
SpanSet®
02
Height Safety
Lifting
Load Control
Safety Management
SpanSet GROUP
50 YEARS
SpanSet Certified Safety

Safety and quality „made by SpanSet“

Safety and quality were the driving forces behind the development of the seatbelt by the company founder Erik Ehnimb in 1966 in Sweden. As an international corporation with high innovative strength, SpanSet sets quality standards in load control, height safety and lifting. Property rights, patents and innovative solutions provide trend-setting impulses in a wide variety of sectors worldwide. New developments based on state-of-the-art technology guarantee tried-and-tested products that ensure greater safety and cost-effectiveness.

In addition to safety, top priority is given to the concept of quality in our everyday work as demonstrated by SpanSet's DIN EN ISO 9001:2000-certified quality management system. This also includes e. g. the Germany-based manufacture in our in-house weaving mill, strap finishing and assembly in Übach-Palenberg. In our product management, round slings and flat slings with the highest functional characteristics are developed in cooperation with external institutes and accompanied until they are ready for mass production. Solutions designed to meet all applications are developed for our international customers' lifting requirements. Furthermore, we offer our customers services geared to their needs, such as on-site technical advice, inspection service of the lifting gear as well as risk analyses and expert assessments. Current expertise is taught by certified consultants e. g. in our practical lifting seminars.

On the following pages you will find a comprehensive range of products for lifting. We develop special solutions in consultation with you as the user. Please ask us about this. With SpanSet you are always sure to find the right solution.

Hans-Josef Neunfinger Patrick Schulte

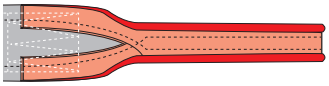
SpanSet legend

The product benefits of the SpanSet round slings and flat sling

Flat sling loop reinforcement

Added protection against abrasion

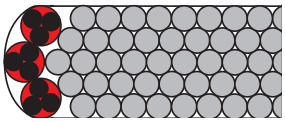
Loops have to withstand a great deal of stress during lifting, hooking in and hooking out. The solution: loop reinforcement made of high-performance fibres. Thanks to the robust fibre layer, the load-carrying fabric is much more resistant to abrasion, thus prolonging its service life.



Reinforced edges

Resistant to wear and abrasion

Extremely hard-wearing high-tech black spun yarn is woven into the edges of the slings. They provide an easily recognisable protection against chafing on the edge of the strap. Your benefit: longer service life and lower costs!

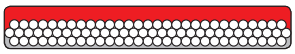


Flat sling coating

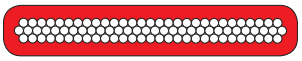
Protects against cutting of the lifting gear

Flat slings can be coated with secutex on one or on two sides, which provides for one-sided or all-around protection of the flat slings. This makes them more robust and protects against sharp-edged loads.

One-sided secutex®-coating



Two-sided secutex®-coating

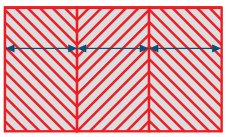


Weaving pattern

Measurable load capacity

With these flat slings you can „measure" the load capacity. The weaving pattern of the strap changes every 30 mm, and each „strip" indicates a nominal carrying capacity of 0.5 t per layer, e. g.:

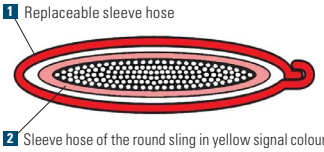
2-ply flat sling, 90 mm wide
= 3 x 30 mm x 2 layers = 3 t load capacity.



Replaceable protective sleeve

Damages visible immediately

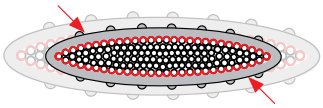
The round sling has an additional outer sleeve which can be easily replaced in the event of damage. The actual load-carrying round sling with a protective sleeve in the signal colour yellow lies underneath. Even minor damage to the outer sleeve is easy to see.



Compact cross-section

Compact thanks to improved production process

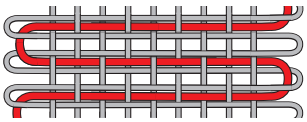
Thanks to the special matching of the sleeve and core, these round slings are very compact. The most important benefit: The compact round sling is not compressed in small crane hooks and the formation of creases is prevented – creasing would decrease the strength and is therefore prohibited.



Textile fibre reinforcement

Protects against tears and creasing

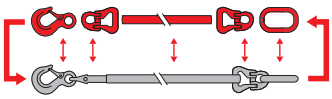
The textile filament woven into the outer sleeve offers reliable protection against tearing of the round sling and prevents further rupturing. Furthermore, the textile filament reduces creasing of the protective casing. The benefit: a longer service life of the round sling.



Modular system

Easily replace individual parts

If parts become damaged, you do not have to replace the entire sling. Thanks to the modular system you can easily replace each individual component, be it the round sling, the connector or the hook. This minimises purchasing costs and increases safety.



Folded label

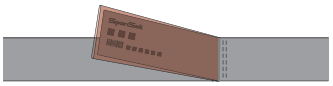
Protection against damage with writing on the inside

SpanSet lifting gear is fitted with a folded label which is sewn on in two layers. The label is also shorter because of a fold in the middle and is thus more tear-resistant. In addition, the writing on the inside is protected against abrasion.

Protective sleeve label

Optimally protected, reinforced with a lining

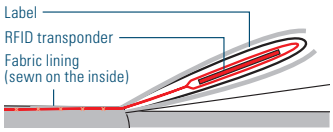
In addition to the tear-resistant design with a fabric lining, a robust plastic sleeve perfectly protects the writing from abrasion and dirt. In lifting gear fitted with an RFID transponder, the transponder is integrated into the protective sleeve and is tear-resistant.



RFID transponder

Elect. test documentation and management system

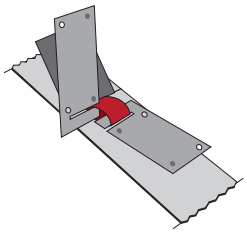
The SpanSet premium heavy-duty round slings are fitted with an RFID transponder that is firmly integrated into the label, which – together with IDXpert – makes it easy for you to plan, carry out and document the regular inspections of work equipment.



RFID optional

Attachment strap for retrofitting

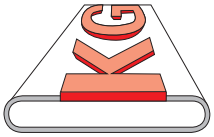
All SpanSet lifting gear can be fitted with an RFID transponder for asset management with IDXpert. An attachment loop sewn into the lifting gear makes for easy mounting of the transponder.



Woven load capacity indicator

Easy to read even when dirty

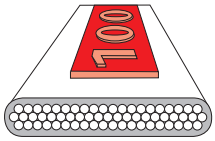
Speed is often of the essence in everyday work. To make sure you always use the right round sling, the load capacity indicator is firmly woven into the sleeve and can be read even when the sling is very dirty.



Sewn-in load capacity indicator

Easy to read even when dirty

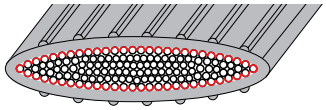
For more application safety, the load capacity indication is sewn firmly onto the strap. The load capacity remains clearly legible even when the lifting gear is very dirty.



Matching of the sleeve/core

Minim. the formation of creases, even at high load capacities

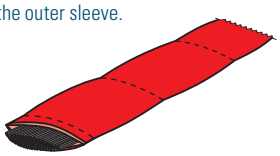
The sleeve and core are perfectly adapted to one another. The outer sleeve is designed to fit tightly around the edge of the sling – this makes the round sling more compact, lighter and reduces creasing in the longitudinal direction.



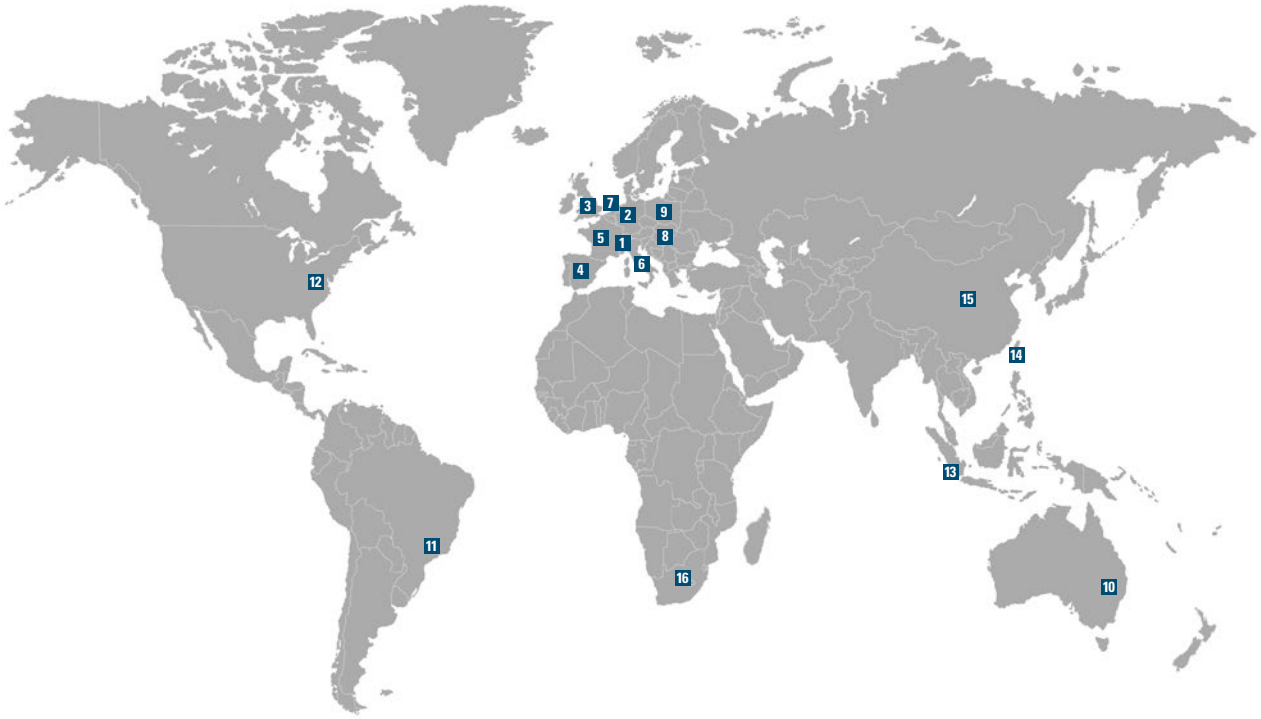
Safety chambers

Protects against ingress of dirt and foreign matter

The layers are woven into one another in sections in the double sleeve. This creates „chambers" that make it more difficult for foreign matter and dirt particles to penetrate the fabric in the presence of damage on the outer sleeve.



SpanSet worldwide



1 Switzerland, 2 Germany, 3 United Kingdom, 4 Spain, 5 France,
6 Italy, 7 Netherlands, 8 Hungary, 9 Poland, 10 Australia, 11 Brazil,
12 USA, 13 Indonesia, 14 Taiwan, 15 China, 16 South Africa

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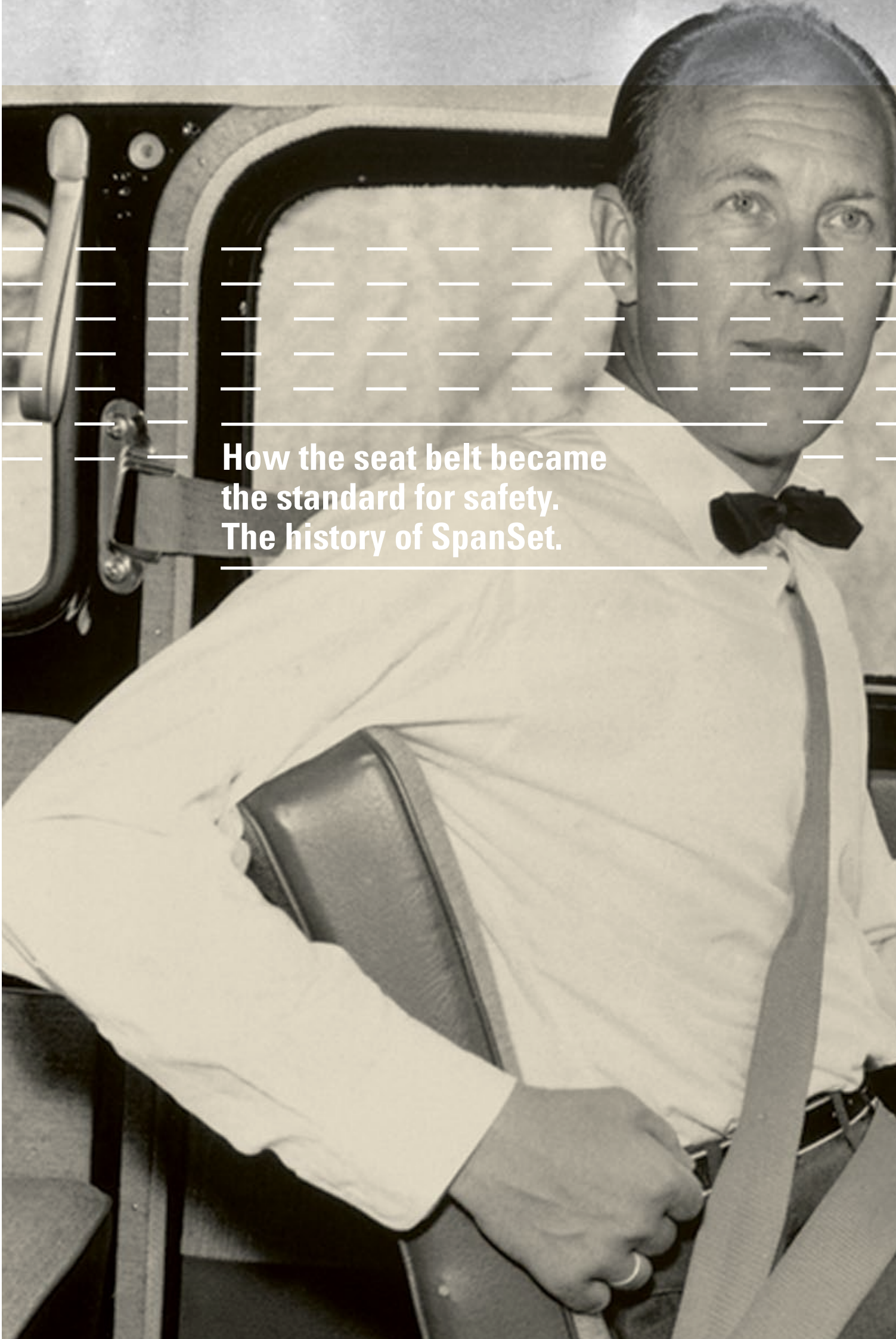


How the seat belt became the standard for safety. The history of SpanSet.

The foundation: the development of the seatbelt.
It's hard to imagine, but only 50 years ago cars had no seatbelts. At that time, little consideration was given to accident prevention and many accidents had fatal consequences where those involved would today escape unharmed. In the late 1950s, in order to improve the safety of those travelling in cars, the automotive manufacturer Volvo contacted the ribbon weaving company AB Textilkonst & Klippan with a commission to develop a safety belt for Volvo vehicles. The time had come for the small Swedish belt weaving company. Working together with Volvo engineers, it developed the world's first vehicle safety belt from hard-wearing fabric ribbon. In 1959, these belts were fitted in the Amazon and 544 models, and initially met with widespread astonishment from the public. However, as we know, they soon became a great success.

1966 – SpanSet Germany is founded.
Due to the considerable demand, Erik Ehnimb, the co-owner of Klippan, founded the SpanSet company in Malmö in 1966. The straps produced by SpanSet were quickly put to use in many other areas in which chains and wire cables had previously been used. In particular, customers valued the extremely high load-bearing capacity of the new lashing and lifting straps. The same year saw the foundation of SpanSet GmbH & Co. KG in Germany, and this was followed just one year later by the establishment of SpanSet AG in Hombrechtikon, in the Zurich region. These start-ups were soon followed by further subsidiaries in Europe, Asia, the USA and Australia, and remain part of a global production and sales network to this day.

The 1970s – further innovations were on the agenda.
The development of the car safety belt was only the first of many innovative products that SpanSet brought onto the market over the course of the decades. In the early 1970s, SpanSet worked with Mannesmann Anlagenbau to develop lifting belt mats with load capacities of up to 60 tons for laying large-diameter pipes for the pipeline and gas industry. For the first time, flat slings and protective sleeves could now be used to lift and turn rough and sharp-edged loads thanks to the secutex coating.

Continuous further developments during the 1980s.
The secutex coating was an important step in lifting technology and led to the foundation of SpanSet-secutex GmbH in the early 1980s. Furthermore, a new generation of round slings came onto the market, with textile fibre reinforcement and a superior load capacity label woven into the fabric. Moreover, for the first time, the knowledge and experience that had been built up in the areas of lifting and load control was passed on through training sessions.

SpanSet provides even more safety.
In 1994, TÜV Rheinland certified that SpanSet had a quality management system managed in accordance with DIN ISO 9002/EN 29002. By the way: today, SpanSet's quality management is DIN EN ISO 9001:2000-certified. Furthermore, the company started producing and selling personal protective equipment to protect against falls. The Magnum round slings with an increased load capacity of 100 t and a maximum working length of 60 metres passed the critical test when they were used to lift a 110-metre long and 300-tonne heavy roof onto the Fritz-Walter stadium in Kaiserslautern in 1998.

Round sling with 450 t load capacity.
At the start of the century, SpanSet developed the first shorteners for textile round slings and flat slings with the VarioSling and VarioWeb. Furthermore, innovative powerhouses were launched onto the market with the new Magnum-X round slings. Stronger, more compact and more robust than other round slings, these slings can be manufactured with a load capacity of up to 450 t. Today, the SpanSet Group has more than 15 production and sales companies and almost 1,000 employees and is proud of its history – after all, the many decades of research and development work has resulted in increased safety, easier working practices, fewer accidents and has contributed towards lower operating costs around the world. On the basis of constant innovation and new technologies, SpanSet is now facing up to the challenges of the future.

SpanSet – Certified Safety

How SpanSet makes work operations easier, safe and more economical in areas other than lifting.

Height safety

Flat slings or round slings from SpanSet are not the only equipment one sees on the construction site of a new offshore wind farm in the North Sea. The installation of the individual elements, such as the engine or the rotor blades, takes place at heights at which there is a risk of falling and thus danger to life. The use of „personal protective equipment" (PPE) is indispensable when performing this kind of work. Consequently, some years ago, SpanSet was the driving force in the development of special harnessing and retention systems that offer an extremely high level of safety in such cases. In addition to lifting solutions, SpanSet also offers a wide range of products for height safety. We find highly specialised solutions even for the most complex applications. We have already developed many innovative products in close cooperation with our customers. The best example of this is Safeline, a fixed-line roof fall arrest system made from rustproof steel that is used as horizontal and vertical fall arrest and is manufactured in line with customers' requirements for the specific application. Customers throughout the world benefit from the close collaboration within the SpanSet Group. With a close eye on the EN standards at all times, we know what users need and what demands the legislation places on those using personal protective equipment.

Load control

When constructing the façade of a shopping centre, extremely long steel supports are required. However, before the supports can be lifted and installed with SpanSet Magnum-Plus round slings on site, the heavy load has to be safely transported to the construction site. This is where SpanSet lashing systems come into action. A comprehensive range of load control equipment helps users to secure a wide variety of goods, prevent hazards and costly transport damages and meet the statutory requirements.

When it comes to load control, SpanSet stands for quality and innovative solutions. Push and pull ratchets for loads ranging from 125/250 daN to 12,500/25,000 daN lashing capacity, load safety nets for quick deployment with constantly changing cargo and also a wide range of accessories, including anti-slip matting or edge protectors for sensitive goods, have helped increase the level of safety in load control for many decades. In addition to the continuous checks in our in-house laboratory, renowned institutions such as the employers' liability insurance association (BG), DEKRA, TÜV and DNV GL regularly inspect and certify our products and the way in which our quality management system is organised. By using SpanSet load control equipment, you are contributing optimally to ensuring the safety of man and transported goods.

Safety management

Tobias Leusch, a technician working for a car manufacturer, is responsible for the loading of sharp-edged car parts. In addition to choosing the correct lifting gear, the subject „sharp edge" is thus also of key importance for the lifting operations. But for Mr. Leusch, sharp-edged loads are never a problem – he recently attended the SpanSet seminar for lifting! Should he be confronted with any questions, Mr. Leusch can always consult the „Sharp Edges" brochure or contact a SpanSet application engineer – ensuring that even the most critical lifting operations are mastered together.

