated in the harness, thanks to an integrated padded seat belt and a loop. With an extra wide comfortable waist strap with 2 work positioning attachment points for the work position lanyard. With one rear and front fall arrest attachment as well as multiple tool eyelets and loops. Shoulder strap with quick-release buckle. Ideal for fall arrest applications, for rescue, work positioning, climbing und rope access use.

Article number	Weight [approx. kg]	Fall arrest attachments	Work positioning attachment points	Size
D051584	2,2	2	3	Standard



## HARNESSES

- „MWEF-Pro“/„MWEF-Pro 2“ harness
- „ScaffPro“ harness



### Harness (EN 361) „MWEF-Pro“ and „MWEF-Pro 2“

The MWEF-Pro and MWEF-Pro 2 harnesses were specially designed for users of lifting platforms and working platforms. Special attention was paid to ease of use (handling) and a safety function that is particularly important on and around building sites. The MWEF-Pro with its adjustable work position line in the front attachment point is designed for delivery drivers. The harness can be worn during short journeys in a lorry without getting in the way. The MWEF-Pro 2 with its 2 attachment points is designed to allow flexible working on lifting platforms.

Article number	Weight [approx. kg]	Fall arrest attachments	Work positioning attachment points	Size
D062239	1,9	1	–	Standard
D062240	1,9	2	–	Standard



### Harness „ScaffPro“ (EN 361)

A harness that makes daily work with fall arrest as easy as possible for workers on the building site. If long distances in particular and transporting materials on the shoulders are part of your daily tasks, then this specially developed, light-weight harness with an innovative lateral seam and easy-to-use quick-release catches in the leg area is the secure companion for this type of work. A protective sleeve protects the harness from external influences.

Article number	Weight [approx. kg]	Fall arrest attachments	Work positioning attachment points	Size
D057414	auf Anfrage	2	–	Standard
D057415	auf Anfrage	2	–	XL



## HARNESSES JACKETS



- 1X-harness jacket (EN 361) „Driver“
- 2X-harness jacket (EN 361)

### More than just an eye-catcher

SpanSet harness jackets are full-body harnesses and safety vests all in one! The integrated harness can be adjusted at the leg loops, chest and shoulder straps. The water-resistant and breathable safety vest is easy to open, which allows for a visual inspection of the harness.

### Practical standard size „Multifit“

So that the vest really fits any- and everybody: simply open the integrated middle piece and turn the standard size into L or XL.



**1** Open the Velcro strap on the inside and, depending on your needs, remove one ...



**2** ... or both sides of the extension panels ...



**3** Done!

### 1X-harness jacket (EN 361) „Driver“

High-visibility full-body harness jacket with reflective strips. With a fall arrest attachment on the extension strap. Thanks to the Multifit system, the harness can be enlarged to size XL, with a quick-release buckle, 2 front pouches and 2 side pouches.

Article number	Weight [approx. kg]	Fall arrest attachments	Work positioning attachment points	Size
D056215	1,9	–	2	Standard



### 2X-harness jacket (EN 361)

High-visibility full-body harness jacket with Inox fall arrest attachments and reflective strips. Harness with one rear and front fall arrest attachment, with a tri-glide buckle. Thanks to the Multifit system, the harness can be enlarged to size XL, with a quick-release buckle, 2 front pouches and 2 side pouches.

Article number	Weight [approx. kg]	Fall arrest attachments	Work positioning attachment points	Size
D037637	1,9	2	–	Multifit





## General functions and benefits of the SP140 range

- Tests and certifications according to the EN 355 performance requirements based on a 140 kg test weight
- Undercutting of the normal limits by up to 37 % at a weight of 100 kg
- Precise fall height calculations possible at any time (see pages 12–15)
- No user weight restrictions and therefore no risk of confusion
- Lightweight, compact shape of the energy absorber for more freedom of movement for the user
- Publication of the values for the required space for users weighing 80 kg, 100 kg, 120 kg and 140 kg
- An integrated ring as a connecting point allows the karabiner of the lanyard to be hooked into the tape energy absorber again.
- Even more compact energy absorber design that gives the Y-lanyards an even greater useful length between the attachment points
- A new coating that makes the belt strap more safe and makes testing even easier
- The label incl. CE label etc. lies protected inside the energy absorber for longer durability
- As an option, we can also supply equipment with an RFID transponder that can be attached in the label
- Lifespan ten years after production date

## Special aspects of the 3-loop system

Often the karabiners are too small and you don't want to have to also carry attachment loops; in this case, the lanyard with an integrated attachment sling is an option. It can be attached in various lengths around parts without reducing the strength.

See pages 24–25.



---

## LANYARDS

---



---

SP140 lanyard acc. to EN 355



### Properties of the SpanSet-SP140 lanyard series:

- 1 Very strong polyester fabric
- 2 Inside identification of the model, the year of production, the norm and individual serial number for traceability
- 3 Additional reinforcements at places subject to greater wear
- 4 Integrated tape energy absorber
- 5 The harness strap is completely coated to increase the lifespan and strength, high VUV resistance
- 6 An integrated ring allows the karabiner of the lanyard to be hooked into the tape energy absorber again
- 7 The SP140 lanyard series has been tested and certified for 140 kg user weight in accordance with EN 355
- 8 RFID transponders for management with IDXpert can be retrofitted as an option



## LANYARDS




- SP140-lanyard acc. to EN 355
- 3-loop system acc. to EN 355




Twistlock

Pipe hook






	Type/article number	Length [m]	Description	Karabiner User side	Karabiner Attachment side
<b>Rigid lanyard (EN 355)</b>					
	<b>FAA-01C09</b> D069364	2.0	<ul style="list-style-type: none"> <li>- Rigid lanyard with energy absorber</li> <li>- Two-layer strap for improved edge protection during the fall</li> <li>- Available in the useful lengths 1.0 m, 1.5 m and 2.0 m</li> </ul>	Twistlock	Pipe hook
<b>Elastic lanyard (EN 355)</b>					
	<b>FAE-01C09</b> D069324	2.0	<ul style="list-style-type: none"> <li>- Elastic lanyard with energy absorber</li> <li>- Elastic strap reduces the risk of tripping</li> <li>- Length stretched from 2.0 m and/or relieved by 1.1 m</li> </ul>	Twistlock	Pipe hook
<b>Adjustable lanyard (EN 355)</b>					
	<b>FAG-08C01</b> D069367	1.4-2.0	<ul style="list-style-type: none"> <li>- Lanyard with energy absorber</li> <li>- Adjustable length</li> </ul>	Twistlock	Twistlock
	<b>FAG-08C09</b> D069373	1.4-2.0	<ul style="list-style-type: none"> <li>- Length adjustment range from 1.4 m to max. 2.0 m overall length</li> <li>- Easy to adjust</li> </ul>	Twistlock	Pipe hook

	Article number	Length [m]	Description	Karabiner User side	Karabiner Attachment side
<b>3-loop system (EN 355)</b>					
	<b>FAM-01C01</b> D069192	1.0-1.8	<ul style="list-style-type: none"> <li>- Lanyard with energy absorber with innovative 3-loop system</li> <li>- Screw attachments can be wound back around the attachment point to the loops</li> <li>- Loops in traffic light colours to mark adjustable lengths</li> <li>- Maximum useful length: 1.8 m</li> <li>- Red loop: 1.55 m, yellow loop: 1.35 m, green loop: 1.2 m, ring on the tape energy absorber: 1.0 m</li> </ul>		

## LANYARDS

- SP140-lanyard acc. to EN 355
- 3-loop system acc. to EN 355



	Type/Article number	Length [m]	Description	Karabiner User side	Karabiner Attachment side
<b>Rigid Y-lanyard (EN 355)</b>					
	<b>FAB-01C09</b> D069385	2.0		Twistlock	Pipe hook
<b>Elastic Y-lanyard (EN 355)</b>					
	<b>FAF-01C10</b> D069386	2.0	<ul style="list-style-type: none"> <li>- Elastic Y-lanyard with energy absorber</li> <li>- Elastic strap reduces the risk of tripping</li> <li>- Length stretched from 2.0 m and/or relieved by 1.1 m</li> </ul>	Twistlock	Pipe hook
<b>3-loop system - Y-lanyard (EN 355)</b>					
	<b>FAN-01C01</b> D069384	1.0-1.8	<ul style="list-style-type: none"> <li>- Y-lanyard with energy absorber with innovative 3-loop system</li> <li>- Attachment connections can be wound back around the attachment point to the loops</li> <li>- Loops in traffic light colours to mark adjustable lengths</li> </ul>	Twistlock	Twistlock/ 3 loops



---

## General functions and benefits of the DSL2 range

- Hybrid of two devices: Works like a retractable type fall arrester, but is used like a lanyard
- Tested to EN 360 and EN 355
- Shortens the required fall path by up to 50%
- No usage restrictions that are common among other retractable type fall arresters
- Must be checked by an expert
- Does not need to be opened
- Lifespan ten years after production date