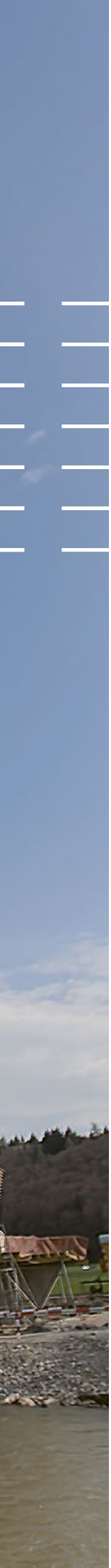
Not only because of the constantly changing safety provisions is it important to always be up-to-date on subjects concerning day-to-day work – which is why, at SpanSet, safety management has existed for many years. We want to help you effectively prevent risks. This includes competent, expert advice, the inspection and repair service and also our wide range of seminars designed to improve and simplify working at heights, lifting loads or securing cargo in a sustainable manner. Place your trust in our expertise and our experience and let us take care of these issues so that you can concentrate nf the important aspects of your work.

For more information, please download our Height Safety catalogue at **www.spanset.de/katalog.html**

To see the comprehensive range of load control products and solutions, please download our Load Control catalogue at **www.spanset.de/katalog.html**

To learn more about Safety Management visit **www.spanset.de** and to see our current seminar offerings visit **www.spanset-seminare.de**


HECTOR EGGER
HOLZBAU



Lifting

How SpanSet makes lifting loads safe and effective.

When heavy loads are moved, safety and care are the top priority. This means the highest level of protection for the goods and for all persons involved. SpanSet is one of the pioneers when it comes to lifting with textile lifting gear. With our lifting gear and the expert advice of our application engineers, you can effectively prevent hazards and accidents, while ensuring that you fully meet the requirements stipulated by law.

In the late 1960s, unwieldy chains or hemp ropes were used to lift heavy loads. At this time, SpanSet began to develop new solutions made of hard-wearing artificial fibres. Today, SpanSet's textile flat slings and round slings are used throughout the world to tackle difficult tasks. The ISO-certified flat slings and round slings from SpanSet have been used to lift antique works of art, whole roofs of sports stadiums and ships - after all, you can rely on the high-tech slings that are „made in Germany". SpanSet became the market leader thanks to constant innovations and an ISO-certified quality assurance standard. Numerous patents and a constant flow of new, practical improvements are a clear sign of our unique knowledge and expertise in lifting.

100 % quality – 100 % safety
From the material selection to the quality test, from exact calculations to intelligent application – we give 100% at every stage. We weave the majority of our flat slings and round sling sleeves ourselves – in Germany. In order to ensure that you receive only completely reliable and practical lifting gear, we employ experts from the various sectors and develop new products in collaboration with universities of applied sciences and other institutions.

Tested and certified
Our quality management system involves ongoing tests of materials and end products. These materials and end products are subject to continuous checks in our in-house laboratory and in external test series. We test the maximum load, strength and durability. For many years, renowned institutions such as the employers' liability insurance association, DEKRA, TÜV and DNV GL have been carrying out regular testing and certification of our products and the manner in which our quality management system is organised.

By choosing SpanSet quality products for lifting, you can move nearly any load – while protecting the material and ensuring the safety of the people.

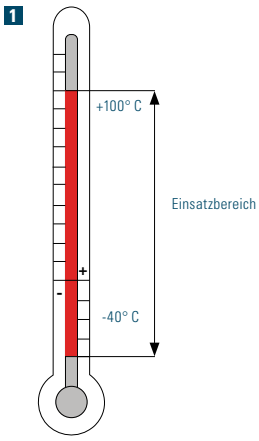
SpanSet – Certified Safety

Lifting gear

The right lifting gear

Material science

Textile lifting gear has to be manufactured from hard-wearing multi-filament yarns. Whether it's polyester (PES), polyamide (PA) or polypropylene (PP): Flat slings and round slings are only allowed to be manufactured from one single material. When choosing the right lifting gear, all important environmental conditions have to be taken into account. Extreme temperatures or aggressive substances – such as acids and caustic solutions – can reduce the durability of the fabric straps or make them impossible to use.



1 The permitted temperature range for using and storing flat slings and round slings made of polyester and polyamide is -40° C to +100° C.

What kind of textile lifting gear is the right one depends on the application. Is the load compact or high-volume? Does it have fixed attachment points? Are the surfaces sensitive – or does the load have sharp edges? SpanSet has the right lifting gear for every application:

Round slings

If you want to lift loads that do not have fixed attachment points, our round slings are the product of first choice. They can carry up to 450 t and are real workhorses. A surface that is extra-resistant to wear and woven textile wire reinforcement make Magnum-X & co. particularly robust: Quality for everyday use.

Flat slings

SpanSet's flat slings are particularly flexible. The loops are reinforced to make them resistant to wear and comfortable to handle. Equipped with links at the ends, the slings fit into every crane hook and are ideal for lifting operations in the noose.

Multi-leg slings

If your load has fixed attachment points, the choice is simple: Round slings and multi-leg slings are particularly easy to handle and can even be adjusted with the right accessories. Because every leg can be adapted to have an individual length, lifting asymmetrical loads is child's play.

Coated flat slings

To protect your lifting gear, secutex® is the number one choice. As a permanent coating on the flat sling for handling rough surfaces, or as a secutex®-coated protective sleeve for handling sharp edges – with these slings you will not only be able to safely lift, but also turn your loads.

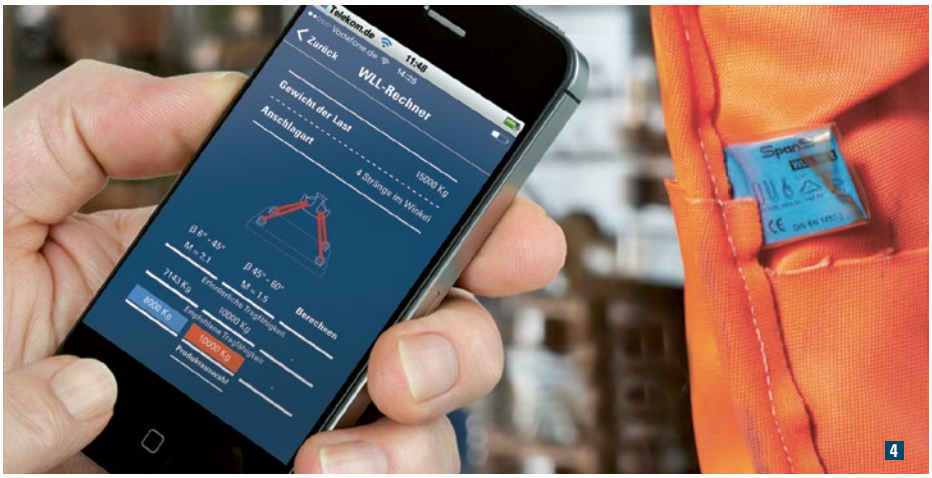
At a glance:
Load capacity in use

When choosing the right flat slings and round slings, SpanSet makes it twice as easy for you – with a label and colour code 2. The colour coding of the straps in accordance with DIN EN shows you immediately whether the load capacity in a straight pull is sufficient for the load in question.

Nominal carrying capacity [kg]

500 kg	5.000 kg
1.000 kg	6.000 kg
2.000 kg	8.000 kg
3.000 kg	≥10.000 kg
4.000 kg	

The nominal carrying capacity (working load limit, WLL) with the various slinging configurations. Under certain circumstances you may be able to lift heavier loads. We also kept this in mind: In addition to the nominal carrying capacity, you can also read off the load capacity in the most common applications directly from the label.



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The load lifting factor M

You can easily read off the respective load capacity of your lifting gear from the label – but not for all applications. The SpanSet load capacity controller or the lifting app can help you with this 4 (p. 104 ff). These aids help you to determine the factor M and to easily read off the load capacity in all common applications.

The most important standards and regulations

In Germany there are a number of regulations for lifting loads that have to be observed in addition to the European legislation. In principle, the following provisions apply for textile lifting gear:

- Machine Safety Directive 98/37/EC
- Occupational Health and Safety Ordinance
- DIN EN 1492-1
- DIN EN 1492-2
- DIN 60005
- DGUV Rule 100 - 5001)
- ZH 1/324
- BGI 556
- Company standards

It is important for you to be up-to-date at all times, because impermissible applications are very dangerous. To support you in this, SpanSet offers compact seminars in which you can learn the necessary expertise regarding the correct and compliant use of lifting gear in a practical environment. This means more safety for you, for your employees and for the loads. For more information about our seminars, see pages 106 - 111.

Lengthen at will – but in the correct way

If you want to lengthen round slings or flat slings, you must never tie the slings to one another or join them with a knot! This leads to incorrect loading of the fibres, which in turn rapidly decreases the load capacity – accidents are bound to happen. The Joker Hook provides a safe way of lengthening the lifting gear (p. 50 et seq.). For more information please refer to the quick reference guide 5 that is sewn onto every SpanSet sling.


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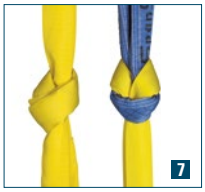

7

6 Correct lengthening with the Joker Hook

7 Wrong! Never tie round slings and flat slings to one another or join them with a knot.

Watch out for sharp edges

By definition, a sharp edge is frequently not recognised as such because the edge is seen as being round and not sharp. Left undiscovered, sharp edges can quickly damage the lifting gear. A sharp edge already exists if the edge radius **„r"** is smaller than the thickness of the material **„d"** of the lifting gear. For more information about the sharp edge, see pages 12 et seq.

The basic rules for correct lifting

01 Determine the weight

To ensure safe lifting it is absolutely essential to know the weight of the load. Design specifications, shipping papers or indications on the lead can provide the necessary information. Alternatively, the load can be weighed by briefly lifting it with a crane scale – always with an eye on occupational safety, i.e. in accordance with the valid accident prevention rules.

02 Take into account the centre of gravity

The crane hook always has to positioned directly above the centre of gravity. For asymmetrical loads, the strengths and lengths of the individual legs have to be determined.

03 Determine the angle of inclination

The angle of inclination of the lifting gear has to be determined beforehand. It must not exceed 60°. To check your calculations you can use the SpanSet load capacity controller and the lifting app as a help (p. 110 et seq.).

04 Safety while lifting

If the radius r of an edge is smaller than the diameter or the thickness d of the lifting gear, the edge is considered to be sharp (p. 12 et seq.). This includes not only „razor-sharp" edges, but also typical rolling edges. Protective sleeves and edge protectors can help effectively protect your lifting gear. For more application instructions, please refer to the BGR 500 or our user manual.

1) Previously BGR 500 section 2.8

Sharp edge

Definition: Sharp edge

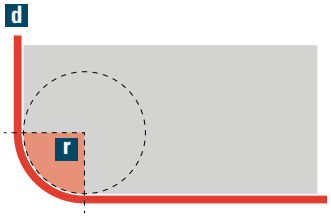
In addition to external factors, such as temperature or mechanical stress, „sharp edges“ still represent one of the main causes of damage to the lifting gear itself and are therefore a frequent cause of accidents. The most damages on sharp or rough edges occur by moving the load transversely to the lifting gear. If the edge is „sharp“, it can, in the worst case, cut through the lifting gear. If the load moves to the side, a cutting motion occurs at the edge. Being comparable with the blade of a knife, the edge can cut through unprotected lifting gear.

A sharp edge already exists if the edge radius „r“ is smaller than the thickness of the material „d“ of the lifting gear. If the edge radius is under 2 mm, experts already consider this a „razor-sharp edge“. The definition of „sharp edges“ was originally devised for wire rope attachments, but was not adapted to the development of round slings. This problem was examined by SpanSet in cooperation with the trade association and DEKRA in an extensive series of tests.

Tools for measuring radii
In order to assess the sharp edge, „tools“ are required. The following tools can be used to determine radii: radius gauge 1 , vernier caliper 2 , folding ruler.

The different versions of a sharp edge:

Sharp edge: Edge radius
If the edge radius r is smaller than the thickness of the flat sling/round sling d , the edge is considered „sharp“. Lateral movements or surface pressure can already be enough to sever the lifting gear.



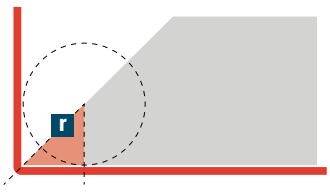
Example of surface pressure:

MagnumPlus 30 t, support width 170 mm
Magnum-X 30 t, support width 90 mm

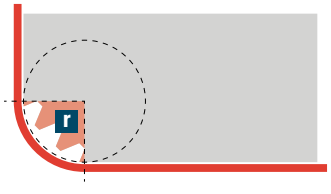
The surface pressure on the Magnum-X round sling increases by approximately 90%. The surface pressure exerted by the load on the lifting gear is lower

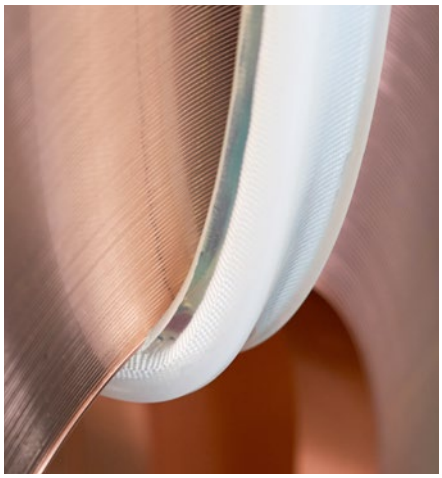
- the wider the contact area is,
- the larger the radius of the component is,
- the thicker the protective layer between the component and lifting gear is.

Sharp edge: Edge angle
In addition to loads with rectangular edges, there are goods with deviating shapes. These include loads with protruding edges and with sharp or jagged outer contours, such as cogwheels, turbine blades etc. These edges cannot be determined by the general rule.



Sharp edge: Edge shape
The shape and surface finish of the edges have a significant impact on the durability of the lifting gear. Very rough surfaces, such as those of a prefabricated concrete component, can very quickly damage textile lifting gear or a wire rope.





The 10 commandments of „sharp edges“ for flat slings and round slings

01 Never lift sharp-edged loads without receiving prior training!

02 Carefully plan the lifting procedure using the design specifications!

03 Read the instruction manual for the textile lifting gear before lifting!

04 If the radius of the edge is unknown, it has to be determined using measurement tools!

05 Lifting gear always has to be protected from sharp edges!

06 Never lift edge radii smaller than 1 mm without having received prior professional consultation! Don‘t take any risks and arrange a consultation appointment with our application engineers.

07 Use coated flat slings only with mounting hardware when suspending in a noose!

08 Use the flexible NoCut® sleeve and pad for deflections and narrow gaps!

09 Use protective sleeves to balance the lifting gear when lifting sharp-edged loads!

10 Relative motion between the load and the cut protectors is not permitted! Don‘t take any risks and arrange a consultation appointment with our application engineers.

Need some advice?

Telephone: +49(0)2451 4831-0
Email: scharfekante@spanset.de

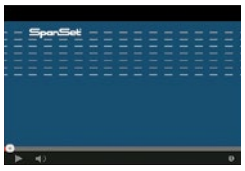
More about the „sharp edge“

View and print out

SpanSet has developed a brochure and a poster all about the subject of „sharp edges“. The PDF versions of these documents can be downloaded free of charge at **spanset.de/katalog.html**.

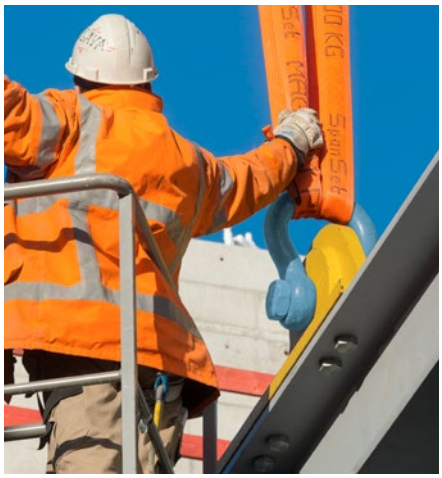
Download: „Sharp Edge“ brochure

Printout: „Sharp Edge“ poster



View: „Sharp Edge“ workshop

Sharp edge



We have something against the „sharp edge“

Years of experience, in-house test procedures, testing equipment and on-site consultation in the case of especially complicated loads provide for sound knowledge when „dealing with“ sharp edges. This has resulted in an extensive range of effective protective measures for lifting procedures involving sharp-edged loads.

Wir bieten:

- A complete range of protective measures
- Seminars all about „sharp edges“
- Operating manuals and documentation with detailed information on edge radii and lifting gear
- Product identification using labels and transponders
- DEKRA-certified products
- Special solutions in dialogue with customers

Für verlässliche Prüfergebnisse auf Basis der DIN EN 12195-2 steht die SpanSet-Werksnorm und damit auch unser eigenes „Qualitätssiegel“.

An overview of SpanSet's tools for dealing with sharp edges:

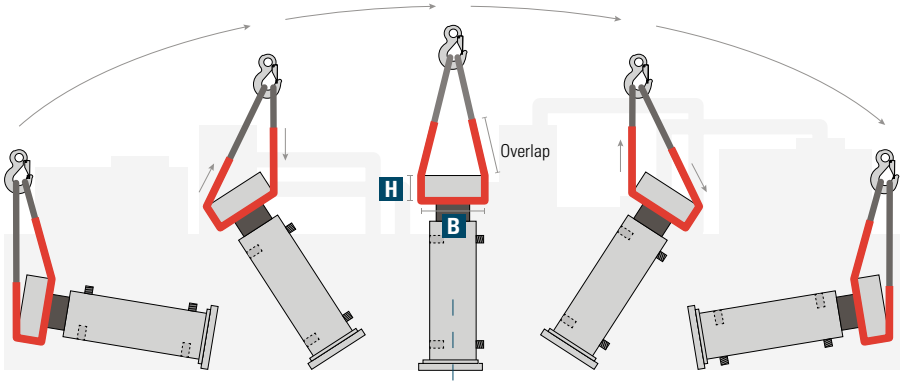
HPME-woven protective sleeves
The flexible and light-weight protective sleeves made of HPME are woven, certified by DEKRA and offer the perfect edge protection for round slings and flat slings when dealing with „sharp edges“. Find out more on p. 82 et seq.

secutex-coated protective sleeves
The protective sleeve latches onto the edge of the load, allowing the flat sling to glide freely through the protective sleeve. This protects both the load and lifting gear. For more information about our secutex protective sleeves, see p. 88.

ExoSet round sling shackles
Perfectly matched and tested combinations of round slings and shackles approved by the employers' liability insurance association offer effective protection from sharp edges. For more information see p. 100/101.

Edge protectors
The exceedingly robust secutex edge protectors are gentle on the load and on the flat sling. They increase the radius of the edge, thus preventing „sharp edges“. Ask us about it!

Coated flat slings
Permanent secutex coating effectively protects flat slings against cuts by sharp-edged loads, from wear and from ingress of foreign particles and fluids. Coated flat slings are presented on p. 72 et seq.



Safe raising and turning

When turning and raising coils, the use of protective sleeves is indispensable.

The flat sling is hung into the crane hook and positioned onto the load with the protective sleeve. When lifting, the strap freely moves inside the protective sleeve, which lies firmly against the load.

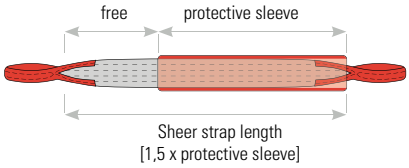
Turning component by 90°

Step 1:
Determine the minimum length of the protective sleeve

2 x H [height]
\+ 2 x B [wide]
\+ 2 x overlap 25 cm
Length of flat sling

Step 2:
Determine the minimum length of the flat sling

1,5 x protective sleeve
\+ 2 x loop length
Length of flat sling



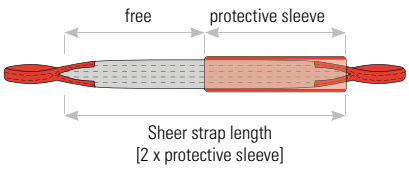
Turning component by 180°

Step 1:
Determine the minimum length of the protective sleeve

2 x H [height]
\+ 3 x B [wide]
\+ 2 x overlap 25 cm
Length of flat sling

Step 2:
Determine the minimum length of the flat sling

2 x protective sleeve
\+ 2 x loop length
Length of flat sling



i When raising/turning with **NoCut sleeve**, use an overlap of at least **+20 %** of the sleeve length.

Our tips for safely rotating coils

01 Position the flat sling exactly at 12 o'clock in the eye of the coil.

02 Only individual, unpacked and clean coils may be turned.

03 A slip-resistant base such as the secutex turning mat can be used.

04 Rolling of the coil or slipping in a transverse direction to the flat sling must be prevented.

05 Diagonally „pulling out" a coil is not permitted.

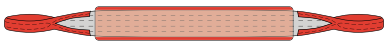
Protective sleeve types and surface finishes

The right type for every application

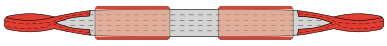
Lifting procedures are just as different as the respective loads themselves. This also apply to the field of application of the various types of protective sleeves, as the latter is adapted to the load and the working range of the lifting gear. This applies to both the NoCut sleeve and to all secutex protective sleeves.

The protective sleeve can protect the flat sling across the entire working length (type 1) or just a short part of its working length (type 2). In the case of round slings, the single strand can be protected over the entire working length (type 3) or a short part (type 4), while the double strand can be protected entirely (type 5) or over a short part (type 6).

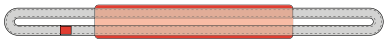
Flat slings: Image type 1
Protective sleeve over the entire working length



Flat slings: Image type 2
Protective sleeve pair for the contact area

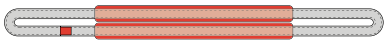


Round slings: Image type 3
Protective sleeve over the entire working length

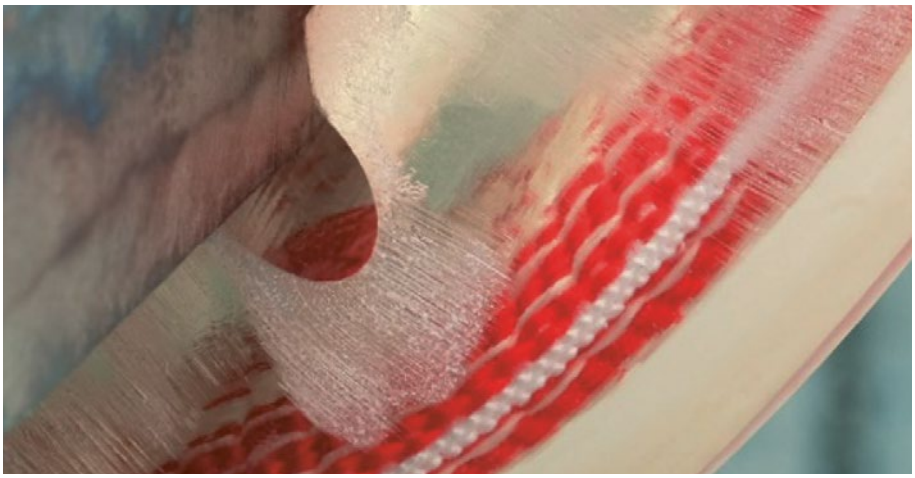


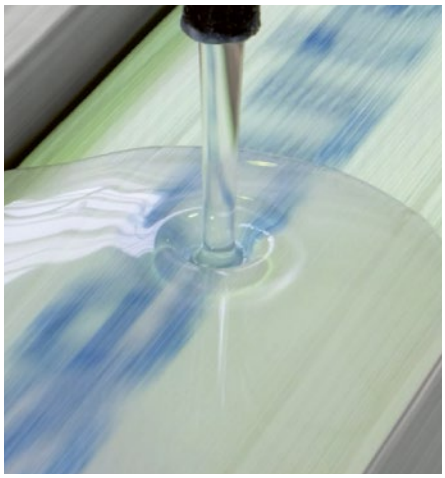
Round slings: Image type 4
Protective sleeve pair for the contact area

Round slings: Image type 5
Protective sleeve pair over the entire working length



Round slings: Image type 6
Protective sleeve pair for the contact area





Smooth
With the smooth secutex surface, the load rests on the entire surface. In a dry state, it offers the highest possible frictional lock and inhibits slipping to the greatest extent possible.

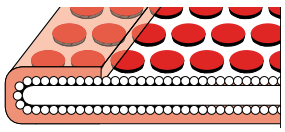
Ground
This surface is slightly rough. It is used if the contact side comes into contact with small amounts of liquids. The rough surface remains permanently slip-resistant.

Fish bone
More than „ground", this surface makes it possible for liquids to run off the surface. By means of an almost like relationship between bridging and beading, it maintains a high level of frictional lock with the load.

Pyramid
Here, the load rests only on the tip. This allows large amounts of liquid to run off the surface quickly, without breaking the contact between the contact side and the load.

Wave und Miniwave
Large, wave-shaped protrusions make it possible for the load to lock onto the flat sling. A version that is also used as a conveyor belt on turning crossheads.

Optional: Reinforcement and Tropic
By inserting steel plates, the coated part of the flat sling is equipped with an additional protective layer, which considerably increases the cut resistance.



The optional Tropic coating for flat slings is suitable for use in areas in which the equipment is subjected to permanent moisture, especially salt water. The hydrolysis-resistant secutex Tropic is the first choice for offshore use.

Surface finish for coated flat slings and protective sleeves

Our subsidiary, secutex GmbH, is the market leader in the field of coated flat slings and the driving force behind the development of protective coatings for use in industry. secutex is a polyurethane elastomer with excellent physical and chemical qualities:

High structural strength
Compared to other chemical materials, secutex is extremely resistant to wear and tear. The polyurethane can be stretched to 500% of its original length without tearing.

Particular elasticity
secutex possesses a substantially higher elasticity in comparison to conventional rubber, even when exposed to extreme changes in temperature. Extremely resistant to wear secutex is very durable. In the strength test under wet conditions, secutex was shown to be more durable than certain metals.

Long-lasting dimensional stability
No shrinking, no wrinkling. secutex retains its shape even after intense use. The protective sleeves retain their length and reliably protect the textile lifting gear from „sharp edges".

secutex protective sleeves and permanent coatings are manufactured in various surface finishes as standard. With the accurately fitting surface, the coated flat slings are particularly well suited for use in areas subject to the influence of water, ice and oil.

02.1

Round slings

How SupraPlus round slings are used to move gear units

The Voith Turbo BHS Getriebe GmbH in Sonthofen has devoted its efforts, among other things, to the construction, manufacture and installation of high-performance gear units. The heavy machine components, which can weigh up to 65 t, have to be lifted more than just once on their way from the manufacturing hall until they are dispatched. In addition to the heavy weight, the asymmetrical design of the components and the partly sharp edges at the attachment points pose a challenge. No problem for the compact SupraPlus round slings in combination with ExoSet shackles. Contrary to wire ropes made of steel, the round slings are much lighter, the risk of damage to the component is much lower and the risk of accidents is considerably reduced. Other SpanSet products, such as PowerStar, Magnum-X, NoCut and secutex protective sleeves are also used at Voith on a daily basis. „The high quality and the resulting durability of the lifting gear, but also the training sessions and briefings are decisive factors for placing our trust in SpanSet products", say Ralf Harden from the company Voith.

The SpanSet SupraPlus adapts to the load with virtually no creasing. In spite of its relatively slim design, it finds sufficient contact area even in smaller crane hooks and is not compressed. This helps to effectively prevent an impermissible loss of load capacity. A ribbed structure and woven textile wire make SupraPlus exceedingly robust. It meets the highest safety and quality standards worldwide. In addition to SupraPlus, SpanSet's Twintex and Liftfix complement the range of round slings for lifting weights ranging from 0.5 t to 8 t. The round slings are enveloped in a protective sleeve made of a special, robust polyester fabric that protects the core. During production, the sleeve and core are perfectly adapted to one another in order to prevent unwanted creasing. A firmly sewn label displaying the technical details offers additional safety in application. In addition to SupraPlus, Twintex and Liftfix can be optionally fitted with an RFID transponder. This enables the electronic identification and management of your lifting gear and saves time during regular inspections. Different protective sleeves also ensure trouble-free application – also when sharp edges are involved.

Facilitating lifting procedures while increasing safety at the same time: no problem for our round slings.

SpanSet – Certified Safety

02.1 ROUND SLINGS

SupraPlus 0,5 - 8,0 t

Download: SupraPlus brochure

For more information, download the SupraPlus brochure at **spanset.de/katalog.html.** Simply scan the QR code with the smartphone or tablet.

SupraPlus 0,5 - 8,0 t

- Slim and compact
- Very high cut and wear resistance due to special ribbed profile
- Robust, tear-resistant label protected by a transparent protective tube
- Superior load capacity indication woven into the sleeve
- With integrated loop to allow for easy retrofitting of an RFID transponder
- Optimal tear protection due to reinforced fabric with interwoven textile filament

SupraPlus – compact, robust and durable

Versatile and reliable

Whether it's a straight pull, single-layer lift or noose: The very compact SupraPlus round sling adapts to the load with virtually no creasing. The round sling is particular slim and finds sufficient contact area even in smaller crane hooks, without being compressed. This helps to effectively prevent an impermissible loss of load capacity. Universally applicable in all sectors of industry, SupraPlus meets the highest standards in terms of safety and quality worldwide.

With reinforced fabric and textile filament

The ribbed structure woven into the outer sleeve makes SupraPlus even more resistant to wear. The ribs are made of a high-performance polyester that is markedly more cut- and wear-resistant than conventional chemical fibres. The textile filament woven into the sleeve offers additional tear protection. More safety that also pays its way economically. On request, the SupraPlus can also be fitted with an RFID chip for IT-supported asset management with IDXpert (p. 94 ff.). An attachment loop firmly sewn onto the round sling allows for easy and quick attachment of the RFID chip.

Additional protection

Protective sleeves such as the one-sided SF-1 and the two-sided SF-2 or SpanSet NoCut are the ideal addition. They not only effectively protect the round sling from damages, but also facilitate the turning and rotating of sharp-edged loads and generally offer protection against sharp edges.

Nominal lifting capacity [kg]	Approx. material thickness under load [mm]	Approx. material width under load [mm]	L1 min. [m]	L1 max. [m]	Approx. weight per running m [kg]	Order numbers for standard lengths 1 m	1,5 m	2 m	3 m	4 m	5 m
500	5	40	0,50	30	0,2	**D005089**	**D005304**	**D005301**	**D011621**	-	-
1.000	5	42	0,50	30	0,3	**D005090**	**D005091**	**D005092**	**D005094**	**D005095**	**D015754**
2.000	7	46	0,50	30	0,5	**D004349**	**D004350**	**D004351**	**D004353**	**D005097**	**D010772**
3.000	8	54	0,50	30	0,6	**D008795**	**D011448**	**D005096**	**D005098**	**D005099**	**D010741**
4.000	10	57	0,75	30	0,8	**D008796**	**D009396**	**D008797**	**D005101**	**D008800**	**D010746**
5.000	10	62	0,75	30	1,0	**D015760**	**D009397**	**D010413**	**D010864**	**D010941**	**D011041**
6.000	11	68	1,00	30	1,3	**D011848**	**D013340**	**D014612**	**D010330**	**D012581**	**D010923**
8.000	13	73	1,00	30	1,8	-	**D015763**	**D011461**	**D010862**	**D011458**	**D010863**

Special designs available on request. Manufactured according to DIN EN 1492-2.

The explanations of the icons can be found on the flap.

Twintex 1,0 - 8,0 t

- Double sleeve with safety chamber makes it more difficult for foreign matter to penetrate the material if the outer sleeve if damaged
- Load capacity indication printed on
- Optional fitting with an RFID transponder
- 2-ply, tear-resistant label

Twintex – round sling with safety chambers

Tested quality

Twintex round slings with load capacities of 1 to 8 t meet all the requirements stipulated in DIN EN 1492-2. The GS-tested round slings are colour-coded in accordance with the Euro standard and have a 2-ply, permanently interwoven identification label. Furthermore, interwoven ton markings and printing on the sling indicate the maximum load capacity to help you quickly and reliably select the correct sling for your loads.

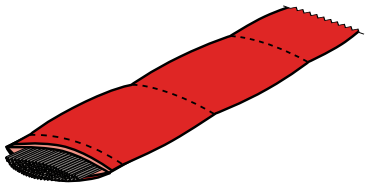
Dual chamber system

To protect against damage, Twintex round slings are enveloped by a double sleeve whose layers are interweaved with one another section by section 1. This creates „chambers" that make it more difficult for foreign matter and dirt particles to penetrate the fabric in the presence of damage on the outer sleeve.

Useful accessories

Different protective sleeves (p. 23 ff.) to protect against sharp edges are available for Twintex. Furthermore, the round sling can also be fitted with an RFID chip to facilitate electronic asset management (p. 98 ff.).

1 The Twintex round sling dual chamber system.



Nominal lifting capacity [kg]	Approx. material thickness under load [mm]	Approx. material width under load [mm]	L1 min. [m]	L1 max. [m]	Approx. weight per running m [kg]	Order numbers for standard lengths					
						1 m	1,5 m	2 m	3 m	4 m	5 m
1.000	4	46	0,50	30	0,3	**D001631**	**D001632**	**D001634**	**D001635**	**D001637**	**D001638**
2.000	6	49	0,50	30	0,5	**D001640**	**D001642**	**D001644**	**D001646**	**D001648**	**D001649**
3.000	7	58	0,50	30	0,6	**D001651**	**D001653**	**D001655**	**D001656**	**D001658**	**D001659**
4.000	8	63	0,50	30	0,8	**D001662**	**D001664**	**D001666**	**D001668**	**D001669**	**D001671**
5.000	9	72	0,75	30	1,0	**D001673**	**D001674**	**D001676**	**D001680**	**D001682**	**D001684**
6.000	12	82	1,00	30	1,3	**D001686**	**D001687**	**D001689**	**D001690**	**D001692**	**D001694**
8.000	13	83	1,00	30	1,8	**D001696**	**D001698**	**D001700**	**D001701**	**D001703**	**D001705**

Special designs available on request. Manufactured according to DIN EN 1492-2.

The explanations of the icons can be found on the flap.

Liftfix 0,5 - 8,0 t

– Load capacity indication printed on label
– Optional fitting with an RFID transponder
– 2-ply, tear-resistant label

Liftfix – tried-and-tested standard for daily use

Colour coding with ton markings
The Liftfix round sling is manufactured in accordance with the provisions of Euro standard 1492-2. A colour-coded outer sleeve with interwoven ton markings and load capacity printed on the fabric make it easy for you to recognise the correct lifting gear in daily use.

The load capacity of the round sling starts at 500 kg. For extremely heavy loads, you will find the heavy-duty versions of the Liftfix round sling with load capacities of 10 to 100 t on page 35.

Protection against sharp edges
For added protection, especially for sharp-edged loads, additional aids are available for the Liftfix round slings, such as SpanSet NoCut® (p. 24) or also the secutex protective clip SC (p. 27).

Nominal lifting capacity [kg]	Approx. material thickness under load [mm]	Approx. material width under load [mm]	L1 min. [m]	L1 max. [m]	Approx. weight per running m [kg]	Order numbers for standard lengths					
						1 m	1,5 m	2 m	3 m	4 m	5 m
500	3	38	0,38	30	0,2	**D001720**	**D001721**	**D001722**	**D001723**	-	-
1.000	5	42	0,38	30	0,3	**D001724**	**D001725**	**D001726**	**D001727**	**D001728**	**D001729**
2.000	7	43	0,38	30	0,5	**D001730**	**D001731**	**D001732**	**D001733**	**D001734**	**D001735**
3.000	7	57	0,38	30	0,6	**D001737**	**D001739**	**D001741**	**D001743**	**D001746**	**D001748**
4.000	8	65	0,38	30	0,8	**D001750**	**D001752**	**D001754**	**D001757**	**D001761**	**D001759**
5.000	9	68	0,75	30	1,0	-	**D001763**	**D001766**	**D001770**	**D001768**	**D001772**
6.000	10	81	1,00	30	1,3	-	-	**D001774**	**D001777**	**D001779**	**D001782**
8.000	13	84	1,00	30	1,8	-	-	-	**D001784**	**D001786**	**D001788**

Special designs available on request. Manufactured according to DIN EN 1492-2.

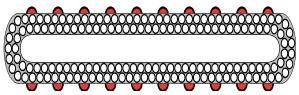
RFIDoptional

The explanations of the icons can be found on the flap.

NoCut® sleeve protective sleeve

- Low dead weight
- Supple and flexible
- High cut protection due to ribbed reinforcement
- Minimises application errors as it can be used on both sides
- Tested and certified
- 2-ply label with instructions for use

Unique ribbed structure of NoCut sleeve with equally high all-round cut resistance.



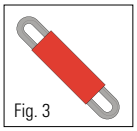


Fig. 3

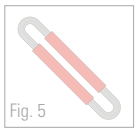


Fig. 5

NoCut® sleeve – woven protective sleeve with all-round cut protection

The protective sleeve NoCut® made of HPME fibres is simply slid over the round sling and placed against the sharp edge of the load to protect the lifting gear. The fabric-reinforced sleeve can also be fitted by the user as shown in Figure 3. On request, the single legs of a round sling can also be fitted with NoCut® sleeve at the factory as shown in Figure 5.

Long service life and maximum safety

NoCut® sleeve is supple and flexible, allowing the protective sleeve to be easily positioned on the load even in tight spaces. The design of the sleeve with equally high all-round cut resistance makes for a long service life, as it can be used on both sides, and offers the highest level of operational safety, as application errors are excluded. NoCut® sleeve is delivered as a prefabricated cut with trimmed edges. As standard, the protective sleeves are offered with lengths in 250-mm increments and widths ranging from 45 mm to 315 mm.

More about NoCut®

For more information about the NoCut® products and the product finder, which can be used to easily identify the right NoCut® product for textile lifting gear in just a few steps online, please see page 82.

NoCut sleeve suitable for	Designation NoCut sleeve	Approx. inside width [mm]	Approx. outside width [mm]	Approx. thickness [mm]	Approx. weight per running m [kg]	**SupraPlus**	**Twintex**	**Liftfix RS**
500	**NCS-075**	75	85	13	0,6	✓	–	✓
1.000	**NCS-075**	75	85	13	0,6	✓	✓	✓
2.000	**NCS-075**	75	85	13	0,6	✓	✓	✓
3.000	**NCS- 105**	105	115	13	0,8	✓	✓	✓
4.000	**NCS-105**	105	115	13	0,8	✓	–	–
	NCS-135	135	145	13	1,1	–	✓	✓
5.000	**NCS-135**	135	145	13	1,1	✓	–	–
	NCS-165	165	175	13	1,4	–	✓	✓
6.000	**NCS-135**	135	145	13	1,1	✓	–	–
	NCS-165	165	175	13	1,4	–	✓	✓
8.000	**NCS-165**	165	175	13	1,4	✓	✓	✓

Special designs available on request.
Protective sleeves can also be fitted by the user as shown in Fig. 3. Fitting by the factory as shown in Fig. 5 on request.

NoCut® pad protective plates

– Perfect for use with sharp edges
– Very low dead weight
– Flexible construction
– High operational safety due to tested quality
– High cut resistance
– Sewn label with handling instructions

NoCut® pad – particularly high cut protection

NoCut®pad is the combination of NoCut® sleeve with an internal fabric bridge that has fastening elements on both ends. The NoCut® pad model range offers the user three alternatives to fasten the protective plate to the lifting gear: Velcro strap **1** , Velcro strap with a frame buckle **2** or 2-piece metal buckle (frame or triple bridge) **3**.

NoCut® pad is mounted there where the lifting gear lies flat against the sharp edge. For the user this means: High flexibility, low material requirement and high safety when handling sharp-edged loads! The size of the edge protection can be exactly dimensioned for the danger area and precisely positioned on the sharp edge. Although NoCut® pads normally come in short lengths, there are additional attachment loops for the longer variants (see p. 85).

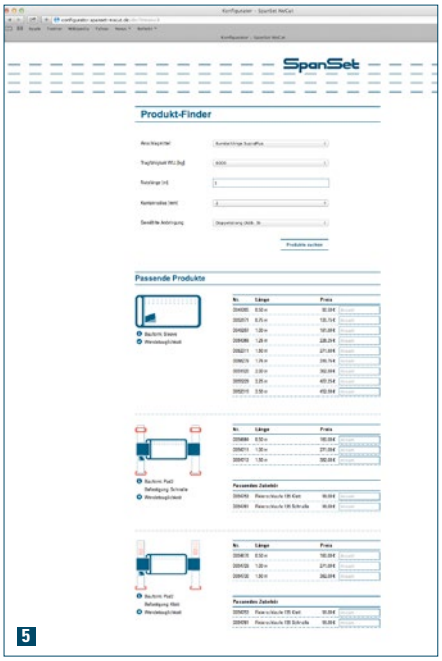
NoCut® pad is offered as a 2-layer or 4-layer version. This multilayer design achieves an extremely high level of cut protection and offers the user many options, also for critical lifting procedures.