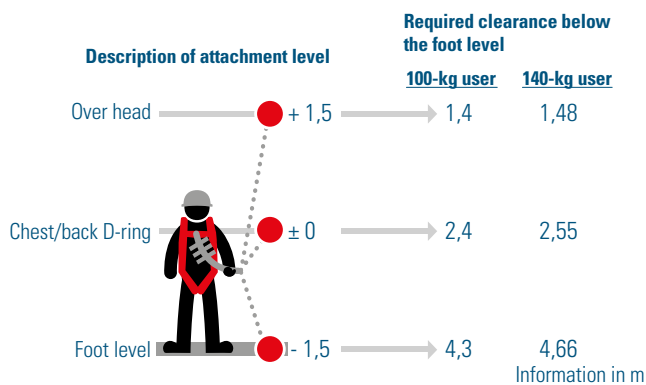


When using height-securing equipment and personal protective equipment against falls from a height (PSAgA), the user must bear in mind that he needs enough space below him in case of a fall. This fall height comprises two factors:

1. The fall height that the equipment requires to secure a user in the event of a fall
2. A safety distance of 1 m to the floor below the user

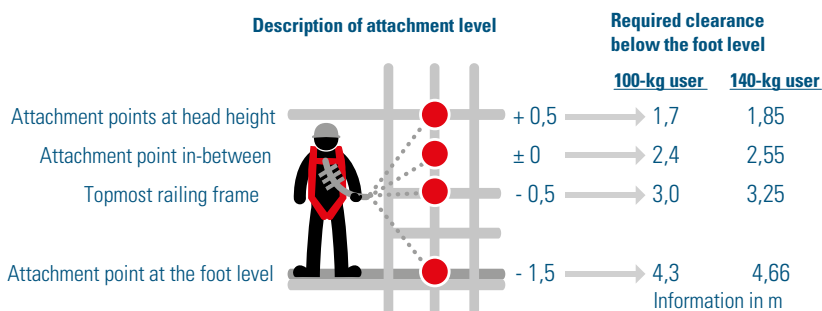
Using the chart and table, you can determine the various attachment positions and define the required height.

### Standard applications



The DSL2 was tested independently in all extreme case scenarios. In all cases, the force remains below 6 kN, even if the DSL2 and the two strands are completely extended and attached. SpanSet DSL is proven, tested and ready for use.

### Applications on scaffolding



In the case of attachments on the scaffolding, the attachment points used must be inspected to ensure they are complete and undamaged. If a scaffolding system is used, steps should be taken to ensure that the attachment points are approved for use by the manufacturer.

### DSL2 – Dynamic, self-winding lanyard





## LANYARDS

- DSL2 lanyards

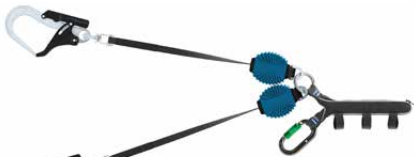



DSL2 – Dynamic, self-winding lanyard

- Single-part dynamic self-winding lanyard for fall protection
- Self-winding strap – reduces the fall height and the risk of tripping
- Lightweight, narrow strap with tape energy absorber
- Tape energy absorber can be stowed tightly against the full body harness – compact and simple
- Works like a retractable type fall arrester, but is used like a lanyard
- Individualised serial number certification for precise traceability
- CE identification pursuant to EN 360
- Tested to EN 355 and EN 360
- Compliance with the dynamic limit values of the EN 355 for weights of up to 140 kg

	Article number	Description	Karabiner user side	Karabiner anchor side
	<b>FAQ-11G10</b> D069388	One-strand, dynamic self-winding lanyard, 2 m long	Aluminium karabiner Trilok	Pipe hook karabiner steel, weight optimised
	<b>FAQ-11G04</b> D068726	One-strand, dynamic self-winding lanyard, 2 m long	Aluminium karabiner Trilok	Aluminium karabiner Twistlock

- Dynamic, self-winding Y-lanyard for use using fall prevention

	Article number	Description	Karabiner user side	Karabiner anchor side
	<b>FAR-11G10</b> D069381	Two-strand, dynamic self-winding lanyard, 2 m long	Aluminium karabiner Trilok	2 Pipe hook karabiner steel, weight optimised
	<b>FAR-11G04</b> D069387	Two-strand, dynamic self-winding lanyard, 2 m long	Aluminium karabiner Trilok	2 x aluminium karabiners Twistlock



---

## KARABINER

---

- Screw karabiner ML 2
- Twistlock scaffold hook
- Trilock karabiner
- Screw karabiner NZ09
- Twistlock karabiner
- Screw karabiner DZ09

---

### Other karabiners for lanyards

---



Screw karabiner ML 2

---



Twistlock scaffold hook

---



Trilock karabiner

---



Screw karabiner NZ09

---



Twistlock karabiner

---



Screw karabiner DZ09

---

## HOLDING ROPE

- WRI-09E03 restraint rope acc. to EN 355
- Horizontal restraint rope 'Clima WPL'



### Vertical and horizontal safety

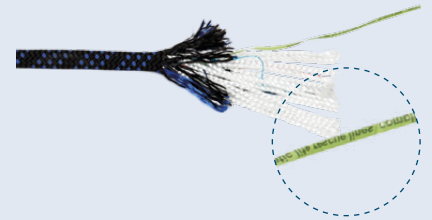
Whenever work activities involve a risk of falling, the user has to be secured. If no collective measures are at hand, such as e. g. scaffolding, railings or safety nets, our safety lines are the ideal solution.

The **vertical safety lines** (travelling fall arresters attached to a movable guide) have a travelling, mechanical stopper that reliably locks into place in the event of a fall.

The **horizontal work position lines** can be used both as a rope restraint lanyard during work positioning or as a work position line. Using the shortening device, the length of the line has to be adjusted such that the worker is able to move around freely up to the edge of the structure.

Every SpanSet line is marked with the year of manufacture, along with a unique serial number, which ensures the

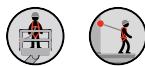
traceability of each individual rope. A colour-coded thread on the inside of the lines indicates the EN number and the type of line.



### WRI-09E03 restraint rope (EN 355)

The WRI-09E03 is designed as a pure restraint rope. It protects you against reaching fall edges and thereby falling from a height. It is important here to keep the length as short as possible, but set as long as necessary. Lengths of around 0.9 m to 1.75 m are possible with the 12 mm thick kernmantel rope. It is equipped at each end with a Twistlock karabiner and has a lifespan of 10 years.

Article number	Designation	Weight [kg]	Length without karabiner [m]	Max. length [m]
D069372	Holding rope for cherry picker	1	1.40	1.75



### Horizontal work position line „Clima WPL“ (EN 358)

Polyamide kernmantel rope, diameter of 11 mm, with a Twistlock karabiner on one end as well as a lanyard of approx. 70 cm at the shortening device end. Not designed to arrest a fall!

Article number	Designation	Weight [kg]	Length [m]
D017236	ClimaWPL	2,0	10



## ROPE RESTRAINT LANYARDS



- Fall arrest system „Clima VL“
- Rope restraint lanyard „WPLANY 2M“

### Fall arrest system „Clima VL“ (EN 353-2)

This temporarily installed fall arrest line is designed for work on ladders, masts or stacking cranes in high-bay pallet warehouses. The anchoring line can be positioned by means of the anchoring sling and tensioned using with the rope clamp. The fall arrester is supplied with a short attachment lanyard and can either be permanently fitted to the anchoring sling or secured to the worker's harness. The kit comes in a shoulder bag for easy transport and storage.

#### Recommended accessories:



Article number	Designation	Weight [approx. kg]	Length [m]
D037806	CVL-15	2,5	15
D037809	CVL-20	2,9	20
D049130	1 CVL-VL	0,5	0,4
D041863	2 CVL-BUDDY	0,4	-



### Rope restraint lanyard „WPLANY 2M“ (EN 358)

This lanyard is easily adjustable to a maximum length of 2 m. It is surrounded by a sleeve that protects the rope from wear and damage during anchoring. The system comes with a screw karabiner on one end and a Twistlock karabiner for easy attachment.

Article number	Designation	Weight [approx. kg]	Length [m]	Karabiner
D013232	WPLANY	1	2	Safety swivel hook
D048960	WPLANY	1	2	Twistlock karabiner





## ANCHOR DEVICES AND POINTS

- HD Tripod
- Winch for HD Tripod
- Bracket for SVLRB
- Bracket for winch



### HD Tripod

The aluminium HD (heavy-duty) tripod was developed for tough working conditions and for long-term use and is perfectly suitable for industrial applications. Right-angled, fully adjustable legs and a head piece made of one single piece prevent damage. Two integrated guide pulleys and an additional anchor point allow for many different options and combinations for entry, exit and rescue equipment. Retractable to a height of 2,7 m.

Article number	Designation	Height [mm]	Weight [approx. kg]	WLL [kg]	Material
D053832	TRIPOD-HD	1.860	24	350 (max. 2 persons)	Aluminium

### Winch for HD Tripod

This personnel and load winch (WLL 140 kg) enables the lifting or lowering of goods and persons, for example from and into confined spaces. Together with the bracket (see below) the winch can be optimally attached to the HD tripod. If you use this winch with a person suspended from the hook, the person should also be secured by means of a back-up system in the shape of a fall arrest device of vertical safety line. The rope length of the RW winch is 20 m.



Article number	Designation	Rope length [m]	Weight [kg]	Material
D053834	RW winch	20	11	Metal

### Bracket for SVLRB

The bracket can be used to easily and rapidly attach your fall arrest equipment to the HD tripod.



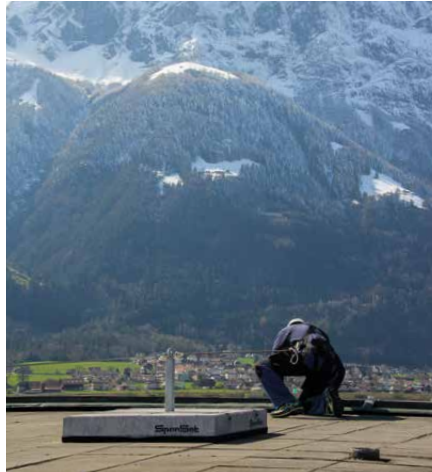
Article number	Designation
D054280	Bracket SVLRB-15
D053833	Bracket SVLRB-18

### Bracket for winch

Article number	Designation
D053836	Winch



## ATTACHMENT EQUIPMENT, ATTACHMENT POINTS



- Attachment point 'DUO'
- Attachment point 'QUATTRO'
- Single anchor point 'Starpoint'
- Free standing anchor point 'TETRAGON'

### One secure anchor point

The quality and efficiency of a fall arrest system depends, among other factors, on the strength of the anchoring point to which the lanyard is attached.

For this reason it is exceedingly important that the lanyards, height safety equipment and safety lines, for example, are attached to a sufficiently strong anchor point.

European standard EN 795 stipulates that the anchor point must withstand a load of 10 kN (approximately 1000 kg).

### Attachment point 'DUO' and 'QUATTRO' (EN795)

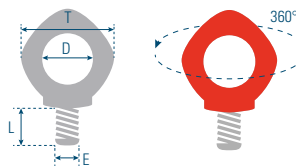
The new attachment points 'DUO' and 'QUATTRO' are designed for securing up to 2 and/or 4 persons and are suitable for mounting to concrete, steel and wood. The rustproof stainless steel 1.4404 attachment points 'DUO' and 'QUATTRO' are always the first choice, be it as temporary attachment points during the construction phase or as part of a permanent safety system.

Art. No.	Type	Weight unit [kg]	Borehole thread	L x W x D [mm]
D070788	DUO	0.2	M 16	120 x 60 x 35
D070786	QUATTRO	0.3	M 16	120 x 120 x 35



### Single anchor point „Starpoint“ (EN 795)

Anchor point for installation in steel. Can be rotated to ensure correct load-bearing in the direction of force. For permanent use outdoors, the Inox version is recommended.



Art. No.	Colour	WLL	Material	D [mm]	E [mm]	T [mm]	Thread length [mm]
D064871	gelb	1 Pers.	G8	30	M12	56	18
D056975	gelb	2 Pers.	G8	35	M16	65	24
D064872	gelb	1 Pers.	Inox	30	M12	56	18
D064873	gelb	2 Pers.	Inox	35	M16	65	24



### Free-standing anchor point „TETRAGON“

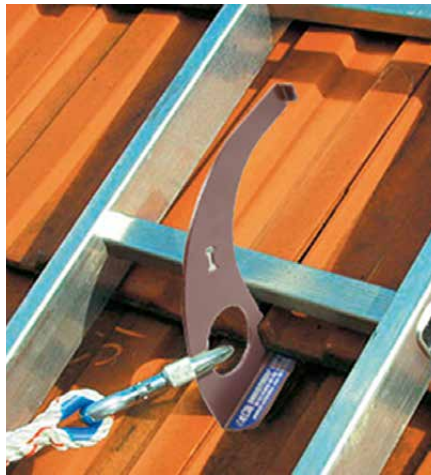
The „TETRAGON“ is a particularly high anchor point for flat roofs that is held by its own weight. In the event of a fall, it absorbs the resulting forces by displacing them. It can be used either as a permanent single anchor point or as an end or intermediate anchor point for anchor devices.

Art. no.	Designation	No. of users	Weight [kg]	Length x width [m]	Height [mm]
D064759	LWS65012-12	1	413	1 x 1	500
D064760	LWS65016-16	2	413	1 x 1	500



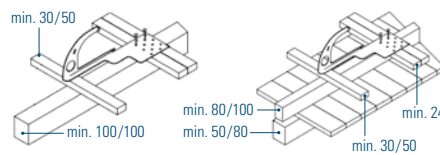
## ANCHOR DEVICES AND POINTS

- Roof hooks for pitched roofs
- Proof Loader Kit
- SpanAnchor
- Anchoring beam



### Roof hook for pitched roofs (EN 795, EN 517)

Quick-mount hook, certified for the substrate in accordance with EN 517 and EN 795, also tested for rafter-mounted insulation, including 2 galvanised fixing screws 8 x 220 mm.



Article number	Material	Colour
D064754	galvanised steel	natural grey
D064755	galvanised steel	anthracite
D064756	galvanised steel	brown
D064757	galvanised steel	red



### Proof Loader Kit (EN 795), SpanAnchor (EN 795)

The Proof Loader Kit comprises 2 SpanAnchors and a testing tool that checks the SpanAnchors for their load-bearing capacity to ensure they are installed correctly. The SpanAnchor is a reusable expansion anchor device designed to be used in concrete. However, if the Proof Loader is used as a setting tool, the SpanAnchor can be installed in any suitable substrate. After use, the attachment point can be easily removed from the substrate and is ready for the next application.

Article number	Designation	Colour
D030648	Proof Loader Kit	natural grey
D041862	SpanAnchor	anthracite



### Anchoring beam (EN795)

Steel beam for clamping into door / window frames, or similarly into stable masonry. Simple adjustment of the width of the beam. To protect the surfaces, the contact areas are covered with a plastic protector. The opening of the anchor point is approximately 35 mm

- 1 TA125:** for 1 person up to 125 cm; for 2 persons up to 80 cm beam width.
- 2 TA110:** for 1 person up to 110 cm; for 2 persons up to 90 cm beam width.

Artikel-Nummer	Bezeichnung	Länge [cm]	Gewicht ca. [kg]
D064767	TA125	150	5
D064768	TA110	140	10

## ANCHOR DEVICES AND POINTS

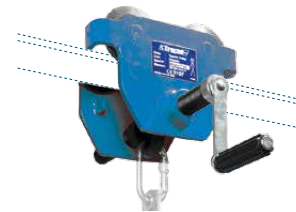


- Beam hoist
- Beam clamp Corso
- Beam clamp
- BMS anchoring sling
- BAS anchoring sling

### Beam hoist (EN795)

Mobile anchor point for securing 1 person to steel beams. Adjustable to various flange widths, with a removable crank handle.

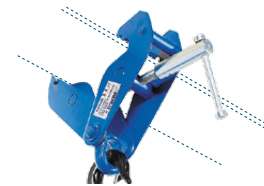
Article number	for flange width [mm]	Weight approx. [kg]
D064763	50 – 220	10,5



### Beam clamp Corso (EN795)

Mobile anchor point for securing 1 person to steel beams. Adjustable to various flange widths.

Article number	for flange width [mm]	Weight approx. [kg]
D064762	75 – 235	4,8



### Beam clamp (EN795)

Sliding anchor manufactured from aluminium with an anchor point for 1 person. For attaching to or suspending from steel beams. Simple handling thanks to quick and absolutely safe locking mechanism.

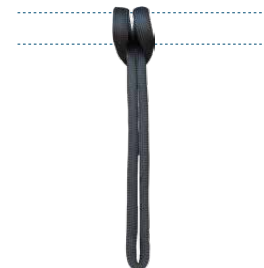
Article number	for flange width [mm]	Weight approx. [kg]
D041648	90 – 350	1,7



### BMS anchoring sling (EN 795)

The rope-like and compact design makes it easy to mount the karabiners and has a low tare weight in spite of a strength of 70 kN.

Article number	Length [m]
D043112	1,0
D043113	1,5
D043114	2,0



## ANCHOR DEVICES AND POINTS

- Xtracta
- Xtracta SPXT2
- Xtracta SPXT5
- Xtracta SPXT24



### Xtracta

Intelligent solutions for working in confined spaces compliant with EN 795. The SpanSet Xtracta series for safe working and rescue in and from confined spaces comprises a number of intelligent, modular systems and accessories to make these types of work activities easier and, more importantly, safer for you. On this page you will find a selection of core components, presented as systems. Should you require additional products, accessories or information, please do not hesitate to contact us.