Use of the HMPE material allows the user to deploy the textile protective plate in temperatures ranging from -40 °C up to +60 °C. As standard, NoCut® pads are produced in lengths from 500 mm to 1,500 mm in 250-mm increments.

NoCut® Produkt-Finder

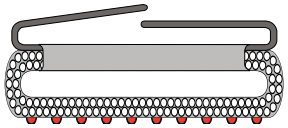
All SpanSet flat slings and round slings can be protected against sharp edges with NoCut® pad. Even the extremely compact Magnum-X round slings can be used to lift loads up to a load capacity of 30 t with the protective plates. Turning and rotating loads is not permitted – please use NoCut® sleeve for these operations.

The NoCut® product finder **5**, which can be used to easily identify the right NoCut® product for textile lifting gear in just a few steps online, can help you to select the rights pads for your application. For more information see page 89.

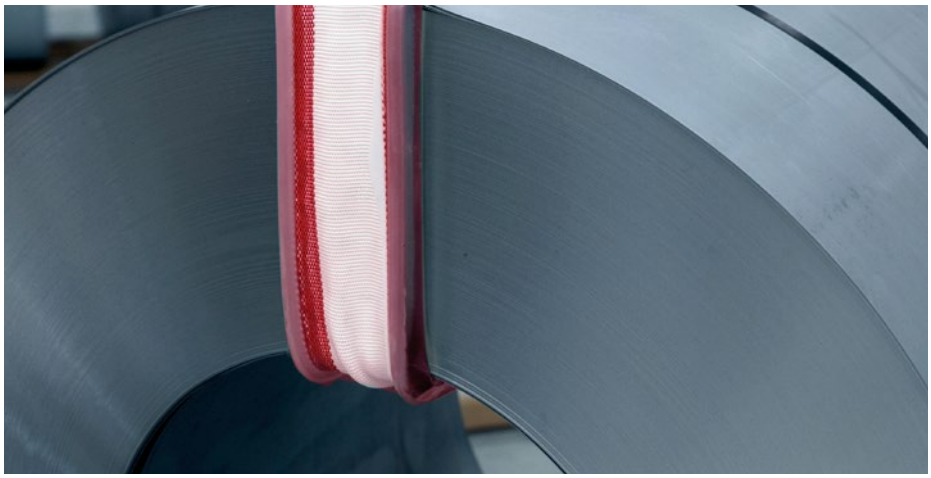


5

NoCut pad: the combination of NoCut sleeve and fabric bridge with a fastening element.

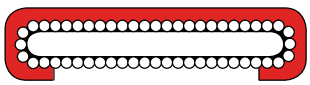


secutex SF-1 protective sleeve



- Easy to position
- Extremely cut-resistant
- Reduces creasing in the fabric
- Permanent dimensional stability
- Lifting gear is movable inside the sleeve

secutex SF-1: One contact side and the sleeve side are secutex-coated



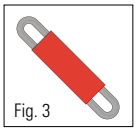


Fig. 3

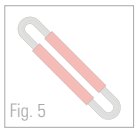


Fig. 5

secutex SF-1 – protective sleeve coating on one side

Protective sleeve coating on one side
The secutex SF-1 has been technically designed for optimal use with the SpanSet flat sling range and the SpanSet round slings. The contact side of the protective sleeve has a secutex coating, is extremely cut-resistant and reduces the formation of creases in the fabric. Easily clipped onto the textile lifting gear, the protective sleeve with the one-sided secutex coating equally protects the lifting gear and the load at „sharp edges“ and rough surfaces.

Designed for the application
On request, the protective sleeve also comes in a version with two-sided secutex-coating as secutex SF-2. This means that both sides can be used for lifting and mistakes can be minimised.

secutex SF-1 and SF-2 are available with different surface structures (p. 14), such as the slightly rough „ground surface finish“. It is used whenever the contact side comes into contact with small amounts of liquids. The interrupted surface remains permanently slip-resistant and its handling is more pleasant for the user.

The use of steel plates (reinforcement) for even greater cut resistance or the Tropic-coating for use in permanently moist environments are optionally available for the SF-1. This means that the protective sleeve can be adapted to your individual needs.

SF-1 suitable for	Designation SF-1	Approx. inside width [mm]	Approx. outside width [mm]	Approx. outside height [mm]	Approx. weight per running m [kg]	**SupraPlus**	**Twintex**	**Liftfix RS**
500	**SF-1 50/3**	55	70	25	1,2	✓	–	–
1.000	**SF-1 50/3**	55	70	25	1,2	✓	✓	–
2.000	**SF-1 65/3**	65	80	25	1,5	✓	✓	–
3.000	**SF-1 75/3**	80	95	25	1,8	✓	✓	–
4.000	**SF-1 100/3**	105	125	25	2,1	✓	✓	–
5.000	**SF-1 125/3**	125	145	25	2,6	✓	✓	–
6.000	**SF-1 125/3**	125	145	25	2,6	✓	✓	–
8.000	**SF-1 150/3**	155	175	25	3,0	✓	✓	–

Special designs available on request.
Protective sleeves can also be fitted by the user as shown in Fig. 3. Fitting by the factory as shown in Fig. 5 on request.

secutex Clip-SC

- With mounting slot on the back
- Quick and easy for anyone to mount
- Virtually indestructible
- Permanent dimensional stability
- Reduces creasing in the fabric

secutex Clip-SC – easy to handle, quick to attach

Clip with longitudinal opening
Thanks to the mounting slot on the back, the secutex Clip-SC can be quickly mounted by the user when needed – whether on single- or double-strand straps. The protective clip is easy to handle and quick to set up, and is preferably used in environments with constantly changing requirements and whenever round slings with or without additional protection are needed.

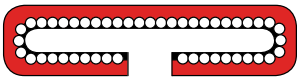
The permanently stable protective sleeve reduces the formation of creases. The secutex protective layer can be placed softly and flexibly on the load, thereby increasing the radius at the critical edges. The leverage forces are extensively distributed and the load remains undamaged.

Different designs
secutex Clip-SC comes with different surface finishes or also with inserted steel plates for increased cut protection (see p. 17).

Clip-SC suitable for	Designation Clip-SC	Approx. inside width [mm]	Approx. outside width [mm]	Approx. outside height [mm]	Approx. weight per running m [kg]	**SupraPlus**	**Twintex**	**Liftfix RS**
500	**SC 50/3**	55	70	25	1,1	✓	–	✓
	SC 30/5	55	70	25	1,1			
1.000	**SC 50/3**	55	70	25	1,2	✓	✓	✓
	SC 30/5	55	70	25	1,2			
2.000	**SC 65/3**	65	80	25	1,3	✓	✓	✓
	SC 50/5	55	70	25	1,2			
3.000	**SC 75/3**	80	95	25	1,8	✓	✓	✓
	SC 50/5	65	80	25	1,3			
4.000	**SC 100/3**	105	125	25	2,1	✓	✓	✓
	SC 65/5	65	80	25	1,3			
5.000	**SC 125/3**	125	145	25	2,6	✓	✓	✓
	SC 60/5	80	95	25	1,8			
6.000	**SC 125/3**	125	145	25	2,6	✓	✓	✓
	SC 60/5	80	95	25	1,8			
8.000	**SC 150/3**	155	175	25	3,0	✓	✓	✓
	SC 60/5	105	125	25	2,1			

i Special designs available on request.
Protective sleeves can also be fitted by the user as shown in Fig. 3 and Fig. 5.

One-sided secutex®-coating, sleeve open at the back for flexible use.



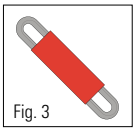


Fig. 3

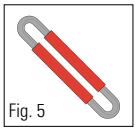
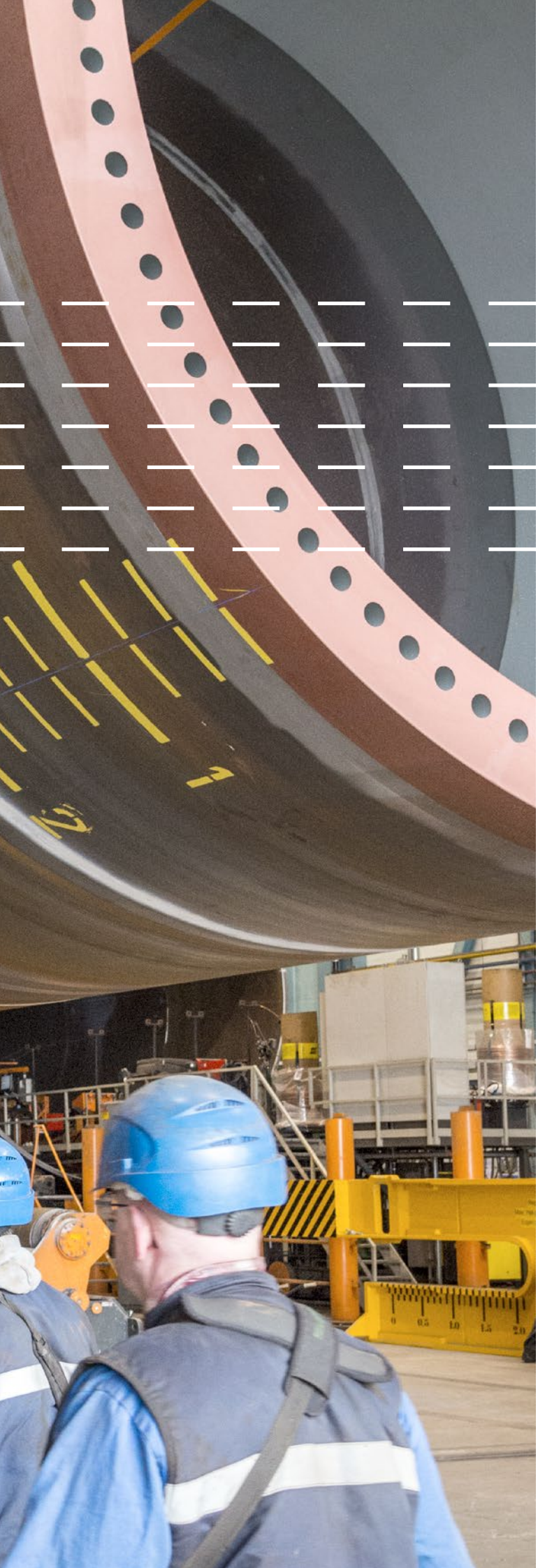


Fig. 5

02.2

Heavy-duty round slings



How 1,000 tons of steel are safely moved with the Magnum-X

The company Firma Sif Group bv from Roermond in the Netherlands is the market leader in the production of monopiles for the offshore industry. The thick-walled steel pipes are used as foundations for wind power plants. In addition to logistic skills, the transportation of a monopile from the manufacturing hall to the site of operation requires the use of professional lifting gear, as the round slings are subjected to a great deal of stress by the rough structure and the extremely heavy steel pipes. When transporting the monopiles, which weigh up to 1,000 tons and are 100 m long, the Sif Group relies on SpanSet Magnum-X and MagnumPlus round slings. Jan Donders, Safety Manager: „Our products have to meet very stringent quality standards. Since using SpanSet round slings, the service life has more than doubled. Safety is always our top priority, and the round slings always deliver, even under extreme conditions. When SpanSet was commissioned with the task of increasing the service life of round slings a few years back, we took the idea and made it a success – inspection, repairs and 24-hour service included."

You can master any challenge with the SpanSet range of heavy-duty round slings. One single Magnum-X sling can lift up to 450 t in a straight pull – enough for even the heaviest loads. The secret lies in the „core": A hard-wearing and heat-stabilised yarn is wound endlessly. This makes the finished round sling so flexible that it can easily adjust to the contours of any load. The Magnum-X smart is part of same product series. The heavy-duty round sling with a replaceable sleeve hose shows the user instantly if there is damage to the sleeve – a major advantage in terms of safety and operating efficiency. Standard RFID transponders, load capacity information woven into the fabric, protected quality labels and a range of protective sleeves make our premium heavy-duty round slings the perfect lifting gear, even under the most difficult conditions.

Noticeably increase the efficiency of your work with our heavy-duty round slings, even for the heaviest loads.

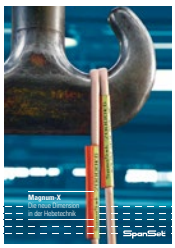
SpanSet – Certified Safety

02.2 HEAVY-DUTY ROUND SLINGS

Magnum-X 10,0 - 450,0 t

Download: Magnum-X brochure

For more information, please visit us on the internet at **www.spanset.de**. In the „Catalogue“ section you will find the PDF version of our Magnum-X brochure for downloading.



Movie: Magnum-X in operation

The procedure of lifting the monopiles in the port of Roermond was also captured in moving images. Simply scan the QR code and watch how the Magnum-X easily moves several hundred tons of weight.

Magnum-X 10,0 - 450,0 t

- Tear-resistant sewn label with additional protective cover
- Fitted with an RFID chip to store the product data
- Extremely robust and compact round sling
- Signal-coloured patch with superi or woven load capacity indication

Magnum-X – the new dimension in lifting

Magnum-X sets benchmark in convenience, safety and durability – all with a load capacity of up to 450 t. A core made of high-performance polyester and the compact sleeve hose make the Magnum-X sling up to 50% slimmer than comparable heavy-duty round slings, while maintaining the same load capacity. Even in small crane hooks and in attachment points the round sling is not compressed and exhibits high longitudinal and transverse rigidity. The reduced creasing of the sleeve hose in the crane hook and on the load markedly improves the wear performance. A signal-coloured patch with inter-woven load capacity indication also ensure that the sling is easy to recognise even at a distance and when heavily soiled. The label, which is additionally protected with a transparent cover, is tear-resistant. An RFID transponder that enables storage of the product data is integrated in the label and facilitates e.g. regular inspections.

Up to 125 t without a side seam

Magnum-X is available with load capacities ranging from 10 t to 40 t **1** in a side-elastic protective sleeve and from 50 t to 125 t in a woven protective sleeve. From 150 t to 450 t the woven protective sleeve is sewn on the side **2**.

Nominal carrying capacity [kg]	Magnum-X without side seam	Magnum-X with side seam	Approx. material thickness under load [mm]	Approx. material width under load [mm]	L1 min. [m]	L1 max. [m]	Approx. weight per running m [kg]	Order number for standard lengths 4 m	5m	6 m	7 m	8 m
10.000	✓		12	65	2,0	60	0,9	**D031023**	**D031029**	**D031030**	**D031031**	**D031032**
20.000	✓		19	67	2,0	60	1,8	**D030910**	**D030911**	**D030912**	**D030913**	**D030914**
25.000	✓		19	85	2,0	60	2,4	**D061947**	**D057505**	**D061948**	**D061949**	**D061950**
30.000	✓		25	90	2,0	60	2,9	**D030917**	**D030918**	**D030919**	**D030920**	**D030921**
40.000	✓		25	105	3,0	60	3,9	**D030924**	**D030925**	**D030926**	**D030927**	**D030928**
50.000	✓		19	146	3,0	60	5,2	**D031666**	**D031667**	**D031668**	**D031669**	**D031670**
60.000	✓		21	173	3,5	30	7,1	**D031673**	**D031674**	**D031675**	**D031676**	**D031677**
80.000	✓		24	192	3,5	30	9,4	**D031680**	**D031681**	**D031682**	**D031683**	**D031684**
100.000	✓		35	227	3,5	30	13,6	**D031687**	**D031688**	**D031689**	**D031690**	**D031691**
125.000	✓		45	301	6,0	30	18,7	**D031694**	**D031697**	**D031698**	**D031699**	**D031700**
150.000		✓	51	280	8,0	30	20,0	**D031703**	**D031704**	**D031705**	**D031706**	**D031707**
200.000 1)		✓	49	284	8,0	30	20,0	-	-	-	-	auf Anfrage
300.000		✓	81	330	8,0	30	43,1	-	-	-	-	auf Anfrage
450.000 1)		✓	79	330	8,0	30	43,1	-	-	-	-	auf Anfrage

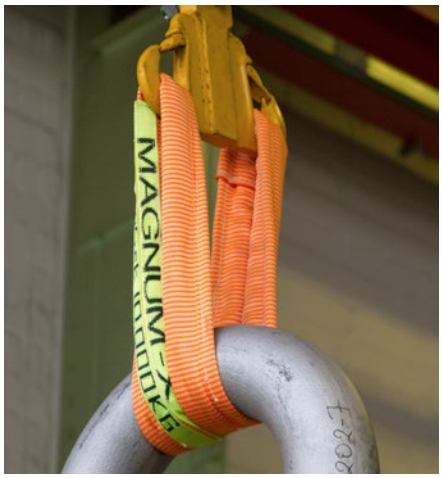
Special designs available on request. 1) Safety factor 1:5; manufactured according to DIN EN 1492-2.

RFID

The explanations of the icons can be found on the flap.

Magnum-X short 10,0 - 30,0 t

- Short version from 0.375 m to 2 m
- Tear-resistant sewn label with additional protective cover
- Fitted with an RFID chip to store the product data
- Extremely robust and compact round sling
- Signal-coloured patch with superior woven load capacity indication



Magnum-X short – the „short version“

Not even 40 cm long, but extremely strong
The characteristics of the Magnum-X sling, i.e. „very robust, compact and also extremely wear-resistant“, apply equally to the Magnum-X short, only with the addition of „extremely short“. In the standard lengths 1 m, 1.5 m and 2 m, „our short one“ is even more user-friendly. Even a length of just 0.375 m is possible. The round sling with load capacities of 10 t to 30 t is available as standard.

All characteristics of the Magnum-X
The Magnum-X short, with a close-fitting sleeve and a side seam, boasts the same characteristics as the Magnum-X round sling (p. 31). The use of high-performance fibres in the sleeve and in the load-carrying core makes the Magnum-X round sling lighter and easier to handle than conventional slings. The material thickness under load is very small and is made for extreme applications. It allows the sling to fit more snugly against smaller edge radii than conventional round slings while maintaining the same load capacity, making work operations more efficient, faster and safer.

Standard fitting and accessories
The Magnum-X short, which is manufactured in accordance with DIN EN 1492-2, is fitted with an RFID chip as standard for electronic asset management, e.g. with IDXpert (p. 94 et seq.) and a particularly well-protected label displaying all relevant data. A large, signal-coloured patch also shows the respective load capacity details.

Different protective sleeves are optionally available, which e. g. facilitates the use with extremely small edge radii and protects the round sling against damage.

Nominal carrying capacity [kg]	Approx. material thickness under load [mm]	Approx. material width under load [mm]	L1 min. [m]	L1 max. [m]	Approx. weight per running m [kg]	Order number for standard lengths				
						0,375 m	1 m	1,5 m	2 m	2,5 m
10.000	10	55	0,375	<2	1,3	available on request[1)]	**D048679**	**D048824**	-	-
20.000	13	70	0,375	<2	2,1	available on request[1)]	**D048826**	**D048827**	-	-
30.000	21	100	1	<3	3,5	available on request	**D048829**	**D048830**	**D048831**	**D063337**

Special designs available on request. Manufactured according to DIN EN 1492-2. [1)]different dimensions

The explanations of the icons can be found on the flap.

Magnum-X smart 20,0 - 40,0 t

- Replaceable protective hose
- Immediate recognisability of damaged sleeve hoses in signal colours
- Tear-resistant sewn label with additional protective cover
- Fitted with an RFID chip to store the product data
- Extremely robust and compact round sling
- Signal-coloured patch with superior woven load capacity indication

Magnum-X smart – the round sling with a replaceable protective hose

With the SpanSet high-performance round sling Magnum-X smart one can see straight away if the outer sleeve hose is damaged, as an additional outer sleeve for particularly hard and high-wear applications sets standards in terms of safety and operating efficiency.

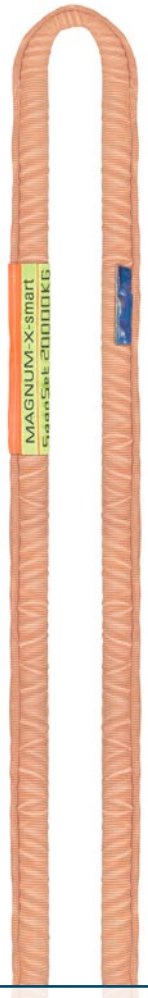
Magnum-X with an additional outer sleeve
Essentially, the Magnum-X smart is comprised of two parts: The exceedingly robust outer sleeve, made of durable high-performance fibres, which can easily be replaced in the event of damage 1 . Under the outer sleeve lies the actual load-bearing round sling with a sleeve hose, which is delivered in the flashy signal colour yellow 2 . Thanks to this signal colour, the inner sleeve hose of the round sling is easy to see even with minor damages or minimal wear of the outer sleeve – an unmistakable sign that it is time to replace the outer sleeve.

Cost-saving replaceability
In most cases, the actual round sling can still be repaired and continue to be used. When using the Magnum-X smart, this means not only a marked increase in safety, but also in operating efficiency, because a repair costs only a fraction of the purchasing price of a new round sling. The ability to replace the outer sleeves in a cost-saving manner also ensures a particularly long service life in high-wear applications, because the round sling can practically be considered brand new after the replacement.

In addition, the Magnum-X smart offers the same advantages as the Magnum-X heavy-duty round sling.

1 Replaceable sleeve hose

2 The sleeve hose of the Magnum-X smart round sling has a yellow signal colour



CE

Nominal carrying capacity [kg]	Approx. material thickness under load [mm]	Approx. material width under load [mm]	L1 min. [m]	L1 max. [m]	Approx. weight per running m [kg]	Order number for standard lengths 4 m	5 m	6 m	7 m	8 m
20.000	15	80	2,0	30	2,4	**D045273**	**D045275**	**D045276**	**D047647**	**D045277**
30.000	20	90	2,0	30	3,7	**D045283**	**D045284**	**D045285**	**D047650**	**D045278**
40.000	24	110	3,0	30	4,8	**D045286**	**D045287**	**D045288**	**D047652**	**D045289**

i Special designs available on request. Manufactured according to DIN EN 1492-2.

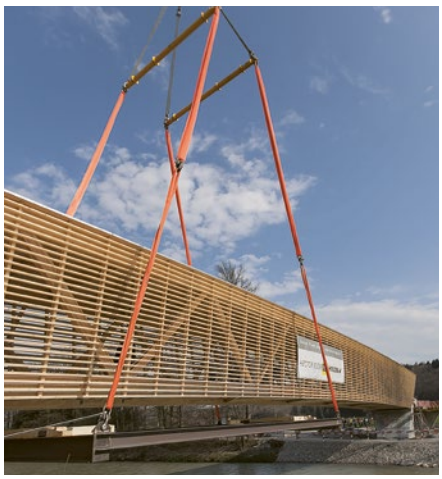
RFID

The explanations of the icons can be found on the flap.

02.2 HEAVY-DUTY ROUND SLINGS

MagnumPlus 10,0 - 300,0 t

- Optimal adjustment of the sleeve and core reduces creasing
- Tear-resistant label with RFID chip
- Extra-robust design
- Permanently legible load capacity details woven into fabric
- Optimal tear protection thanks to reinforced fabric with interwoven textile filament



MagnumPlus – strong hold for heavy loads

Load capacity of 300 t in a straight pull
The SpanSet MagnumPlus manufactured from high-performance fibres offers everything a textile round sling needs for lifting even the heaviest loads: reliable support, optimal handling and high resistance to wear. Just one single MagnumPlus heavy-duty round sling can lift up to 300 t in a straight pull in a lifting procedure; in the past, only significantly heavier wire rope grommets were able to stand up to this challenge.

Safe even under maximum stress
The MagnumPlus has proven itself in a variety of situations, even under maximum stress. The fabric hose of the round sling is manufactured e. g. with a close-fitting design on the side, which minimises the formation of creases even at high load capacities, and a textile filament woven into the sleeve protects the fabric from tearing.

See pages 36-39 for protective sleeves that are optimally adapted to the heavy-duty round slings.

Nominal carrying capacity [kg]	Approx. material thickness under load [mm]	Approx. material width under load [mm]	L1 min. [m]	L1 max. [m]	Approx. weight per running m [kg]	Order number for standard lengths 4 m	5m	6 m	7 m	8 m
10.000	15	89	2,0	60	2,2	**D042017**	**D042018**	**D042019**	**D042020**	**D042021**
15.000	18	112	2,0	60	2,7	**D042022**	**D042024**	**D042025**	**D042026**	**D042027**
20.000	22	130	2,0	60	4,0	**D042028**	**D042029**	**D042030**	**D042031**	**D042032**
25.000	24	150	2,0	60	5,0	**D042033**	**D042034**	**D042035**	**D042036**	**D042037**
30.000	26	170	3,0	60	6,5	**D042038**	**D042039**	**D042040**	**D042041**	**D042042**
40.000	34	190	3,0	60	9,7	**D042043**	**D042044**	**D042045**	**D042046**	**D042047**
50.000	36	195	3,0	60	12,5	**D042048**	**D042049**	**D042050**	**D042051**	**D042052**
60.000	47	220	3,5	30	16,6	**D042054**	**D042055**	**D042059**	**D042061**	**D042062**
80.000	51	230	3,5	30	20,8	**D042063**	**D042064**	**D042065**	**D042066**	**D042067**
100.000	61	265	3,5	30	24,3	**D042068**	**D042069**	**D042070**	**D042071**	**D042072**
150.000	75	350	8,0	30	45,5	-	-	-	-	available on request
200.000 [1]	55	420	8,0	30	45,5	-	-	-	-	available on request
300.000 [1] [2]	50	440	8,0	30	45,5	-	-	-	-	available on request

Special designs available on request. Manufactured according to DIN EN 1492-2. 1) with side seam; 2) safety factor 1:5

The explanations of the icons can be found on the flap.

Liftfix 10,0 - 100,0 t

- Optional fitting with an RFID transponder
- 2-ply, tear-resistant label
- Load capacity indication printed on label

Liftfix – the standard heavy-duty round sling

Colour coding with load capacity indication
The Liftfix heavy-duty round sling is manufactured in accordance with the provisions of Euro standard 1492-2. A colour-coded outer sleeve with printed load capacity details makes it easy for you to identify the Liftfix round sling with the right load capacity in day-to-day use.

Tear-resistant label
Lifting gear with illegible or missing labels should never be used. For this reason, Liftfix round sling has a 2-ply sewn folded label: this makes it more resistant to tear and protects the writing on the inside against wear.

Abrasion protection
To protect from damage or wear during lifting procedures, the Liftfix heavy-duty round slings can additionally be fitted with e. g. a secutex protective clip SC (p. 39).

Nominal carrying capacity [kg]	Approx. material thickness under load [mm]	Approx. material width under load [mm]	L1 min. [m]	L1 max. [m]	Approx. weight per running m [kg]	Order number for standard lengths					
						1 m	1,5 m	2 m	3 m	4 m	5 m
10.000	15	99	2,0	60	2,2	**D007173**	**D006247**	**D005420**	**D001791**	**D001793**	**D001795**
15.000	16	115	2,0	60	2,7	**D044809**	**D009665**	**D007594**	**D001797**	**D001799**	**D001801**
20.000	20	140	2,0	60	4,0	**D030092**	**D020493**	**D056010**	**D001804**	**D001806**	**D001808**
25.000	23	153	2,0	60	5,0	**D016206**	**D018946**	**D007074**	**D001809**	**D001811**	**D001813**
30.000	24	167	3,0	60	6,5	**D006586**	**D016540**	**D019365**	**D001815**	**D001817**	**D001820**
40.000	34	190	3,0	60	9,7	-	-	-	**D001822**	**D001824**	**D001825**
50.000	36	195	3,0	60	12,5	-	-	-	**D001826**	**D001827**	**D001828**
60.000	27	220	3,5	30	16,6	-	-	-	-	**D033563**	**D027911**
80.000	47	260	3,5	30	20,8	-	-	-	-	**D040732**	**D040749**
100.000	58	300	3,5	30	24,3	-	-	-	-	**D040745**	**D040746**

Special designs available on request. Manufactured according to DIN EN 1492-2.

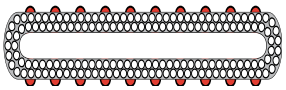
RFID optional

The explanations of the icons can be found on the flap.

NoCut® sleeve

- Low dead weight
- Supple and flexible
- High cut protection due to ribbed reinforcement
- Versatile, as it can be used on both sides
- Tested and certified
- 2-ply, tear-resistant label

Unique ribbed structure of NoCut sleeve with equally high all-round cut resistance.



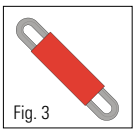


Fig. 3

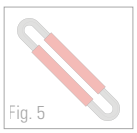


Fig. 5

NoCut® sleeve – all-round cut protection for heavy-duty round slings

NoCut® sleeve also offers the perfect all-round cut protection for our heavy-duty round slings. Simply pulled onto the round sling, the protective sleeve made from HPME fibres protects heavy-duty round slings with a load capacity of up to 25 t at the sharp edge of the load. NoCut® sleeve can also be fitted by the user as shown in Figure 3. Single legs of a round sling can also be fitted with NoCut® sleeve at the factory as shown in Figure 5. Ask us about it!

All-round protection with high cut resistance

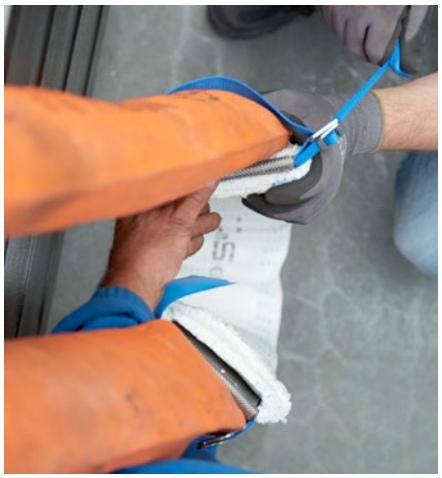
The super-flexible NoCut® sleeve protective sleeve can also be easily positioned on the load in very tight spaces. During lifting procedures, the protective sleeve sits firmly on the load, while the round sling can move inside the sleeve. The design of the sleeve offers equally high cut resistance all around, which means that it can be used on both sides. In addition to a longer service life, the design also offers advantages in terms of occupational safety. Since the sleeve can be used on both sides, application errors on sharp-edged loads can be excluded.

More about NoCut®

For more information about NoCut® and the product finder, which can be used to easily identify the right NoCut® product for textile lifting gear in just a few steps online, please see page 82.

NoCut sleeve suitable for	Designation NoCut sleeve	Approx. inside width	Approx. outside width	Approx. thickness [mm]	Approx. weight per running m	**Magnum-X**	**MagnumPlus**	**Liftfix RS**
10.000	**NCS-105**	105	115	13	0,8	✓		
	NCS -195	195	205	13	1,6		✓	✓
15.000	**NCS-255**	255	265	13	2,0			✓
20.000	**NCS-165**	165	175	13	1,4	✓		
	NCS-315	315	325	13	2,7		✓	✓
25.000	**NCS-315**	315	325	13	2,7		✓	✓

Special designs available on request.
Protective sleeves can also be fitted by the user as shown in Fig. 3. Fitting by the factory as shown in Fig. 5 on request.



NoCut® pad

- Perfect for use with sharp edges
- Very low dead weight
- Flexible construction
- High operational safety due to tested quality
- High cut resistance
- Sewn label with handling instructions

NoCut® pad – protective plates against the sharp edge

Alongside the NoCut® sleeve protective sleeve, SpanSet developed NoCut® pad, which is also made from woven HPME fibres. In the pad version, NoCut® sleeve is fitted with an inner fabric bridge equipped with fastening elements at both ends. Three alternatives are offered: Velcro strap [1], Velcro strap with a frame buckle [2] or 2-piece metal buckle (frame or triple bridge) [3].

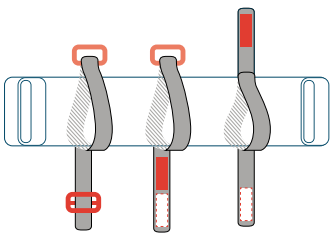
NoCut® pad is fitted precisely where the lifting gear comes into contact with the sharp edge. A major advantage for the user, as this requires less material in addition to providing added safety when lifting sharp-edged loads. The size of the edge protection can be exactly dimensioned for the danger area and precisely positioned on the sharp edge. Although NoCut® pads normally come in short lengths, there are additional attachment loops [4] available for the longer variants.

NoCut® pad comes in a 2- and 4-ply version. The 4-ply NoCut® pads offer an exceedingly high level of cut protection, so that the user can also carry out critical lifting procedures safely. As standard, the pads are produced in lengths from 500 mm to 1,500 mm in 250-mm increments.

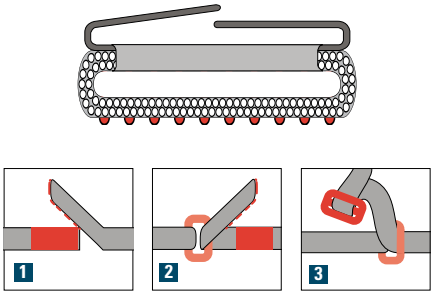
NoCut® product finder

Protect your SpanSet heavy-duty round slings with NoCut® pad against sharp edges. Even the extremely compact Magnum-X round sling can be used to lift loads of up to 30 t with the protective plates. The NoCut® product finder can easily help you find the right „pad“ for your round sling. In just a few steps, you can define the suitable NoCut® product. For more information about our NoCut® product range see page 82.

4 The optional attachment loops for longer versions come either with a Velcro strap, a Velcro strap and frame buckle or a frame and triple bridge.

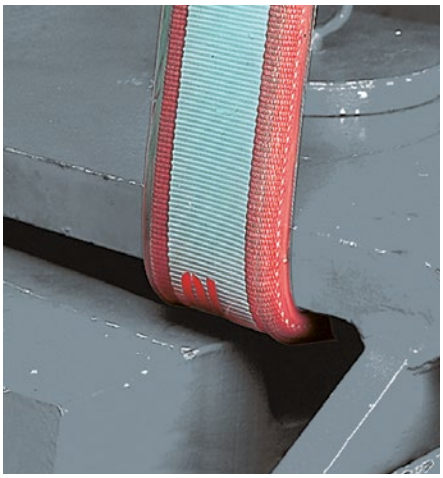


NoCut pad: The combination of NoCut sleeve and fabric bridge with a fastening element.

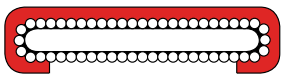


secutex SF-1 protective sleeve

- Easy to position
- Extremely cut-resistant
- Reduces creasing in the fabric
- Permanent dimensional stability
- Lifting gear remains movable inside the sleeve secutex SF-1: One contact side and one sleeve side are secutex-coated.



Secutex SF-1: One contact side and one sleeve side are secutex-coated.



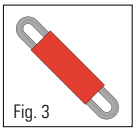


Fig. 3

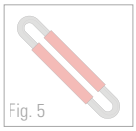


Fig. 5

secutex SF-1 – protective sleeve coating on one side

The secutex SF-1 has been technically designed for optimal use with the SpanSet flat sling range or the SpanSet round slings. The contact side has a secutex coating, is extremely cut-resistant and reduces the formation of creases in the fabric. Easily clipped onto the textile lifting gear, the protective sleeve with the one-sided secutex coating equally protects the lifting gear and the load at „sharp edges“ and rough surfaces.

The secutex protective sleeve also comes with two contact sides in the „SF-2“ version. For more information see page 92.

SF-1 suitable for	Designation SF-1	Approx. inside width	Approx. outside width	Approx. outside height	Approx. weight per running m	**Magnum-X**	**MagnumPlus**	**Liftfix RS**
10.000	**SF-1-60x25/3**	60	80	35	1,4	✓		
	SF-1 200-20/3	145	165	35	2,4		✓	✓
15.000	**SF-1 250-25/3**	185	210	50	4,6		✓	✓
20.000	**SF-1-110x30/3**	110	130	40	2,0	✓		
	SF-1 300-30/3	245	265	45	3,7		✓	✓
25.000	**SF-1 300-35/3**	245	275	50	4,0		✓	✓
30.000	**SF-1-140x35/3**	140	160	45	2,4	✓		
	SF-1 350-40/3	310	340	35	4,6		✓	✓
40.000	**SF-1 170-40/3**	170	190	50	2,8	✓		
	SF-1 350-50/3	340	365	60	4,9		✓	✓
50.000	**SF-1-170x40/3**	170	190	50	2,8	✓		
	SF-1 400-50/3	340	365	60	4,9		✓	✓
60.000	**SF-1-255x50/3**	255	275	60	3,8	✓		
	SF-1 400-70/3	400	425	90	8,4		✓	✓
80.000	**SF-1-380x60/3**	380	400	70	5,1	✓		
	SF-1 450-80/3	450	480	90	8,9		✓	✓
100.000	**SF-1-515x60/3**	515	535	70	6,3	✓		
	SF-1 500-80/3	500	530	105	13,0		✓	✓
125.000	**SF-1-515x80/3**		Dimensions on request				✓	
150.000	**SF-1-675x80/3**		Dimensions on request				✓	

Special designs available on request.
Protective sleeves can also be fitted by the user as shown in Fig. 3. Fitting by the factory as shown in Fig. 5 on request.

secutex Clip-SC

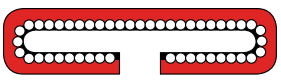
- With fitting slot on the back
- Quick and easy to attach for anyone
- Virtually indestructible
- Permanent dimensional stability
- Reduces creasing in the fabric

secutex Clip-SC – protective sleeve with a longitudinal opening

The secutex Clip-SC is quickly fitted thanks to the mounting slot on the back. Flexible in terms of application, it is used wherever round slings with or without a protective sleeve are alternately required. For more detailed information on the Clip-SC, see page 89.

Clip-SC suitable for	Designation Clip-SC	Approx. inside width	Approx. outside width	Approx. outside height	Approx. weight per running m	**Magnum-X**	**Magnum Plus**	**Liftfix RS**
10.000	**SC- 60-25/3**	60	80	35	1,7	✓		
	SC- 30-25/5	30	50	35	1,3			
	SC- 200-20/3	145	175	35	3,5		✓	✓
	SC- 100-20/5	95	110	35	2,3			
15.000	**SC-250-25/3**	185	210	50	5,9		✓	✓
	SC-125-25/5	105	125	50	3,7			
20.000	**SC-110-30/3**	110	130	40	2,4	✓		
	SC-55-30/5	55	65	40	1,7			
	SC-300-30/3	245	265	45	5,5		✓	✓
	SC-125-30/5	125	145	50	4,2			
25.000	**SC-300-35/3**	255	275	50	5,5		✓	✓
	SC-150-35/5	135	155	50	3,6			
30.000	**SC-140-35/3**	140	160	45	2,9	✓		
	SC-70-35/5	70	90	45	2,0			
	SC-300-40/3	310	340	35	6,8		✓	✓
	SC-150-40/5	155	175	60	5,2			
40.000	**SC- 170-40/3**	170	190	50	3,4	✓		
	SC- 85-40/5	85	105	50	2,4			
	SC- 350-50/3	340	365	60	10,0		✓	✓
	SC- 200-50/5	185	210	70	6,5			
50.000	**SC- 170-40/3**	170	190	50	3,4	✓		
	SC- 85-40/5	85	105	50	2,4			
	SC-400-50/3	340	365	60	10		✓	✓
	SC-220-50/5	220	240	75	8,9			
60.000	**SC- 255-50/3**	255	275	60	4,7	✓		
	SC- 130-50/5	130	150	60	3,2			
	SC-2-250-70/3	220	520	100	20,6		✓	✓
	SC- 250-70/5	220	240	100	10,3			
80.000	**SC-380-60/3**	380	400	70	6,5	✓		
	SC-200-60/5	200	220	70	4,3			
	SC-2-250-80/3	250	580	100	27,6		✓	✓
	SC- 250-80/5	250	290	100	13,8			
100.000	**SC-2-515-60/3**	515	535	105	8,2	✓		
	SC- 260-60/5	260	280	120	5,0			
	SC-2-515-90/3	280	535	120	38,4		✓	✓
	SC- 280-90/5	280	320	120	19,2			
125.000	**SC-2-515-80/3**	260	535	90	8,7	✓		
	SC- 260-80/5	260	280	90	5,5			
150.000	**SC-2-675-80/3**	340	695	90	10,7	✓		
	SC- 340-80/5	340	360	90	6,5			

One-sided secutex-coating, sleeve open at the back for flexible use.