#### Xtracta SPXT2 manhole guard with integrated davit arm

Complete set comprising:

Article number	Designation	Weight [kg]
D057797	Adjustable XTIRPA davit arm 24" including 2 adapter plates	15,0
D057799	XTIRPA portable manhole guard L = 1 x 1 m	13,0
D057800	XTIRPA stabiliser for portable manhole guard SPXTIN2108	2,0

#### Xtracta SPXT5 modular H-base davit system

Complete set comprising:

Article number	Designation	Weight [kg]
D057797	Adjustable XTIRPA davit arm 24" including 2 adapter plates	15,0
D057802	XTIRPA davit mast 0.9 m for SPXTIN2210	10,0
D059086	XTIRPA H-shaped base unit 1.27 m on wheels	36,8

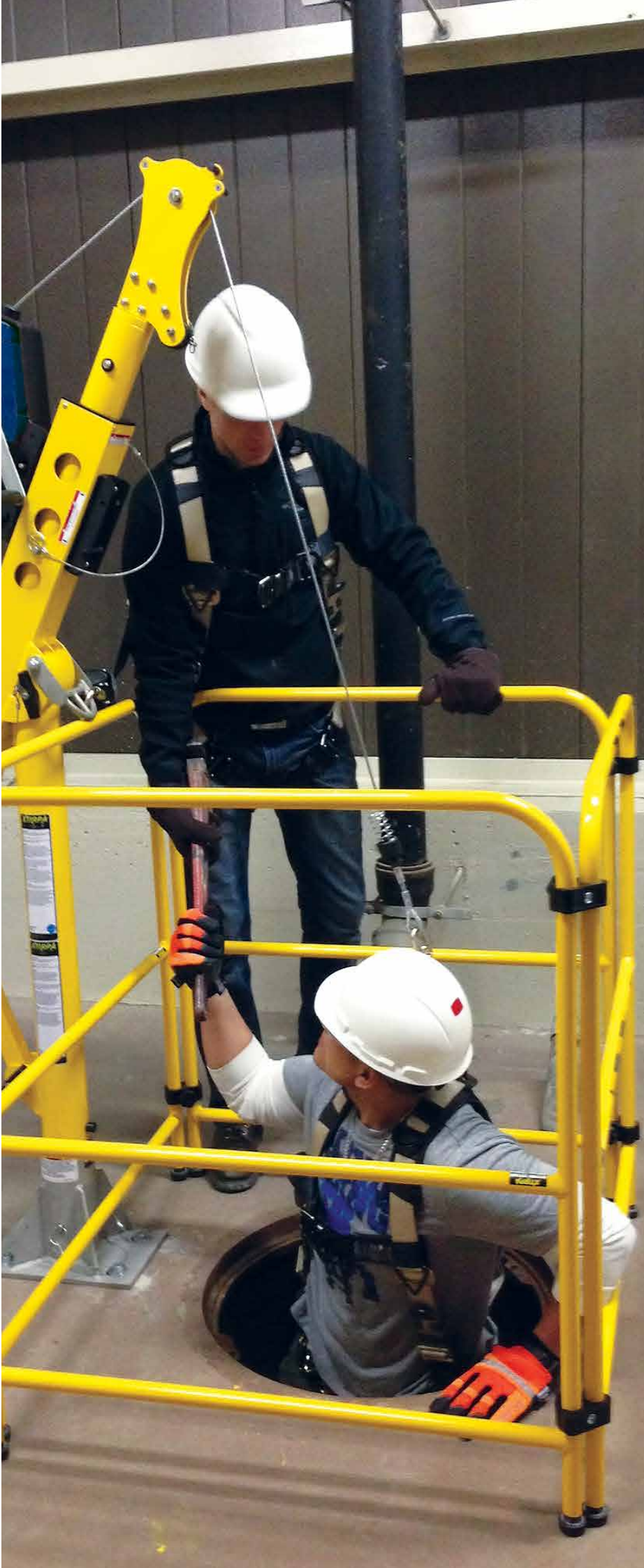


#### Xtracta SPXT24 davit arm screw-on floor adapters

Complete set comprising:

Article number	Designation	Weight [kg]
D057802	XTIRPA davit mast 0.9 m for SPXTIN2210	10,0
D057797	Adjustable XTIRPA davit arm 24" including 2 adapter plates	15,0
D059089	Stainless steel flood adapter for SPTXIN2003	10,0





## ANCHOR DEVICES AND POINTS

- Accessories for the SpanSet Xtracta series

### Accessories for the SpanSet Xtracta series



Article number	Designation
D057855	Carry bag for XTIRPA Manhole Guard SPXTIN2108
D057852	Carry bag for XTIRPA Davit Arm SPXTIN2210
D057853	Carry bag for XTIRPA Davit Mast SPXTIN2003



Article number	Designation
D057865	Bracket for SVLRB 15
D059091	Bracket for winch

## HORIZONTAL SAFETY SYSTEMS

- Horizontal safety line „ERGO LINE“



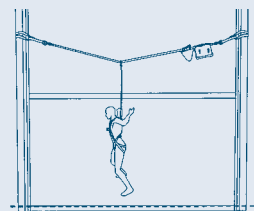
### Horizontal safety systems „ERGO LINE“ for temporary safety lines

The temporary horizontal safety line offers wide freedom of movement while working at height and is designed primarily for one person.

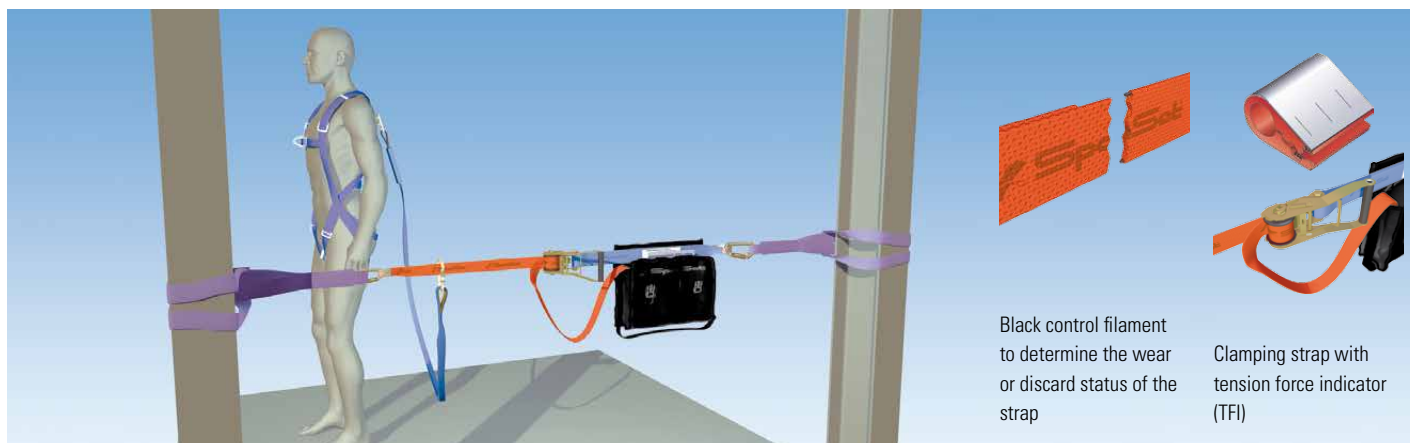
It has to be tensioned between two sufficiently strong anchor points (min. 15 kN = approx. 1.500 kg) and then be further tightened by hand using the tension ratchet until the 250-daN mark is reached on the preinstalled tension

force indicator (TFI). The line is supplied in a practical carry bag with a shoulder strap. The system is available with two different end connectors. The version with a safety swivel hook guarantees an automatic unwinding of the webbing. This precludes incorrect installation of the system.

The HSL horizontal safety lines can also be used to secure two persons at the same time. In this case, the anchor points have to be able to withstand twice the force, i.e. 30 kN (= approx. 3.000 kg).



Because the line droops under load, the **required clearance** below the line has to be large enough to ensure the safety of the users in the event of a fall. (Note instruction manual!).



Black control filament to determine the wear or discard status of the strap

Clamping strap with tension force indicator (TFI)



### Horizontal safety line „ERGO LINE“ (EN 795)

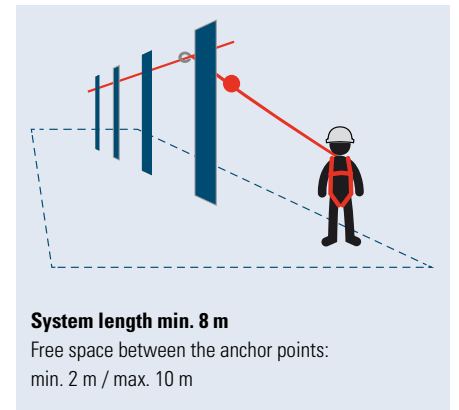
Temporary horizontal safety line comprising: webbing, orange, with black control filaments to determine the wear or discard status of the strap. Tension ratchet with tension force indicator (TFI) to ensure the necessary tension. Complete system supplied in a practical carry bag with a shoulder strap. Depending on the variant, this system comes with Twistlock karabiners or safety swivel hooks as end connectors.