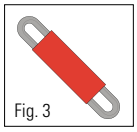


Fig. 3

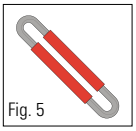
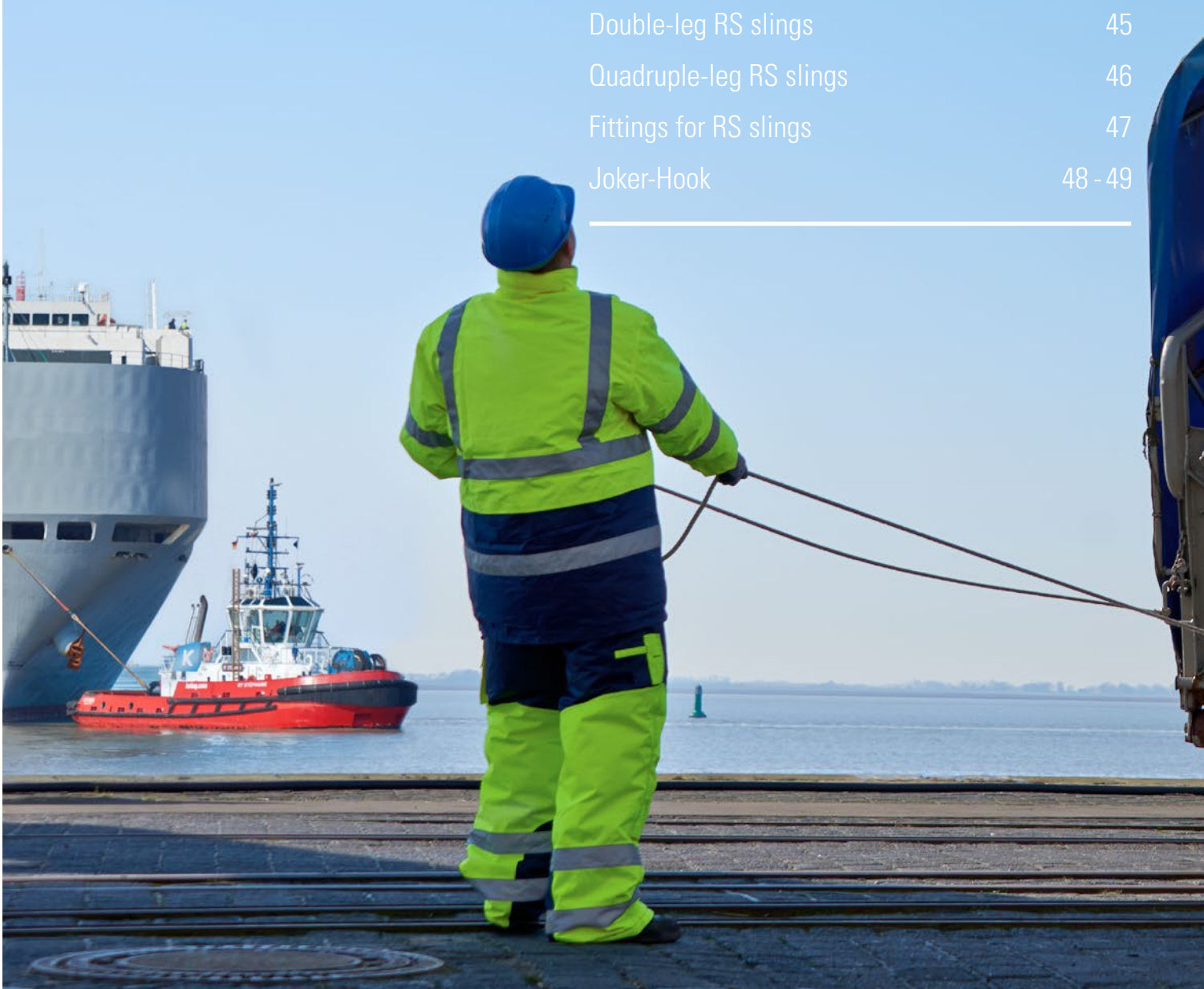


Fig. 5

Special designs available on request.
Protective sleeves can also be fitted by the user as shown in Fig. 3 and Fig. 5.

02.3

Round slings and multi-leg slings



How loads never lose their balance with VarioWeb

How passengers, luggage items and supplies are safety lifted on board or onshore is demonstrated by DEKRA Akademie GmbH in the Columbus Cruise Center in Bremerhaven during one of its everyday tasks. For cruise ships arriving in the port, a gangway has to be transported from the quay to the ships, e. g. to allow passengers to embark and disembark. The challenge for these lifting procedures is the varying heights of the ships. The ability to quickly and easily adjust the length of the lifting gear is decisive in this case, as the gangway has to be positioned on the ship at a specific angle. The DEKRA Akademie relies on VarioWeb to meet this challenge. With VarioWeb, the individual straps can be continuously adjusted, so that the angle of the gangway can be perfectly adapted to each individual ship. This is also a major advantage when lifting asymmetrical loads. „The easy handling thanks to the quick adjustability makes VarioWeb the perfect solution for our requirements", says Hartmut Oerding from the DEKRA Akademie. Its maintenance is also an economic advantage – if any part of the fixtures is damaged, it can be easily replaced thanks to the modular design concept.

In addition to „VarioWeb", the single- and multi-leg round sling fittings also offer high flexibility during use. With the combination of round slings in the required length in conjunction with different fittings, lifting symmetrical loads has never been easier. When using the 4-leg sling, the suspension of the load from four attachment points ensures that the load can tilt neither in the longitudinal nor in the transverse direction. When lifting at angles below 45°, it is possible to achieve load capacities of up to 63 t. The option of equipping the round sling fittings with an RFID transponder also makes life easier for the user. This way, product data can be electronically managed with IDXpert®, which is particularly beneficial during the regular inspections, as the inspection data are always at hand. To ensure a longer service life, all legs of the SpanSet round sling fittings are additionally enveloped in a protective sleeve. The sleeve, in the load capacity colours as per DIN EN, is firmly sewn and reduces wear of the material. At the same time it improves handling by bundling the round slings.

With the SpanSet round slings and multi-leg slings, every load is kept safely in balance.

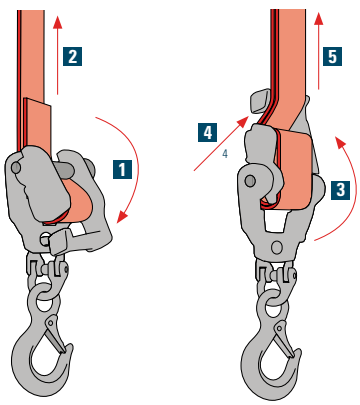
SpanSet – Certified Safety

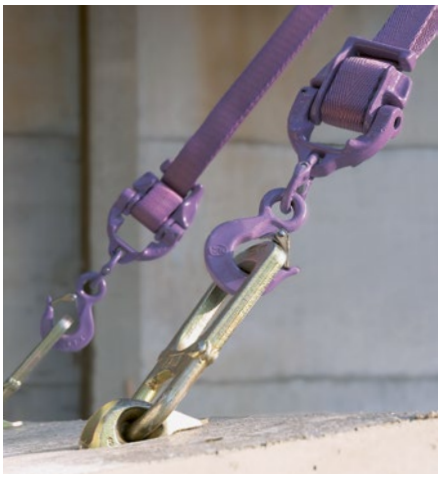
VarioWeb multi-leg slings 1.0 - 4.2 t
1, 2 and 4 legs

Shortening the strap with VarioWeb

See for yourself how easy it is to shorten the strap with VarioWeb. Simply scan the QR code and watch the short instruction video.

1 Pull out the strap, pull the bow down,
2 shorten/lengthen the strap, **3** push the bow back up,
4 reinsert the strap, **5** ready for lifting!





VarioWeb multi-leg slings 1.0 - 4.2 t
1, 2 and 4 legs

- Continuously adjustable multi-leg slings
- Lifting of asymmetrical loads
- Particularly robust: forged fittings protect the strap from wear thanks to an intelligent design
- Replacement of parts based on the modular principle
- Identification with a plaque

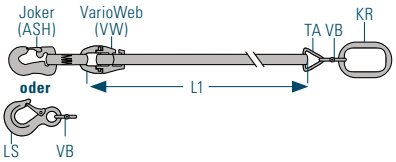
SpanSet VarioWeb – for lifting asymmetrical loads

A common problem: The centre of gravity of a load is not in the centre and the lifting gear has the wrong length. All you need now is lifting gear with an adjustable length in order to lift the load in „balance" – VarioWeb.

Continuously adjust strap lengths
VarioWeb is ideal for lifting asymmetrical loads: The individual legs of the multi-leg slings are fitted with shortening elements. Thanks to the intelligent mechanics, the individual legs can be continuously adjusted. In this way you can optimally balance any load and ensure an even transmission of forces.

The maintenance of the VarioWeb system is very economical and flexible. Thanks to the modular design, only the defective parts have to be replaced.

Adjustable and safe
The VarioWeb elements are drop-forged of special-quality steel and are very robust. They have no burrs and no edges that can damage the strap and are shaped such that the straps have full contact with the load. This minimises the wear on the edge and considerably extends the service life of your lifting gear. The load capacity indicator, identified by the colour of the strap in accordance with DIN EN 1492-1, precludes mix-ups. Of course we manufacture the VarioWeb fittings precisely according to your wishes and deliver them fully assembled.



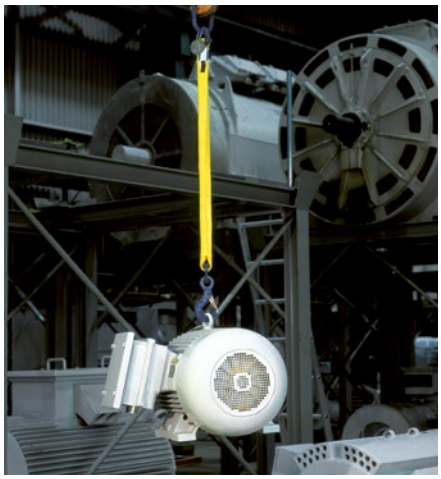
Legs	Load capacity [kg]	Order number	L1 min. [m]	Can be shortened to [mm]	Weight 1st m [kg]	Weight per running m [kg]	KR/KRR	VarioWeb	TA	VB	LS/ASH (Joker)
1	1.000	D006794	2	730	2,62	0,2	1 x KR	1 x VW	1 x TA	2 x VB	1 x LS
1	2.000	D011144	2	880	5,35	0,3	1 x KR	1 x VW	1 x TA	2 x VB	1 x LS
1	1.000	D007286	2	960	2,82	0,2	1 x KR	1 x VW	1 x TA	1 x VB	1 x ASH
1	2.000	D008852	2	1.290	6,15	0,3	1 x KR	1 x VW	1 x TA	1 x VB	1 x ASH
2	1.400	D008566	2	730	5,04	0,4	1 x KR	2 x VW	2 x TA	4 x VB	2 x LS
2	2.800	D009514	2	880	10,30	0,6	1 x KR	2 x VW	2 x TA	4 x VB	2 x LS
2	1.400	D007201	2	960	5,24	0,5	1 x KR	2 x VW	2 x TA	2 x VB	2 x ASH
2	2.800	D010670	2	1.290	11,50	0,7	1 x KR	2 x VW	2 x TA	2 x VB	2 x ASH
4	2.100	D009517	2	890	10,08	0,8	1 x KRR	4 x VW	4 x TA	8 x VB	4 x LS
4	4.200	D007048	2	1.060	20,00	1,2	1 x KRR	4 x VW	4 x TA	8 x VB	4 x LS
4	2.100	D006298	2	1.120	10,48	1,2	1 x KRR	4 x VW	4 x TA	4 x VB	4 x ASH
4	4.200	D006299	2	1.510	23,60	1,6	1 x KRR	4 x VW	4 x TA	4 x VB	4 x ASH

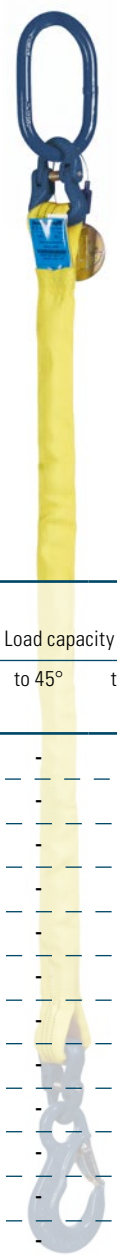
Special designs available on request. Manufactured according to DIN EN 1492-2.

The explanations of the icons can be found on the flap.

Single-leg RS sling 1.0 - 30.0 t
Type LS

- Optional fitting with an RFID transponder
- Ideal in combination with attachment points
- Particularly robust: forged fittings protect the round sling from wear thanks to an intelligent design
- Replacement of parts based on the modular principle
- Identification with a plaque





CE

1-leg RS sling – simply hook in and get start started

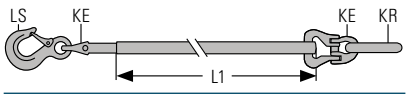
The 1-leg RS sling is particularly suitable if your work involves frequently having to move or reposition loads with a fixed attachment point. Using the round sling fittings also makes sense from an economical perspective.

Modular system saves costs

Based on the tried-and-tested modular system, you can replace each part of the multi-leg round sling individually – whether it's a round sling or a fitting. This significantly reduces your maintenance costs. Furthermore, the strap is enveloped in a protective sleeve for added protection. The fittings of our multi-leg round slings are manufactured using grade 8 and 10 robust steel.

Useful accessories

Documenting the inspection of your RS legs is made even easier with the RFID transponder, which reduces your administrative burden. On request, the chip that stores the product and inspection data can be fitted on the sling. This allows you to retrieve the data anywhere and at any time using the electronic product information system IDXpert.

Nominal carrying capacity [kg]	Load capacity [kg]		Order number for L1=1 m	Order number for L1=2 m	L1 min. [m]	L1 max. [m]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]			
	to 45°	to 60°							1 x LS	2 x KE	1 x KR
1.000	-	-	**D062796**	**D062830**	0,375	10	1,4	0,3	1,5	KE 2,0	1,4
2.000	-	-	**D062820**	**D062831**	0,375	10	2,5	0,5	2,5	KE 2,0	2,5
3.000	-	-	**D062821**	**D062832**	0,375	20	3,7	0,8	4,0	KE 3,15	4,0
4.000	-	-	**D062822**	**D062834**	0,375	20	5,7	1,0	4,0	KE 5,3	4,0
5.000	-	-	**D062823**	**D062835**	0,375	20	6,6	1,1	6,7	KE 5,3	5,6
6.000	-	-	**D062824**	**D062836**	1,000	20	9,1	1,4	6,7	KE 8,0	6,7
8.000	-	-	**D062825**	**D062837**	1,000	20	9,4	1,8	10,0	KE 8,0	10,0
10.000	-	-	**D062826**	**D062839**	2,500	50	23,0	2,5	10,0	KE 12,5	10,0
15.000	-	-	**D062827**	**D062841**	2,500	50	36,0	3,5	16,0	KE 15,0	22,4
20.000	-	-	**D062828**	**D062842**	2,500	50	56,0	5,0	20,0	KE 21,5	22,4
25.000	-	-	**D016640**	**D021664**	2,500	50	89,0	6,0	27,0	KE 31,5	25,0
30.000	-	-	**D016643**	**D021666**	2,500	50	94,0	8,0	31,5	KE 31,5	43,0

Special designs available on request. Manufactured according to DIN EN 1492-2.

The explanations of the icons can be found on the flap.

Two-leg RS sling 1.4 - 42.0 t
Typ LS

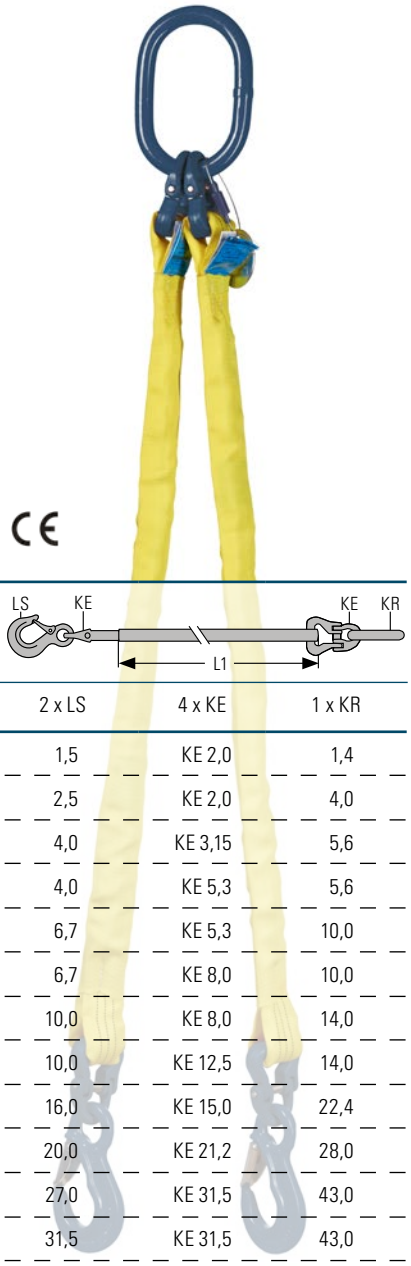
- Optional fitting with an RFID transponder
- Ideal in combination with attachment points
- Particularly robust: forged fittings protect the round sling from wear thanks to an intelligent design
- Replacement of parts based on the modular principle
- Identification with a plaque

2-leg RS sling – all in balance

If longer loads are lifted at only one attachment point in the middle, they can easily start to swing – a dangerous matter for all persons on site. With the 2-leg round sling, the load is kept in balance. This helps you to better control the movements of the load.

Save maintenance costs
The tried-and-tested modular design means that you can replace each element individually in case of damage – whether it's the round sling or the fittings made of robust steel (grade 8 + 10).

Reliable protection
To ensure a longer service life, all legs of the SpanSet RS slings are enveloped by an additional protective sleeve. The sleeve, colour-coded for load capacity colours in accordance with DIN EN, is firmly sewn on and reduces wear of the material. At the same time it improves handling by bundling the round slings.



CE

Nominal carrying capacity [kg]	Load capacity [kg] to 45°	Load capacity [kg] to 60°	Order number for L1=1 m	Order number for L1=2 m	L1 min. [m]	L1 max. [m]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	2 x LS	4 x KE	1 x KR
1.400	**1.400**	**1.000**	**D062861**	**D062862**	0,375	10	3,8	0,6	1,5	KE 2,0	1,4
2.800	**2.800**	**2.000**	**D062863**	**D062864**	0,375	10	5,6	1,0	2,5	KE 2,0	4,0
4.200	**4.200**	**3.000**	**D062871**	**D062874**	0,375	20	9,0	1,6	4,0	KE 3,15	5,6
5.600	**5.600**	**4.000**	**D062872**	**D062875**	0,375	20	12,9	2,0	4,0	KE 5,3	5,6
7.000	**7.000**	**5.000**	**D062873**	**D062876**	0,375	20	13,3	2,2	6,7	KE 5,3	10,0
8.400	**8.400**	**6.000**	**D062877**	**D062881**	1,000	20	22,9	2,8	6,7	KE 8,0	10,0
11.200	**11.200**	**8.000**	**D062878**	**D062882**	1,000	20	24,9	3,6	10,0	KE 8,0	14,0
14.000	**14.000**	**10.000**	**D062879**	**D062883**	2,500	50	40,0	5,0	10,0	KE 12,5	14,0
21.000	**21.000**	**15.000**	**D062880**	**D062884**	2,500	50	69,0	7,0	16,0	KE 15,0	22,4
28.000	**28.000**	**20.000**	**D016653**	**D021705**	2,500	50	108,0	10,0	20,0	KE 21,2	28,0
35.000	**35.000**	**25.000**	**D016655**	**D047781**	2,500	50	143,0	12,0	27,0	KE 31,5	43,0
42.000	**42.000**	**30.000**	**D016656**	**D031777**	2,500	50	156,0	16,0	31,5	KE 31,5	43,0

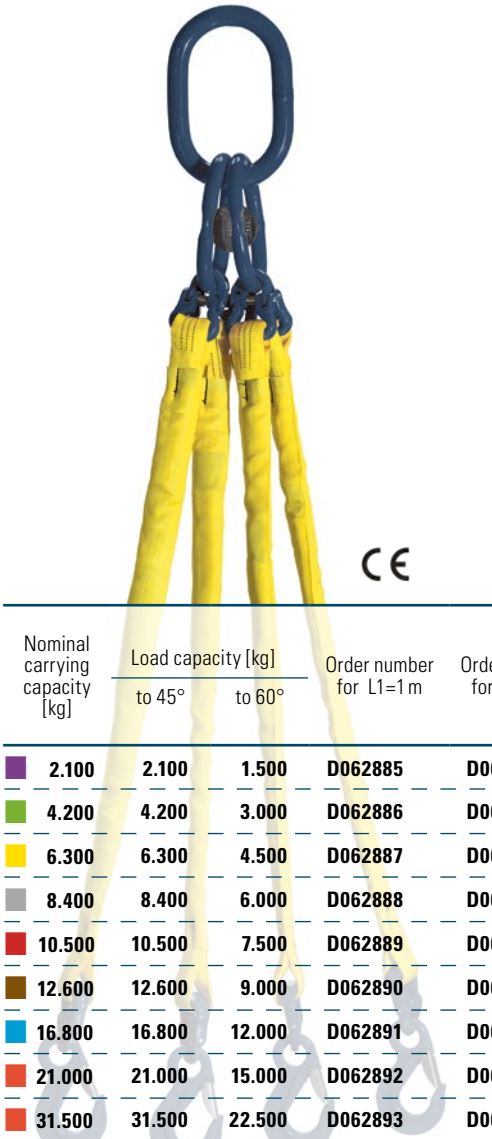
i Special designs available on request. Manufactured according to DIN EN 1492-2.

RFIDoptional

The explanations of the icons can be found on the flap.

Four-leg RS sling 2.1 - 63.0 t
Typ LS

- Optional fitting with an RFID transponder
- Ideal in combination with attachment points
- Particularly robust: forged fittings protect the round sling from wear thanks to an intelligent design
- Replacement of parts based on the modular principle
- Identification with a plaque



4-leg RS sling type LS – the perfect balance

If you want to lift particularly bulky or valuable loads, you want to have full control over their position – at all times. The 4-leg round sling offers you precisely that. Four round slings in SpanSet quality, each at a precisely defined length, make symmetrical lifting easier than ever before. The suspension of the load from four attachment points ensures that the load can tilt neither in the longitudinal nor in the transverse direction. At an angle below 45° you can achieve a load capacity of up to 63 t.

Modular system saves costs
All fittings of the multi-leg round slings are manufactured using grade 8 and 10 robust steel. Based on the tried-and-tested modular system, you can replace each part of the multi-leg round sling individually – whether it's a round sling or a fitting. This significantly reduces your maintenance costs.

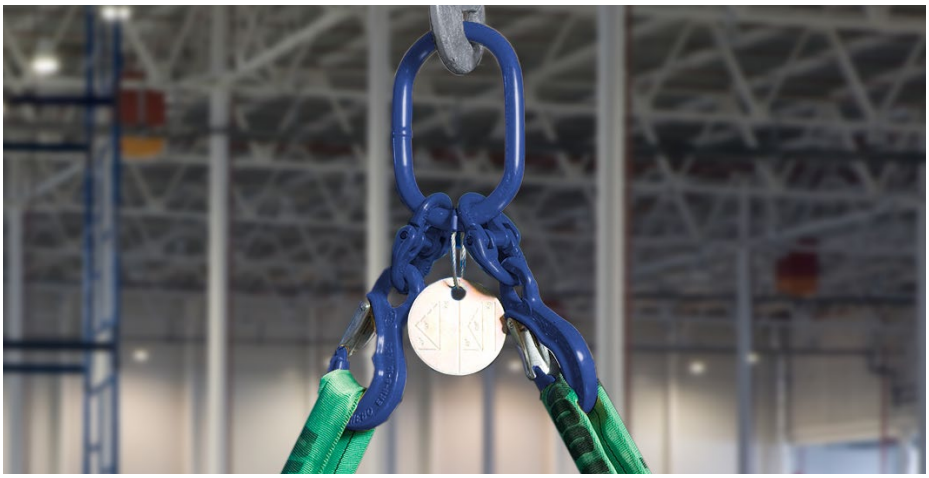
With the optional RFID transponder you can also considerably simplify the documentation of inspections of your RS slings. For more information about RFID transponders and the inspection and administration system IDXpert, see pages 96 et seq.

Nominal carrying capacity [kg]	Load capacity [kg] to 45°	Load capacity [kg] to 60°	Order number for L1=1 m	Order number for L1=2 m	L1 min. [m]	L1 max. [m]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	LS	KE	KRR
									4 x LS	8 x KE	1 x KRR
2.100	**2.100**	**1.500**	**D062885**	**D062894**	0,375	10	9,1	1,2	1,5	KE 2,0	3,0
4.200	**4.200**	**3.000**	**D062886**	**D062895**	0,375	10	11,8	2,0	2,5	KE 2,0	5,3
6.300	**6.300**	**4.500**	**D062887**	**D062896**	0,375	20	18,4	3,2	4,0	KE 3,15	8,0
8.400	**8.400**	**6.000**	**D062888**	**D062897**	0,375	20	27,1	4,0	4,0	KE 5,3	14,0
10.500	**10.500**	**7.500**	**D062889**	**D062898**	0,375	20	32,0	4,4	6,7	KE 5,3	14,0
12.600	**12.600**	**9.000**	**D062890**	**D062899**	1,000	20	43,0	5,6	6,7	KE 8,0	14,0
16.800	**16.800**	**12.000**	**D062891**	**D062900**	1,000	20	46,3	7,2	10,0	KE 8,0	21,2
21.000	**21.000**	**15.000**	**D062892**	**D062901**	2,500	50	102,0	10,0	10,0	KE 12,5	21,2
31.500	**31.500**	**22.500**	**D062893**	**D062902**	2,500	50	168,0	14,0	16,0	KE 15,0	33,5
42.000	**42.000**	**30.000**	**D016659**	**D021718**	2,500	50	260,0	20,0	20,0	KE 21,5	53,0
52.500	**52.500**	**37.500**	**D016660**	**D021721**	2,500	50	343,0	24,0	27,0	KE 31,5	53,0
63.000	**63.000**	**45.000**	**D016661**	**D021722**	2,500	50	363,0	32,0	31,5	KE 31,5	70,0

Special designs available on request. According to DIN EN 1492-2.

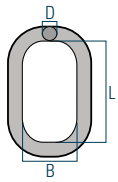
The explanations of the icons can be found on the flap.

Fittings according to DIN EN 1677



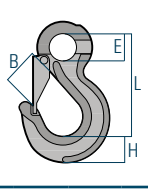
– Particularly robust: forged fittings protect the round sling from wear thanks to an intelligent design

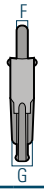
Fitting KR



Load capacity [kg]	Order number	B [mm]	D [mm]	L [mm]	Weight [kg]
1.400	**D062799**	51	13	91	0,29
2.500	**D062800**	56	16	107	0,53
4.000	**D062801**	69	18	130	0,79
5.600	**D062802**	80	20	137	1,10
6.700	**D062803**	90	22	155	1,50
10.000	**D062804**	105	26	175	2,30
14.000	**D062805**	125	32	230	4,40
22.400	**D062815**	160	40	290	8,60
25.000	**D002887**	150	38	250	7,00
28.000	**D016014**	150	40	250	8,00
43.000	**D016600**	200	50	300	15,00

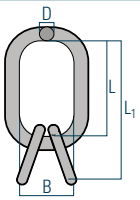
Fitting LS





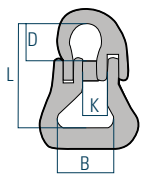
Load capacity [kg]	Order number	B [mm]	E [mm]	F [mm]	G [mm]	H [mm]	L [mm]	Weight [kg]
1.500	**D000893**	24	22	10	17	20	94	0,40
2.500	**D016982**	26	27	12	17	23	108	0,60
4.000	**D016983**	35	34	14	23	30	134	1,10
6.700	**D001085**	42	43	18	28	38	166	2,10
10.000	**D016978**	51	56	22	36	47	203	4,10
16.000	**D001103**	61	61	26	42	60	229	6,50
20.000	**D006142**	73	64	31	43	67	267	8,70
27.000	**D015801**	81	66	32	51	75	301	13,20
31.500	**D009638**	93	76	38	61	80	333	18,90

Fitting KRR



Load capacity [kg]	Order number	B [mm]	D [mm]	L [mm]	L_1 [mm]	Weight [kg]
3.000	**D062806**	56	16	107	165	1,00
5.300	**D062807**	78	20	138	200	2,20
8.000	**D062808**	105	26	175	265	3,80
14.000	**D062809**	125	32	230	345	7,70
21.200	**D062810**	160	40	290	420	13,00
33.500	**D062811**	190	50	335	500	24,80
53.000	**D016508**	260	80	470	750	46,00
70.000	**D015827**	260	80	470	750	71,00

Fitting KE



Load capacity [kg]	Order number	B [mm]	D [mm]	F [mm]	G [mm]	K [mm]	L [mm]	Weight [kg]
2.000	**D001105**	40	22	9	26	18	63	0,30
3.150	**D001134**	57	26	12	30	24	76	0,60
5.300	**D001136**	53	33	15	37	29	94	1,10
8.000	**D001138**	67	40	19	44	35	114	1,90
12.500	**D001140**	80	48	22	53	43	134	3,00
15.000	**D004255**	125	60	24	70	50	187	7,00
21.200	**D008630**	150	61	29	86	58	209	11,50
31.500	**D001142**	155	78	36	100	64	250	20,80

Fitting KR

Fitting LS

Fitting KRR

Fitting KE

Joker hook

- Colour-coded components according to DIN EN 1492-1
- Hard-wearing fittings according to DIN EN 1677
- Turns round slings into multi-leg RS slings
- Ideal connection between two items of lifting gear

Joker hook – the perfect connector with two uses

One hook with two uses
The Joker hooks with a load capacity of up to 10 t are the ideal complement to your round slings and flat slings - after all, they are true all-rounders: They can either be used to extend the length of lifting gear or as end hooks which guarantee a secure hold in attachment points. Combined with one or more round slings, multi-leg lifting gear can be created in no time.

Hook on safely, lengthen at will
With the Joker hook you can turn any round sling into multi-leg lifting gear in next to no time. Simply hook it on, turn, finished. The forged safety catch ensures easy handling and also effectively prevents the slings from slipping out of the hook when loads are deposited on the floor – an added plus for your safety. Thanks to the intelligent design of the Joker you don't need any other tools to thread the hook onto your round slings or flat slings. Joker hooks can also be used as an extension piece, for example to connect two round slings to one another.

All of the characteristics of the Joker hooks have been designed to make them suitable for use with textile lifting gear. The goal: easy to handle and reliable to use. Intelligent details, such as the specially shaped tip of the hook, make for easy hooking into fixed attachments points. The raised side cheeks on the head of the hook prevent the premature wear of the textile lifting gear, as the gear lies protected as if in a groove.

Movie: Using the Joker hook

To see examples of the many applications of the Joker hook, you can watch a video on our YouTube channel „SpanSet Germany" or simply scan the QR code.

Joker hook

Safety is the top priority

The special quality steel (8 Plus) is forged and thus particularly robust. The construction of the Joker hook according to the Skeletto principle saves weight and makes for easy handling. To exclude any errors, the hooks are painted the same colour as the textile slings with the same load capacity (in accordance with DIN EN 1492-1). This way, you can identify the right hook for your use at a glance.

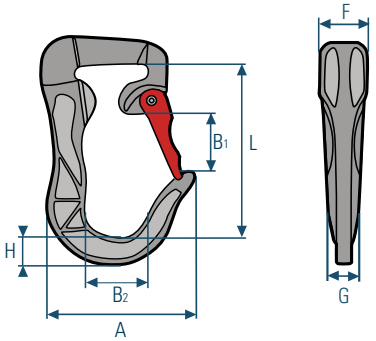
Perfect for your application

Thanks to the exact dimensions of the different Joker hooks you can easily find the right hook for each use (see table).

Functional details at a glance:

- Suitable as connectors between different items of lifting gear to safely hook into fixed attachment points
- Particularly robust: forged steel of quality grade 8 Plus
- Skeletto principle saves weight and eases handling
- With a safety catch for additional safety
- No risk of confusion:
- the same colour is used as for textile lifting gear

Load capacity [kg]	Order number	A [mm]	B_1 [mm]	B_2 [mm]	F [mm]	G [mm]	H [mm]	L [mm]	Weight/ Unit [kg]
1.000	**D049731**	89	29	31	31	14	17	133	0,7
2.000	**D049732**	105	35	40	36	21	24	156	1,1
3.000	**D049733**	125	36	48	47	25	29	170	1,6
6.000	**D001240**	155	48	60	60	35	35	215	4,0
10.000	**D062307**	204	70	80	70	50	58	303	9,9



02.4

Flat slings

How CS flat slings meet the demands of building a stand

Florack Bauunternehmung GmbH, a successful medium-sized construction company, was commissioned with building the new east stand for the dressage stadium on the CHIO premises in Aachen. In the installation of the base support elements, the design provided for the use of special pre-fabricated concrete parts that were not right-angled and thus presented a greater challenge for the lifting procedure. „The pre-fabricated concrete parts made by us were not allowed to be damaged and we had to prevent the colour from being rubbed off by the lifting gear", said Franz-Josef Bizan from the company Florack. After viewing the construction plans, a decision was made by the team to use SpanSet CS flat slings. The 4-ply flat slings are real powerhouses that optimally adjust to the shape of the base support being lifted. In order to protect the flat slings and concrete parts, transparent KSB joint protectors were used which protected the strap from the sharp edges of the concrete parts and also prevented colour abrasion. Using this equipment it was possible to erect the stand, which seats up to 1,200 people and has been inaugurated in the meantime, to the customer's full satisfaction.

In addition to the 4-ply CS flat slings, our range of products also includes further flat slings with different benefits. The highly robust 2-ply PowerStar flat sling, for example, has edges that are reinforced with interwoven high-tech yarns that offer additional protection from wear. In addition to the versions with a looped end, various fittings, such as the D-link, are available for our flat slings. Lifting slings which combine the advantages of a round sling with those of a flat sling, as well as flat slings designed for single use only complete our product range. You can even broaden the range of applications with various edge protectors, a range of protective sleeves or also the innovative NoCut® sleeve and NoCut® pads - these items can help you handle even sharp-edged loads and very small radii.

A versatile range of applications in conjunction with maximum safety for the user and the load – these are the characteristics that define our flat slings.

SpanSet – Certified Safety

PowerStar CS, 4-ply
2,0 - 8,0 t

Fittings: Additional design

In addition to the PowerStar CS flat sling with loops or D-links, the 8-t versionis **also available with D1/D1-links**. Ask us about it!

PowerStar CS, 4-ply
2,0 - 8,0 t

- Sewn patch in signal colour with load capacity indication
- Tear-resistant label covered with a protective sleeve
- Optional fitting with an RFID transponder
- Loop reinforcement protects from abrasion in the crane hook
- Available with loops or D-links

PowerStar CS flat slings – 4-ply with all-round loop reinforcement

Flat sling with fourfold power
Narrow contact areas or lack of space for attaching the lifting gear are by no means uncommon. Here, SpanSet offers you the CS flat sling, which is woven from PES yarns and is sewn in four layers. The result: a flat sling that boasts a markedly higher load capacity than 1- or 2-ply flat slings, all with a narrow strap width. This makes the PowerStar CS flat slings ideal for applications that require the use of a narrower strap – for example, to feed under the load.

Flexibility in use
In addition to the version with reinforced loops, we also offer D-links as standard, which make PowerStar even more convenient to use. The version with D-links makes it easier to e. g. hook the sling into load lifting gear or crane hooks. The optional fitting with an RFID chip facilitates the regular inspections, and different protective sleeves also enable use of these slings on the sharpest edges.

The heavy-duty versions of the 4-ply PowerStar CS flat slings with a load capacity of up to 20 t are found on page 67.

CE

Nominal carrying capacity [kg]	Loop width [mm]	Loop length [mm]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths 2 m	3 m	4 m	5 m	6 m	8 m
2.000	30	350	1,1	30	11,2	0,5	0,4	**D012345**	**D015945**	**D015946**	**D015947**	**D015948**	**D015949**
4.000	60	400	1,3	60	11,2	1,0	0,8	**D015950**	**D015951**	**D011654**	**D015952**	**D015954**	**D015955**
6.000	50	600	1,7	90	12,0	1,5	1,2	**D015956**	**D015957**	**D010722**	**D015958**	**D015960**	**D015961**
8.000	65	800	2,2	120	12,4	2,2	1,6	-	**D015962**	**D015963**	**D015964**	**D015965**	**D015966**

Nominal carrying capacity [kg]	Loop width [mm]	Loop length [mm]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths 2 m	3 m	4 m	5 m	6 m	8 m
2.000	-	-	1,1	30	11,2	1,8	0,4	**D015991**	**D015992**	**D015999**	**D016002**	**D016003**	**D016004**
4.000	-	-	1,3	60	11,2	3,0	0,8	**D016005**	**D016006**	**D016007**	**D016008**	**D016010**	**D016011**
6.000	-	-	1,7	90	12,0	6,6	1,2	**D016012**	**D016013**	**D016015**	**D016016**	**D016017**	**D016018**
8.000[1)]	-	-	2,2	120	12,4	11,2	1,6	-	**D041956**	**D041957**	**D041958**	**D041959**	**0000000**

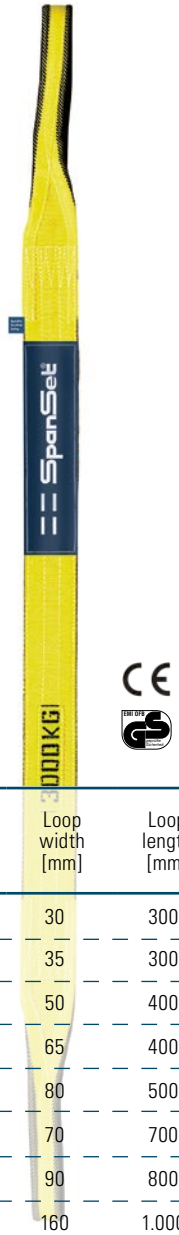
Special designs available on request. Manufactured according to DIN EN 1492-2. 1) Version with D1-link (see p. 52)

RFID optional

The explanations of the icons can be found on the flap.

PowerStar B, 2-ply
1,0 - 10,0 t

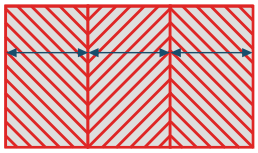
- Superior woven load capacity indication
- Tear-resistant label covered with a protective sleeve
- Optional fitting with an RFID transponder
- All-round loop reinforcement protects from abrasion in the crane hook
- Load capacity is „measurable“
- Edge reinforcement with interwoven high-tech yarns to protect from wear



PowerStar – flat sling with „measurable“ load capacity

Robust and reliable
The PowerStar flat slings deliver what they promise: In a straight lift, they can carry up to 10 t, and you can even measure this. The weaving pattern of the sling alternates every 30 mm, and each „strip“ indicates a nominal carrying capacity of 1 t 1. An example: 90 mm strap width = 3 t load capacity.

1 Alternating weaving pattern every 30 mm.



PowerStar is extremely well protected against wear. Hard-wearing, black reinforcement filaments are woven into the edges to protect the flat sling. In the fully reinforced loops, the load-carrying fabric is intelligently protected against abrasion by an additional fibre coating. The third advantage remains invisible: a special coating that offers three times more protection against abrasion. Another plus for the application: The herringbone weave of the PowerStar flat sling does not get twisted. This makes it easier to feed it under loads and saves time in your daily work routine.

Nominal carrying capacity [kg]	Loop width [mm]	Loop length [mm]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths					
								2 m	3 m	4 m	5 m	6 m	8 m
1.000	30	300	1,0	30	5,6	0,3	0,2	**D005051**	**D005064**	**D005065**	**D012009**	**D005067**	**D015830**
2.000	35	300	1,0	60	5,6	0,6	0,4	**D005073**	**D005077**	**D005078**	**D005080**	**D005081**	**D015831**
3.000	50	400	1,3	90	6,0	1,0	0,6	**D011451**	**D005082**	**D005084**	**D013414**	**D010410**	**D015834**
4.000	65	400	1,3	120	6,2	1,4	0,8	**D015846**	**D008804**	**D008805**	**D015847**	**D015848**	**D015849**
5.000	80	500	1,5	150	6,4	1,7	1,0	**D015850**	**D015851**	**D015852**	**D015854**	**D015853**	**D015855**
6.000	70	700	1,9	180	7,6	2,2	1,2	**D015856**	**D015857**	**D015858**	**D015859**	**D015860**	**D015861**
8.000	90	800	2,2	240	7,6	2,9	1,6	-	**D015862**	**D015863**	**D015864**	**D015865**	**D015867**
10.000	160	1.000	2,6	300	7,6	4,1	2,2	-	**D015868**	**D015869**	**D015870**	**D012097**	**D012096**

Special designs available on request. Manufactured according to DIN EN 1492-2.