Article number	Designation	Weight [approx. kg]	Length [m]	End connector
D000186	HSL-DHW	5,2	20	Safety swivel hook
D002869	HSL	5,8	20	Twistlock karabiner



## HORIZONTAL SAFETY SYSTEMS

- Tempoline



**System length min. 8 m**

Free space between the anchor points:  
min. 2 m / max. 10 m

### Temporary horizontal safety line „Tempoline“

Our newly developed temporary horizontal safety line system is designed for use whenever scaffolding cannot be provided or when building can take place without scaffolding. It is EN 795 Class C-certified and can be used to secure three persons at the same time. The system allows the catcher device to slide across the cable guides between two anchor points without having to detach the catcher and unlock the safety mechanism. The fall arrest system is thus ensured at all times. This allows builders, façade erectors, window manufacturers, surveyors etc. to work safely.

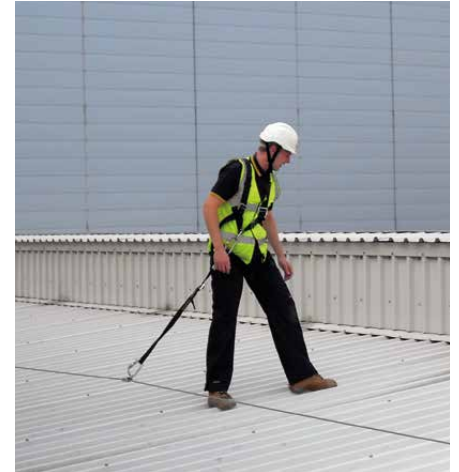
The temporary horizontal safety line Tempoline comprises the following elements:

- Wire cable Ø 8 mm galvanised (length on request)
- Ratchet lashing straps with ABS ratchet as a tensioning device
- Tension force indicator
- Deformable cable guides between anchor points
- Ratchet lashing straps as a fixing point of the cable guides
- Catcher shuttle device
- Webbing bracket, anti-slip mats, protective sleeves
- Optional: round slings, hard-wearing shackles



## HORIZONTAL SAFETY SYSTEMS

- Safeline



### „Safeline“ – The horizontal safety line system. Safe and flexible maintenance, inspections and repairs

The horizontal safety line Safeline comprises a tensioned wire rope to which a catcher shuttle device is attached. The worker is attached to the cable system via the catcher shuttle device. Safeline systems not only protect the worker at height, but also provide the required protection for which every company is responsible.

#### Important functions

- CE mark pursuant to EN 795, Class B and C
- Suitable for all roof types
- The full load-bearing capacity of the roof can be used, and the system causes no damage to the roof after use
- A computer-based calculation guarantees that all work activities remain within the safe working limits of the installed Safeline systems
- Developed and manufactured in accordance with ISO 9001:2008
- All components are manufactured from grades 304er and 316er stainless steel
- 8 mm stainless steel wire rope
- All parts have serial numbers to ensure traceability
- Comprehensive technical support
- Regular re-testing of installed systems
- Can be installed on inclines of up to 15 degrees
- Supply of matching personal protective equipment
- Furthermore, SpanSet offers corresponding training courses

#### Advantages

- Unobtrusive, cost-effective solution with low maintenance costs
- Compared to iron metals, stainless steel components exhibit greater durability even under the toughest environmental conditions and harbour a lower risk of spark formation
- Protect users during the construction phase and also during the performance of routine maintenance tasks following completion

- Fewer movable parts that have to be carried and locked in position during use

#### Some of the most important application examples for the use of these systems:

To protect the workers during maintenance, cleaning and inspection tasks and during installations.

Ideal for construction, warehousing and distribution, buildings, bridges, infrastructures, cranes, power plants.

For safe access to lighting and sonication bridges, warehouse racks, theatre constructions, production plants, maintenance and loading bays of vehicles, production areas of oil and gas plants.



Tested to EN 795 and with a corresponding CE mark

- HT8



### „HT8“ – the evolution of our much tried-and-tested Safeline system.

Time and again there is a need for mounting a permanently installed system above the worker's head. These systems are often very long. In most cases, intermediate brackets within the wire systems are bothersome, as the catcher shuttle device is not able to glide smoothly across these intermediate brackets. Furthermore, these systems are often operated with height safety devices, and to ensure that these are able to glide across the wire precisely and with little friction, the wire system requires a high pre-tension.

This was the starting point for SpanSet's development of a new, unique system, the „HT8“, designed for overhead installations.

The system can be installed up to a maximum wire length of 40 m without intermediate brackets.

A technical highlight of the HT8 is a tensioning device that enables a pre-tension of up to 400 daN to ensure the smallest possible suspension of the wire – especially when height safety devices are employed. Another technical highlight of the HT8 is that the system has been designed for up to four users. This is made possible by the variable use of three separate energy absorbers. Limiting the force to the surrounding components, end forces that have to be reduced into the building, or harnessing values that have to be ensured for the user – all this is made possible by the use of different energy absorbers in the HT8 that limit the force in the endpoints.

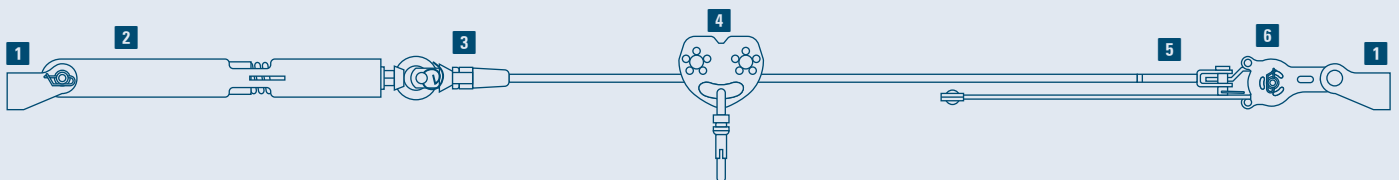
An easy replacement of the different absorbers without having to change the length of the wire is yet another technical feature of the HT8.

The flexibility of the HT8 system makes it possible to make use of virtually any structural conditions to guarantee the necessary safety.

### Innovation made by SpanSet



### HT8 System components



Nr.	Description
1	End anchor bracket
2	Long span tensioner c/w tension indicator
3	8mm 7x7 swageless fork termination
4	Mobile anchor device c/w steel karabiner
5	25m cable c/w swaged fork termination
6	15kN force attenuator

## RETRACTABLE TYPE FALL ARRESTERS

- Saverline
- Saverline with rescue lift



### Retractable type fall arrester 'Saverline' (EN 360)

Working safely in tight spaces! The SpanSet retractable type fall arresters secure users e.g. in combination with attachment equipment, during servicing and assembly work. The integrated energy absorber brakes and holds the secured person reliably in the event of a fall. The AW 1.8 is specially developed and approved for use on work platforms.



SRL AW1.8  
SRL PW3.5  
SRL PW7  
SRL PW12



SRL PS3  
SRL PS6  
SRL PS12



SRL AS18

Article number	Type	Length [m]	Weight [kg]	Casing	Cable/tape	Rescue function	Load-bearing capacity [kg]
D072062	SRL AW1.8	1.8	0.96	Aluminium	Strap	no	136
D072066	SRL PS3	3.0	1.9	Plastic	Steel cable	no	136
D072067	SRL PW3.5	3.5	1.2	Plastic	Strap	no	136
D072068	SRL PS6	6.0	2.5	Plastic	Steel cable	no	136
D072069	SRL PW7	7.0	1.8	Plastic	Strap	no	136
D072070	SRL PS12	12.0	4.9	Plastic	Steel cable	no	136
D072071	SRL PW12	12.0	3.4	Plastic	Strap	no	136
D072073	SRL AS18	18.0	9.5	Aluminium	Steel cable	no	136



### Retractable type fall arrester 'Saverline' with rescue lift



SRLR AS12

Article number	Type	Length [m]	Weight [kg]	Casing	Cable/tape	Rescue function	Load-bearing capacity [kg]
D072074	SRLR AS12	12.0	7.0	Aluminium	Steel cable	yes	136



## FALL ARREST ACCESSORIES



- Parking Point fixing point
- Tool lanyard
- MT-3 glove
- Extension strap
- Helmet
- Bags/duffel bags
- Seat board

### Parking Point fixing point

This fixing point can be used to hang any unused lanyards back onto the harness. The parking point tears off at a maximum load of 80 kg.



#### Article number

D022901

### Extension Strap

Extension for the rear fall arrest attachment. Makes it easier to latch onto the system when using height safety devices. Must not be used to extend lanyards!



#### Article number

D038417

#### Length [m]

0,3

### Helmet (EN 397)

This helmet is tested to EN 397 and is available in white. A wide range of accessories (visor, ear protectors, etc.) is also available.



#### Article number

D059807

### Tool Lanyard

This tool holder prevents your tools from falling, thus increasing safety in the workplace. Suitable for tools weighing up to 4.5 kg.



#### Article number

D053529

#### Length [m]

0,6

### Bags/duffel bags

To stow away your personal protective equipment and additional accessories we offer you a wide range of bags and cases.



1 Bag



2 Backpack



3 Duffel bag



4 Aluminium case

### MT-3 glove (EN 397)

The glove is manufactured from synthetic leather and has reinforced fingertips and palms. It has three open fingers to ensure optimal operation of e. g. karabiners. The tight fit ensures maximum flexibility and the adjustable Velcro strap ensures a secure fit.



#### Article number

D042292

#### Size

M

D042293

L

### Seat board

As an add-on to a harness. The seat board relieves the pressure from the leg loops, makes for easy work and reduces the risk of a suspension trauma.



Recommended accessories:



Art. No.	Designation	Recommended Unit
D041864	Seat board	1
D015606	1 Karabiner ML 2	3
D038975	2 Rigging Plate	1

#### Article number Designation

D023161	1 Bag, black
D047694	2 Rucksack, blue
D043214	3 Duffel bag, blue
D002113	4 Aluminium case, red

## RESCUE SYSTEMS

- When a rescue situation arises!
- D2 Evacuation and descender device



### When a rescue situation arises!

#### First response rescue

For immediate rescue measures on site. This is an ideal solution for short-term tasks or for companies that need to provide an independent solution for working at height. Requires training of the workers and a commitment from fellow workers.

#### Emergency response team

Selected personnel trained intensively for the special purposes of immediate on-site rescue measures. Requires a commitment from the persons on site and a constant reassessment in the event of new or changed tasks. While this may be an expensive option, it may, however, be beneficial for larger sites as it allows the team to cover many different work tasks.

#### Rescue plan

Why SpanSet can help you find a solution.

If your work involves the use of a fall arrest system or workplace positioning techniques, then you must consider the potential rescue implications. Rescue of personnel suspended at height is an issue that concerns every worker, whether they are 2 m or 200 m above ground. Those working in extreme environments traditionally place a great deal of emphasis on this area, and quite rightly so. It also applies to areas that are seemingly harmless, but in these areas it is seldom addressed. Unconsciousness or death can occur in a suspended casualty even though they may not be injured after their initial fall. This is due to a reduced circulation of blood, caused among others by the unusual posture or the pressure points of the harness. If the worker is able to move or relieve the pressure points, the side effects can be dramatically reduced.

#### Emergency services

Professional personnel with professional equipment for a wide range of situations and constantly updated know-how and do-how. However, this should not be considered a first response solution, since travel and response times apply and the readiness is not in the company's hand. Please note: Professional rescue services are only able to address issues they are aware of and trained to perform. You should not simply rely on them, but instead you should speak to your locally competent emergency services and ask whether they are able to meet your requirements.

#### 1. Casualty

What we know:

- You are suspended from an anchor point.
- You are wearing a full-body harness.
- You are at risk from the effects of being suspended.

- As long as the casualty is still suspended, it is not even possible to provide even basic first aid.

#### 2. Rescuer

What is required:

- You must address your own safety first.
- You must be able to act calmly and effectively.
- You must have regular practical experience in techniques for rescue.
- You should reassure the casualty.

#### 3. Equipment

What is required:

- It must transport the casualty to a point of safety, namely with minimal risk for the casualty or rescuer.
- It must be easy to operate.
- It must be designed and intended for the job it is being asked to perform.

#### D2 Evacuation and Descender (EN 12841 and NFPA 1983)

The D2 Evacuation and Descender is an innovative „double-stop“ descending device. A new, handle-operated cam system was developed specifically so that the descender fully stops the descent rather than just slowing it down, especially in a panic situation.

The D2 Descender is the only micro-descender in the world to offer this function. The D2 is CE-certified for a maximum descent of 120 m.



Art. no.	Rope length [m]	Pers.
D054277	15	1

## RESCUE SYSTEMS



- GOTCHA™ Basic Kit
- GOTCHA Shark™ Kit
- GOTCHA™ CRD Kit

### GOTCHA™ Basic Kit (EN 1496) rescue lifting device

The GOTCHA Basic contains a pulley that you can safely attach to any structure with the round sling. The anchor point can thus be placed above, but also below your own position. Do not take a risk: you do not have to climb all the way down to the casualty! Instead, use the light-weight and stable telescopic rod made of carbon fibre. Use the rod to clip the special snap lock („frog”) into a fall arrest attachment of the casualty’s harness. This allows you to always carry out the rescue on your own. After that, you can raise or lower the person to a point of safety. You can also rescue persons who are suspended in vertical ladder systems in this way. The GOTCHA system is available with ropes in various lengths that enable an effective descending height of up to 68 m (high anchor point, 200 m rope).



Article number	Rope length [m]
D008533	50
D015602	100

### GOTCHA Shark™ Kit (EN 341) rescue descending device

With the GOTCHA Shark you are prepared for even the most difficult of situations. The Shark can be easily attached with the anchoring sling even in very angled buildings. Simply hook yourself into the rope rider and lower yourself to the casualty. The rope rider reliably regulates the descent rate and automatically stops in case of an operating error. This function gives you additional safety during difficult rescue operations. Once you have reached the casualty, you also secure them on the rope rider. After that, you cut through the casualty’s attachment with a bladeless rope cutter without any additional risk of injury. This enables a slow and controlled descent.



Article number	Rope length [m]
D016537	66
D025286	100

### GOTCHA™ CRD Kit (EN 1496 + EN 341) rescue descending hoist device

The CRD descender has an integrated special gear unit with a hand lever. This can be used to lift an unconscious persons without any additional help, e. g. from the driver’s cabin of a crane. When lowering a person, the CRD („Constant Rate Descender”) automatically ensures a constant, defined descent rate. Therefore, you can save individual persons from a height of up to 400 m. In the event of an evacuation, the CRD can also be used by multiple persons in quick succession. Because the device is designed to bear a maximum load of 225 kg, up to two persons can be returned to safety at the same time in an emergency.



Article number	Rope length [m]
D013422	100

## RESCUE SYSTEM ACCESSORIES

- Suspension loop trauma harnesses
- Suspension relief straps
- Casualty harness
- Rescue cracker
- Rope clamp
- Footloop
- „Buddy“ fall arrester



### Trauma harnesses suspension loop & suspension relief straps

To alleviate the effects a suspension trauma, SpanSet offers the suspension loop and the suspension relief straps as a small and handy accessory for the GOTCHA kits. These trauma harnesses are used together with one of the rescue kits. The trauma harnesses can help a suspended person – provided they are conscious – to position themselves inside the loop and thus to delay a suspension trauma.



Article number	Designation
1 D015611	Suspension Loop
2 D037304	Suspension Relief Straps

### Casualty harness

Injured persons who are not wearing a harness, because they are e. g. crane operators, have to be rescued from a height. Not a problem with this harness. Regardless of whether the person is conscious or not.



Article number
D041639

### Rescue Cracker (EN 1496 + EN 341)

The Cracker is an extremely light-weight, compact conveyor system. The pulley system with a force transmission of 6:1 provides a major mechanical advantage for rescuers who have to carry a casualty's weight. The carry bag in which all parts of the system can be stowed away is easy to transport and deploy. Weighing only 600 g altogether, the system comes with a compact rope clamp which can be used to attach the Cracker to a kernmantle rope.



Article number
D011808

### Rope clamp

Rope clamp as an add-on to the GOTCHA rescue kits and for height workers.



Article number
D041638

### Footloop

Foot loop as an add-on to the GOTCHA rescue kits and for height workers.



Article number
D041801

### „Buddy“ fall arrester

Back-up fall arrester for the GOTCHA VL vertical rope



Article number
D041863



- GRABBA Bag
- Safe Lifting Kit
- Spanhoist 12.5

### GRABBA Bag

There are many lifting bags available on the market, but the SpanSet GRABBA Lifting Bags are the only ones that are authorised for lifting loads. The GRABBA bags are certified to DIN EN 1492-1. They can be used both as an accessory for your personal protective equipment and as lifting gear. To use the GRABBA bag as lifting gear, simply hang the crane hook into the reinforced lifting slings. To make it easier to attach the bag to your PPE against falls, the loops are fitted with a ring than you can clip onto your harness with a karabiner.



Art. No.	Load capacity [kg]	Storage volume [Litres]
D036487	75	40
D041649	125	60
D036488	250	200

### Safe Lifting Kit

The Safe Lifting Kit is a pulley system for lifting minor loads by hand. The system is pre-assembled and marked in accordance with EN 1492; it is thus authorised for lifting procedures. During the annual inspection only one system has to be documented, and not all individual parts of the system. In accordance with the standard, the system has a maximum load capacity of 150 kg.



Art. no.	Load capacity [kg]	Rope length [m]
D046634	150	25

### Spanhoist 12.5

With this personal protective equipment, the user is able to lower himself to the place of operation and back up again. The system can also be operated by a second user, who can lower the worker and then raise him up again. The kit can be attached to multiple anchoring points, such as an extension arm, a tripod or an anchoring sling. To make work more comfortable, the kit should be used with the corresponding CLIMA harness or a work seat.



Recommended accessories:

- Seat board
- Karabiner
- Rigging plate [See page 39]

Art. no.	Rope length [m]
D033968	50

### i HD Tripod

The aluminium HD (heavy-duty) tripod was developed for tough working conditions and for long-term use and is perfectly suitable for industrial applications. Right-angled, fully adjustable legs and a head piece made of one single piece prevent damage. Two integrated guide pulleys and an additional anchor point allow for many different options and combinations for entry, exit and rescue equipment.

For more information see page 28





## PPE SETS

- Cherry picker set
- Vertical set
- Roofing set
- Special set
- 'SafetySet E' PPE set



### Cherry picker set



#### Set components

Full body harness	1X Standard
Lanyards:	WRI-09E03
Storage equipment:	Rucksack
<b>Article number:</b>	D054973

### Vertical set



#### Set components

Full body harness	2X Standard
Lanyards:	Clima VL 20 m
Anchor sling	1 m
Storage equipment:	Bag, black
<b>Article number:</b>	D054977

### Roofing set



#### Set components

Full body harness	2X Standard
Lanyards:	Clima WPL 10 m
Anchor sling	BMS 1 m
Storage equipment:	Rucksack
<b>Article number:</b>	D054974

### Special set



#### Set components

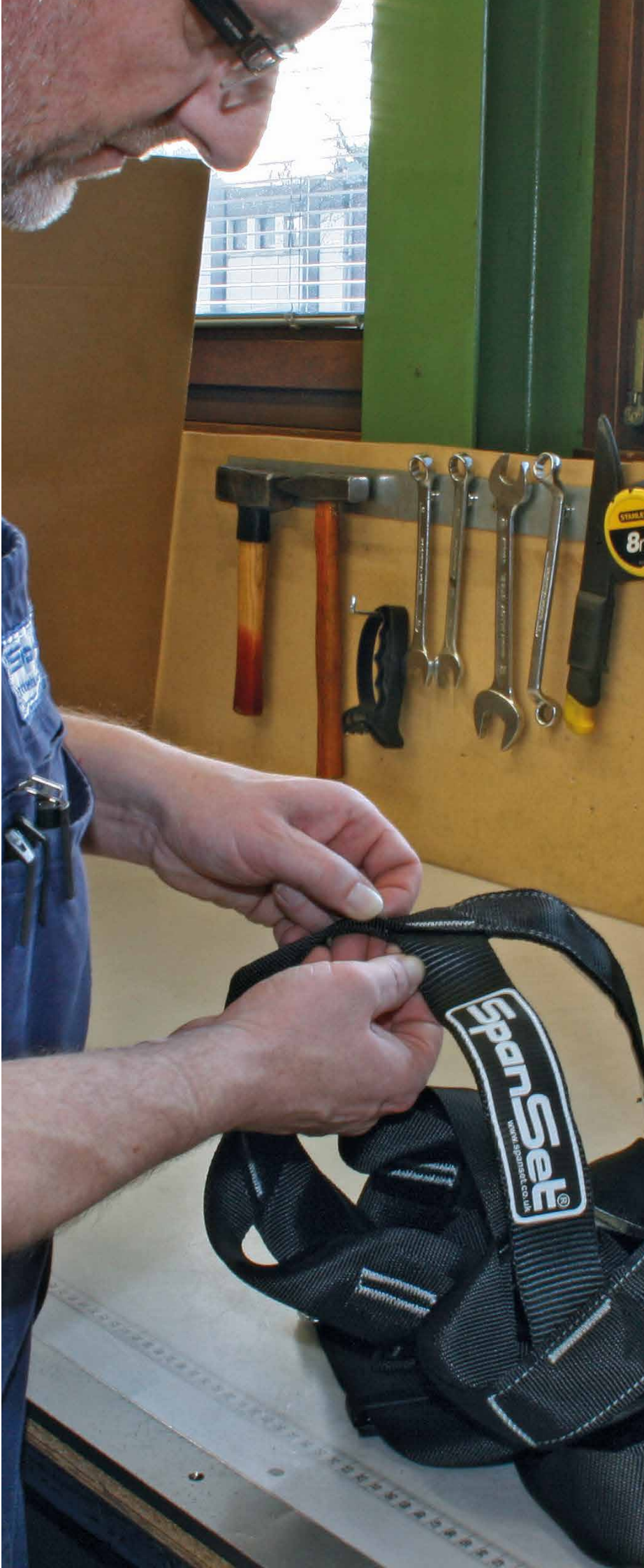
Full body harness	Excel 2X
Extension:	Extension strap
Retractable type fall arrester:	SRL PW3.5
Anchor sling	BMS 1 m
Karabiner:	ML 2
Storage equipment:	Rucksack
<b>Article number:</b>	D054976

### 'SafetySet E' PPE set



#### Set components

Full body harness	2X Standard
Lanyard:	guided-type fall arrester with tape energy absorber, polyamide rope 10 m
Storage equipment:	Metal case
<b>Article number:</b>	D007209



---

## OTHER PRODUCTS SERVICES

---

- Inspection service
- Prints/patches

---

### Inspection service

Height safety equipment and products have to be checked on a regular basis, usually annually, in accordance with the Employer's Liability Insurance Association Guidelines BGR 198 and BGR 199 and the Industrial Safety and Health Ordinance (BetrSichV). Defective products have to be repaired professionally or taken out of service. This inspection obligation, by the way, applies for all safety-relevant products, such as flat slings, lashing straps or ladders.

#### **Be on the safe side with the SpanSet inspection service.**

We check your personal protective equipment and height safety products for you in the mandatory intervals. In the most comfortable way for you: the inspection service comes to you and performs the inspection on-site, be it of SpanSet products or third-party products. The inspected, intact products are marked and registered, and you will receive an inspection certificate after each check-up.



---

### Prints/patches

We would be pleased to print your company logo on your products. Please ask us about the minimum quantities for the individual products.



[www.spanset.de](http://www.spanset.de)

---

### Online tools and more

#### SpanSet microsites

You will find all SpanSet products either in our catalogues or online. For selected products we have created microsites focusing on specific subjects on which you can find all the relevant information, order products directly or book seminars.

[www.spanset-nocut.de](http://www.spanset-nocut.de)  
[www.idxpert.de](http://www.idxpert.de)  
[www.magnum-x.de](http://www.magnum-x.de)  
[www.supraplus.de](http://www.supraplus.de)  
[www.spansetsafeline.co.uk](http://www.spansetsafeline.co.uk)  
[www.spanset-seminare.de](http://www.spanset-seminare.de)

---

#### Online tools

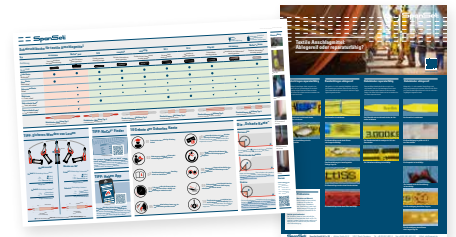
Along with the NoCut® [product finder](#) you will also find the [online calculator](#) for load control at [www.spanset.de](http://www.spanset.de). This tool helps you to easily and correctly [calculate the required lashing gear](#) when lashing down loads or the necessary lashing capacity LC for diagonal lashing in accordance with DIN EN 12195-1.



---

#### Informative posters

In the „Catalogue“ section on [www.spanset.de](http://www.spanset.de) you will find some interesting posters designed to make your daily work easier. In addition to the poster [Discarding of flat slings and round slings](#) you will also find the [Sharp Edges](#) poster there and the [checklist](#) for using anti-slip matting in load control.



---

#### SpanSet apps

Making everyday work easier and safer is our mission – even with the most modern tools. With the SpanSet [lashing calculator](#) you can quickly and easily calculate, for example, how many lashing straps you need to secure your load. The [Inspector](#) app allows you to reliably inspect your PPE and makes sure that you don't forget any important details. The [lifting app](#) determines the required angles and calculates the load capacity of the lifting gear.





---

### Facebook, Twitter and co.

SpanSet is active on several online channels. Get in touch with employees on [Xing](#) or stay in the loop on [Facebook](#) and [Twitter](#).



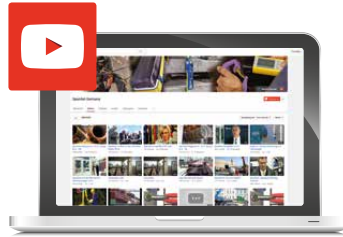
---

We keep you up-to-date!

---

### Informative videos

Why not visit our „[SpanSet Germany](#)“ channel on [YouTube](#)? Here you will find, for example, the current SpanSet company film. Let yourself be convinced by the performance of the Magnum-X round slings on the construction site in Roermond or watch our latest trade fair clip.

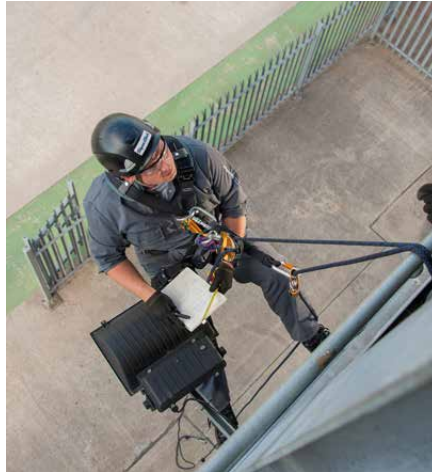


---

## How SpanSet makes height safety safer every day.

Our top priority is to save human lives and to protect from injury. Our systems provide this safety in a very special way, because SpanSet has been the global leader in research and development in this field for many decades.

### SpanSet – Certified Safety



# Fast access

The company history SpanSet 2-3

The SpanSet-recipe for success 4-5

Height-securing measures 6-16

Full body harnesses 17-20

Arresting vests 21

Lanyards 22-28

Karabiners 29

Restraint ropes 30-31

Attachment equipment Attachment points 32-37

Horizontal safety systems 38-42

Accessories fall prevention 43

Rescue systems 44-45

Accessories rescue systems 46-47

PPE sets 48

Other products, Services 49

More by Spanset 50-51

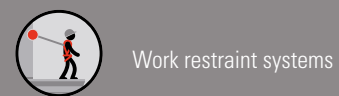
Certainly you can find all the information at the internet:

[www.spanset.de](http://www.spanset.de)



Simply capture the code with the QR reader using your mobile phone.

[www.spanset.de](http://www.spanset.de)



Work restraint systems



Work positioning



Fall arrest



Rooftop work



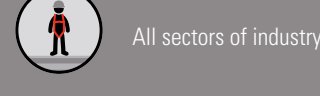
Lifting platform



Safety system on vehicles



Building maintenance



All sectors of industry



Container units



Building construction



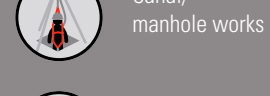
Telecommunication



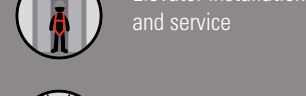
Work on masts



Industrial climbers



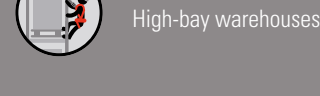
Canal/manhole works



Elevator installation and service



Military



High-bay warehouses



Scaffolding



Wind energy



Tower crane installation & maintenance



Construction



Steel construction



Capcha



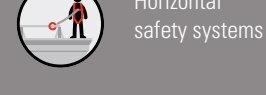
Oil & gas



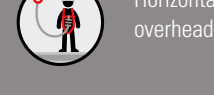
Height rescue



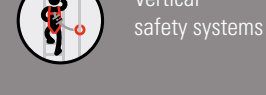
Crane



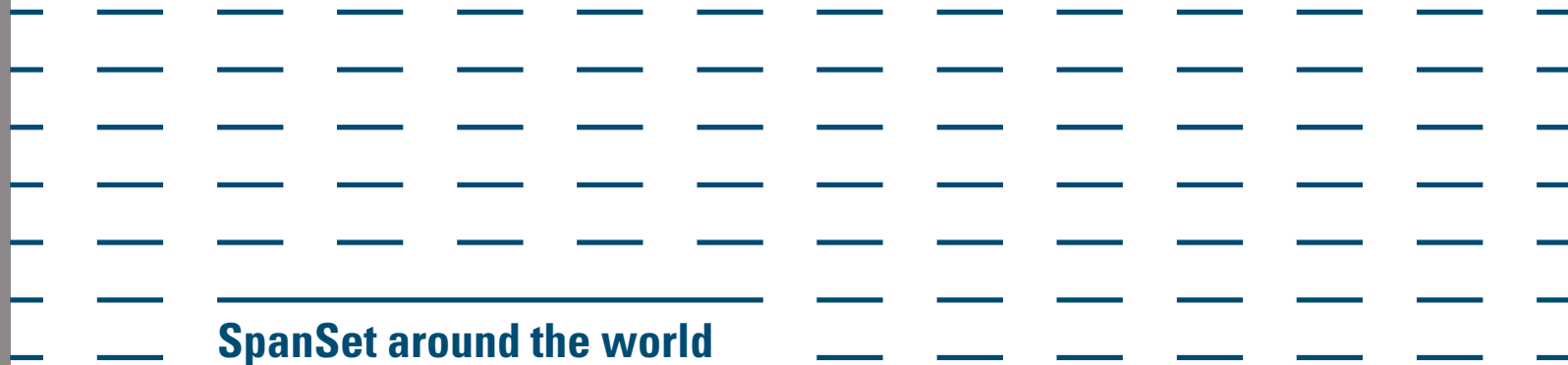
Horizontal safety systems



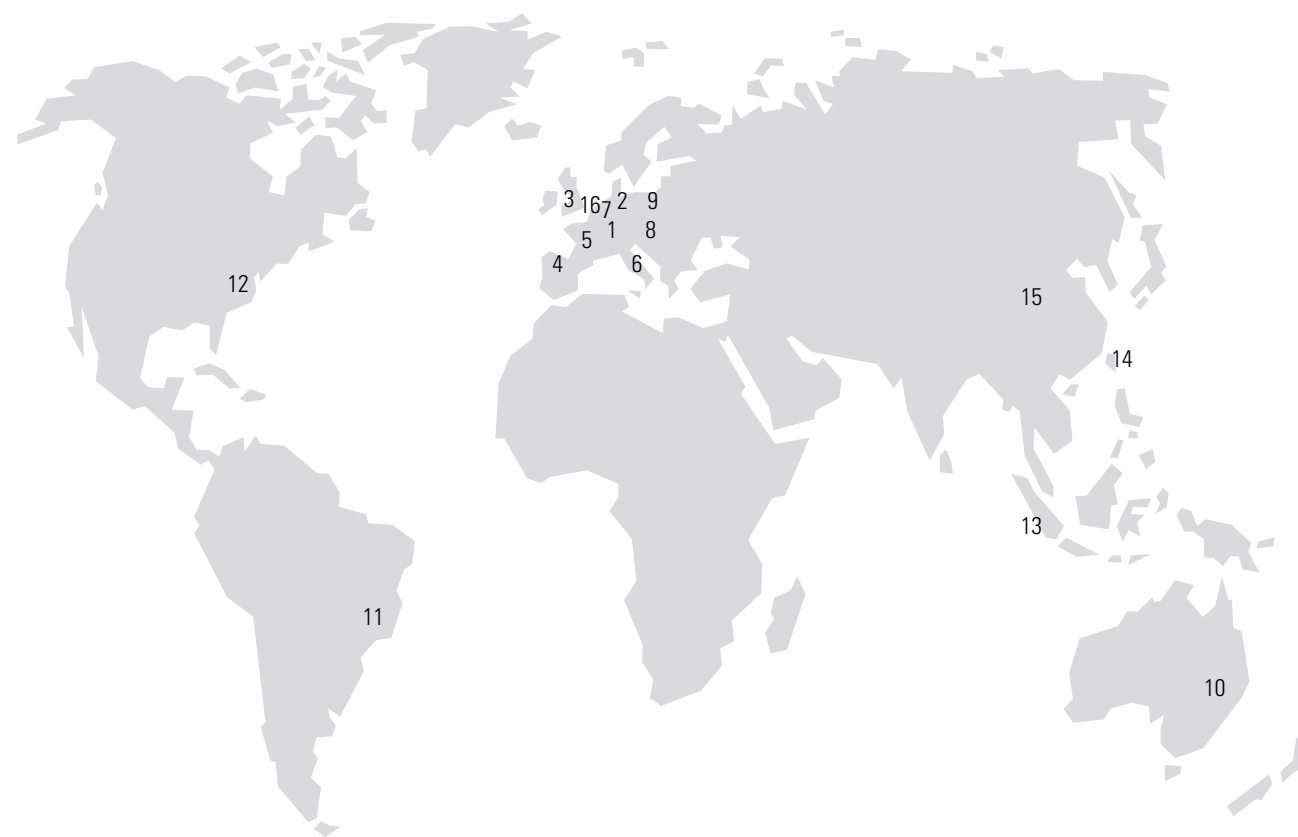
Horizontal overhead



Vertical safety systems



## SpanSet around the world



- |               |              |                |
|---------------|--------------|----------------|
| 1 Switzerland | 7 Austria    | 13 Indonesia   |
| 2 Germany     | 8 Hungary    | 14 Taiwan      |
| 2 England     | 9 Poland     | 15 China       |
| 4 Spain       | 10 Australia | 16 Netherlands |
| 5 France      | 11 Brazil    |                |
| 6 Italy       | 12 USA       |                |