The explanations of the icons can be found on the flap.

PowerStar B with D-link, 2-ply
1,0 - 10,0 t

- D-link on both ends
- Superior woven load capacity indication
- Tear-resistant label covered with a protective sleeve
- Optional fitting with an RFID transponder
- Load capacity is „measurable“
- Edge reinforcement with interwoven high-tech yarns to protect from wear

PowerStar – version with D-links

The D-links easily fit into all common crane hooks. The robust quality steel of the links is resistant to wear and makes this version ideal for lifting procedures involving a noose. Simply thread it and hook it into the crane hook – this effectively prevents the flat sling from slipping out.

Different protective sleeves that can be easily fitted onto the 2-ply PowerStar flat slings also make it possible to use these slings to lift sharp-edged loads (p. 60 et seq.).

Nominal carrying capacity [kg]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths (L1) 2 m	3 m	4 m	5 m	6 m	8 m
1.000	1,0	30	5,6	1,4	0,2	**D015887**	**D015888**	**D015891**	**D015893**	**D015894**	**D015895**
2.000	1,0	60	5,6	2,2	0,4	**D015896**	**D015897**	**D015898**	**D015899**	**D015900**	**D015901**
3.000	1,0	90	6,0	4,2	0,6	**D015902**	**D015903**	**D015904**	**D015905**	**D015906**	**D015907**
4.000	1,2	120	6,2	5,4	0,8	**D015908**	**D015909**	**D015910**	**D015911**	**D015913**	**D015914**
5.000	1,5	150	6,4	9,0	1,0	**D015915**	**D015916**	**D015917**	**D015918**	**D015919**	**D015920**
6.000	1,8	180	7,6	15,2	1,2	**D015921**	**D015922**	**D015923**	**D015924**	**D015925**	**D015926**
8.000	2,2	240	7,6	22,6	1,6	-	**D015927**	**D015928**	**D015929**	**D015930**	**D015931**
10.000	2,6	300	7,6	35,2	2,2	-	**D015932**	**D015933**	**D015934**	**D015935**	**D015937**

Special designs available on request. Manufactured according to DIN EN 1492-2.

RFID optional

The explanations of the icons can be found on the flap.

Liftfix flat sling, 2-ply
0,5 - 10,0 t

– Sectional loop reinforcement
– 2-ply, tear-resistant label

Liftfix HB – flat sling with solid basic equipment

With Liftfix we offer you a flat sling in the usual standard quality with different load capacities ranging from 0.5 t to 10 t. Of course Liftfix is manufactured in accordance with DIN EN 1492-2 and is equipped with a 2-ply label with the writing protected inside. Sectional reinforcement of the flat sling loop protects the sling in the critical area – where it meets the crane hook. Standard-compliant colour coding also prevents confusion of the load capacity.

Nominal carrying capacity [kg]	Loop width [mm]	Loop length [mm]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths					
								2 m	3 m	4 m	5 m	6 m	8 m
500	36	150	1,0	36	3,0	0,2	0,1	**D002558**	**D002559**	**D002560**	**D002561**	**D002562**	**D002563**
1.000	30	300	1,0	30	5,2	0,2	0,2	**D002564**	**D002565**	**D002566**	**D002567**	**D002568**	**D002569**
1.500	35	300	1,0	50	6,8	0,4	0,3	**D002570**	**D002571**	**D002572**	**D002573**	**D002574**	**D002575**
2.000	40	300	1,2	60	5,0	0,4	0,3	**D002576**	**D002577**	**D002578**	**D002579**	**D002580**	**D002581**
3.000	50	400	1,5	90	5,0	0,6	0,5	**D002630**	**D002631**	**D002632**	**D002633**	**D002634**	**D002635**
4.000	70	400	1,5	120	6,8	0,9	0,8	**D002582**	**D002583**	**D002584**	**D002585**	**D002586**	**D002587**
5.000	80	500	1,7	150	6,6	1,2	1,0	**D002588**	**D002589**	**D002590**	**D002591**	**D002592**	**D002593**
6.000	100	700	2,1	180	7,2	1,4	1,2	**D002594**	**D002595**	**D002596**	**D002597**	**D002598**	**D002599**
8.000	130	800	2,3	240	7,2	1,8	1,6	**D002600**	**D002601**	**D002602**	**D002603**	**D002604**	**D002605**
10.000	160	1.000	2,6	300	7,4	2,4	2,3	-	**D002606**	**D002607**	**D002608**	**D002609**	**D002610**

Special designs available on request. Also available with D-links on request. Manufactured according to DIN EN 1492-2.

The explanations of the icons can be found on the flap.

Powerband flat slings, 1- and 2-lply
1,0 - 10,0 t

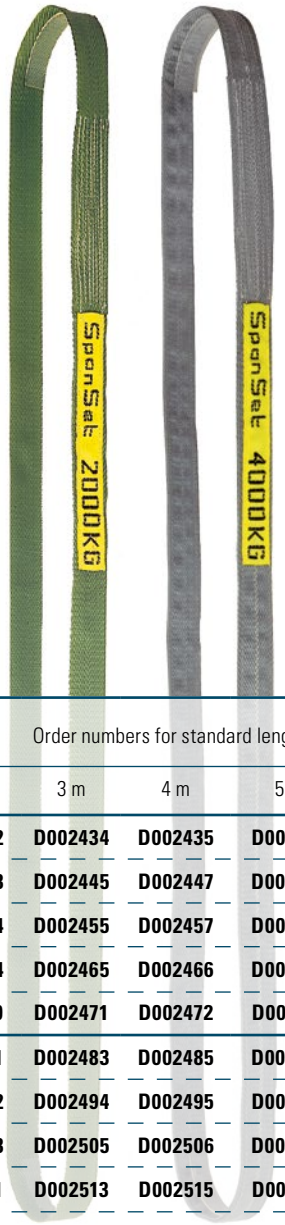
– Sewn patch in signal colour with load capacity indication

Powerband endless flat slings – without hooks and eyes

The endless flat sling is sewn using high-strength polyester fabric. It combines the advantages of the round sling and strap: a contact area that is gentle on the load, variable working length and thus ideal for use in frequently changing applications. It can also be easily used with load beams and turning crossheads.

To ensure that you always have an eye of the load capacity, a signal-coloured label with superior print is permanently sewn onto the sling. It withstands even major stress and remains legible even when the sling is badly soiled. The single-ply Powerband can carry up to 5 t in a straight pull.

Two layers for twice as much lifting power
The duplex PC endless flat slings are sewn using hard-wearing polyester fabric. Compared to the simplex endless flat sling, this means twice as much lifting power with the same width. These endless flat slings can be manufactured in almost any length for all kinds of applications.



CE

Nominal carrying capacity [kg]	Anzahl der Lagen	L1 min. [m]	Loop width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths					
							1 m	1,5 m	2 m	3 m	4 m	5 m
1.000	1	0,5	30	2,8	0,2	0,1	**D002429**	**D002430**	**D002432**	**D002434**	**D002435**	**D002737**
2.000	1	1,0	60	2,8	0,3	0,2	**D002439**	**D002442**	**D002443**	**D002445**	**D002447**	**D002448**
3.000	1	1,0	90	3,0	0,4	0,3	**D002450**	**D002452**	**D002454**	**D002455**	**D002457**	**D002459**
4.000	1	1,5	120	3,1	0,6	0,4	-	**D002463**	**D002464**	**D002465**	**D002466**	**D002467**
5.000	1	1,5	150	3,2	0,8	0,5	-	**D002468**	**D002470**	**D002471**	**D002472**	**D002474**
2.000	2	1,0	30	5,6	0,3	0,2	**D002476**	**D002479**	**D002481**	**D002483**	**D002485**	**D002486**
4.000	2	1,0	60	5,6	0,5	0,4	**D002489**	**D002491**	**D002492**	**D002494**	**D002495**	**D002497**
6.000	2	1,0	90	6,0	0,7	0,6	**D002499**	**D002501**	**D002503**	**D002505**	**D002506**	**D002508**
8.000	2	1,5	120	6,2	1,0	0,8	-	**D002510**	**D002511**	**D002513**	**D002515**	**D002517**
10.000	2	1,5	150	6,4	1,3	1,0	-	**D002519**	**D002521**	**D002523**	**D002525**	**D002527**

Special designs available on request. Manufactured according to DIN EN 1492-2.

The explanations of the icons can be found on the flap.

Flat slings, 1-ply

– Cost-effective endless flat slings for single use
– Label in standard-compliant signal colour

Endless flat slings – the cost-effective single-use variant

Single-use endless flat slings are needed whenever e.g. heavy or bulky products are transported over longer distances. Once the load has arrived safely at the end customer, the lifting gear is severed and disposed of. Your advantage: You save costs, because the single-use endless flat slings are significantly more cost-effective than slings designed for daily use. To ensure that they are not confused with lifting gear designed for reuse, the single-use slings are not coloured in the standard colours indicating the load capacity, but are kept in white. The label in the signal colour orange is another clear sign that it is an item of lifting gear designed for single-use only.

Nominal carrying capacity [kg]	Load capacity single layer [kg]	Order number	L1 min. [m]	Approx. strap width [mm]	Approx. strap thickness [mm]	Approx. weight per m circumference [kg]
400	**800**	**D046271**	1,0	25	1,3	0,060
400	**800**	**D063088**	1,5	25	1,3	0,083
400	**800**	**D049228**	2,0	25	1,3	0,109
400	**800**	**D049229**	4,0	25	1,3	0,213

Single-use flat slings manufactured in accordance with DIN 60005. Special designs available on request.

ASG flat slings, 1-ply

– Cost-effective endless flat sling for single use
– Label in standard-compliant signal colour

ASG endless flat slings – perfect for single use

With the standard-compliant ASG endless flat slings SpanSet offers you particularly cost-effective lifting gear for single use. This means: The endless flat sling is used e. g. for transporting articles from the manufacturer to the construction site. As soon as the cargo arrives at its final destination, the endless flat slings are severed and disposed of. The single-use endless flat slings are thus ideal for use in timber frame and prefabricated building.

The orange-coloured label of the endless flat slings provides details of the load capacity, manufacturer, length, manufacturing date, lifting factors and much more. The ASG endless flat slings can be used across all industries.

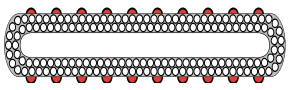
Nominal carrying capacity [kg]	Load capacity single layer [kg]	Order number	L1 min. [m]	Approx. strap width [mm]	Approx. strap thickness [mm]	Approx. weight per m circumference [kg]
750	**1.500**	**D036387**	0,300	50	1,3	0,041
750	**1.500**	**D049805**	0,325	50	1,3	0,050
750	**1.500**	**D037626**	0,400	50	1,3	0,060
750	**1.500**	**D035716**	0,425	50	1,3	0,063
1.500	**3.000**	**D039580**	0,300	50	2,8	0,080
1.500	**3.000**	**D037816**	0,400	50	2,8	0,091
1.500	**3.000**	**D039586**	0,500	50	2,8	0,109
1.500	**3.000**	**D036137**	0,600	50	2,8	0,128

i Single-use flat slings manufactured in accordance with DIN 60005. Special designs available on request.

NoCut® sleeve

- Low dead weight
- Supple and flexible
- High cut protection due to ribbed reinforcement
- Versatile, as it can be used on both sides
- Tested and certified
- 2-ply, tear-resistant label

Unique ribbed structure of NoCut sleeve with equally high all-round cut resistance.



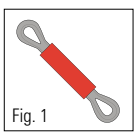


Fig. 1

NoCut® sleeve – all-round cut protection for flat slings

NoCut® sleeve also offers the perfect all-round cut protection for our flat slings. Simply slipped onto the flat slings, the woven protective sleeve is positioned on the sharp edge of the load to protect the lifting gear. NoCut® sleeve can also be fitted by the user as shown in Figure 1.

Long service life and maximum safety
NoCut® sleeve is supple and flexible, allowing the protective sleeve to be easily positioned on the load even in tight spaces. The design of the sleeve with equally high all-round cut resistance allows for a long service life, as it can be used on both sides, and offers the highest level of safety, as application errors are excluded. NoCut® sleeve is delivered as a prefabricated cut with trimmed edges. The protective sleeves are offered at lengths in 250-mm increments as standard.

More about NoCut®
For more information about NoCut® sleeve and the product finder, see page 80. The possible combinations can be easily defined online in just a few steps.

NoCut sleeve suitable for	Designation NoCut sleeve	Approx. inside width [mm]	Approx. outside width [mm]	Approx. thickness [mm]	Approx. weight per running m [kg]	**PowerStar CS, 4-ply**	**PowerStar B, 2-ply**	**Liftfix Flat sling**
1.000	**NCS-045**	45	55	13	0,4		✓	✓
2.000	**NCS-075**	75	85	13	0,6	✓	✓	✓
3.000	**NCS- 105**	105	115	13	0,8		✓	✓
4.000	**NCS- 105**	105	115	13	0,8		✓	✓
	NCS- 135	135	145	13	1,1	✓		
5.000	**NCS- 165**	165	175	13	1,4		✓	✓
6.000	**NCS- 135**	135	145	13	1,1		✓	✓
	NCS- 195	195	205	13	1,6	✓		
8.000	**NCS- 165**	165	175	13	1,4		✓	✓
	NCS- 255	255	265	13	2,0	✓		
10.000	**NCS- 195**	195	205	13	1,6		✓	✓
	NCS- 315	315	325	13	2,7	✓		

Special designs available on request. Protective sleeves can also be fitted by the user as shown in Fig. 1.

- Perfect for use with sharp edges
- Very low dead weight
- Flexible construction
- High operational safety due to tested quality
- High cut resistance
- Sewn label with handling instructions

NoCut®pad – protective plates against the „sharp edge“

NoCut® pad is comprised of NoCut® sleeve and an internal fabric bridge that has fastening elements on both ends. NoCut® pad offers the user three alternatives to fasten the protective plate to the lifting gear: Velcro strap 1 , Velcro strap with a frame buckle 2 or 2-piece metal buckle (frame or triple bridge) 3 .

NoCut® pad is mounted there where the lifting gear lies flat against the sharp edge. The size of the edge protection can be exactly dimensioned for the danger area and precisely positioned on the sharp edge – this saves costs and increases safety at the same time.

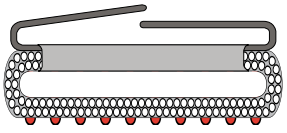
5

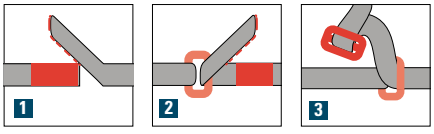
NoCut® pad is offered as a 2-layer or 4-layer design. The 4-layer design offers an exceedingly high level of cut protection, which is why NoCut® pad is also ideal for critical lifting procedures with even the smallest radii.

Use of the HMPE material allows the user to use the textile protective plate in temperatures ranging from -40 °C up to +60 °C. As standard, NoCut® pad is produced in lengths from 500 mm to 1,500 mm in 250-mm increments. Although NoCut® pads normally come in short lengths, there are additional attachment loops available for the longer variants.

NoCut® product finder
All SpanSet flat slings straps and round slings can be protected against sharp edges with NoCut® pad. The NoCut® product finder 5 , which can be used to easily identify the right NoCut® product for textile lifting gear in just a few steps online, can help you to select the rights pads for your application. For more information see page 87.

NoCut pad: the combination of NoCut sleeve and fabric bridge with a fastening element.

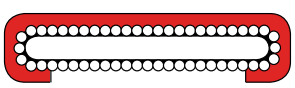


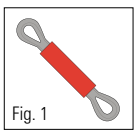


secutex SF-1

- One-sided secutex-coating
- Easy to position
- Extremely cut-resistant
- Permanent dimensional stability

secutex SF-1: One contact side and the sleeve side are secutex-coated. Fig. 1





secutex SF-1 – protective sleeve coating on one side

Protective sleeve coating on one side
The secutex SF-1 has been technically designed for optimal use with the SpanSet flat sling range or the SpanSet round slings. The contact side has a secutex coating, is extremely cut-resistant and reduces the formation of creases in the fabric. Easily clipped onto the textile lifting gear, the protective sleeve with the one-sided secutex coating equally protects the lifting gear and the load at „sharp edges“ and rough surfaces.

Designed for the application
secutex SF-1 is available in different surface finishes (page 17), such as „ground“, whose surface is slightly roughened. It is used whenever the contact side comes into contact with small amounts of liquids. The rough surface remains permanently slip-resistant.

If necessary, secutex SF-1 is also available with a twi-sided coating in the SF-2 version, which precludes application errors when lifting sharp-edged loads. More on pages 90 et seq.

SF-1 suitable for	Designation SF-1	Approx. outside width [mm]	Approx. outside height [mm]	Approx. weight per running m [kg]	**PowerStar CS, 4-ply**	**PowerStar B, 2-ply**	**Liftfix Flat sling**
1.000	**SF-1-30**	55	20	0,9		✓	✓
2.000	**SF-1-60**	85	23	1,4		✓	✓
	SF-1-PCS 30	55	30	0,6	✓		
3.000	**SF-1-90**	115	25	2,2		✓	✓
4.000	**SF-1-120**	145	25	2,9		✓	✓
	SF-1-PCS 60	90	35	1,6	✓		
5.000	**SF-1-150**	175	25	3,4		✓	✓
6.000	**SF-1-180**	210	30	4,2		✓	✓
	SF-1-PCS 90	110	35	1,7	✓		
8.000	**SF-1-240**	270	35	5,5		✓	✓
	SF-1-PCS 120	145	40	2,3	✓		
10.000	**SF-1-300**	340	35	6,8		✓	✓

Special designs available on request. Protective sleeves can also be fitted by the user as shown in Fig. 1.

– Can be positioned during ongoing lifting procedures
– Virtually indestructible
– Permanent dimensional stability

secutex Clip-SC – protective sleeve with a longitudinal opening

The secutex Clip-SC is quickly attached thanks to the mounting slot on the back. It is preferably used whenever flat slings with or without a protective sleeve are required on a case-by-case basis. Important: The Clip-SC makes for easy handling and short set-up times. The secutex protective layer can be placed softly and flexibly on the load, thereby increasing the radius at the critical edges. The leverage forces are extensively distributed and the load remains undamaged.

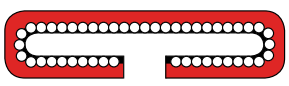
Optional versatility
secutex Clip-SC is available in versions with different surface finishes and with reinforcement. For more information about secutex and the different surface finishes, see page 14.

easyClip
Similar to the Clip-SC in terms of design, but with different material properties, easyClip is the budget-friendly version of the clip sleeve. For more information, ask us about it!

Clip-SC suitable for	Designation Clip-SC	Approx. outside width [mm]	Approx. outside height [mm]	Approx. weight per running m [kg]	**PowerStar CS, 4-ply**	**PowerStar B, 2-ply**	**Liftfix Flat sling**
1.000	**SC-30**	47	22	0,9		✓	✓
2.000	**SC-60**	85	23	1,4		✓	✓
	SC-PCS 30	55	30	0,9	✓		
3.000	**SC-90**	115	25	2,2		✓	✓
4.000	**SC-120**	145	25	2,9		✓	✓
	SC-PCS 60	90	35	2,1	✓		
5.000	**SC-150**	175	25	3,4		✓	✓
6.000	**SC-180**	210	30	4,2		✓	✓
	SC-PCS 90	110	35	2,3	✓		
8.000	**SC-240**	270	35	5,5		✓	✓
	SC-PCS 120	145	40	3,2	✓		
10.000	**SC-300**	340	35	6,8		✓	✓

Special designs available on request. Protective sleeves can also be fitted by the user as shown in Fig. 1.

One-sided secutex®-coating, sleeve open at the back for flexible use.



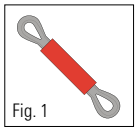
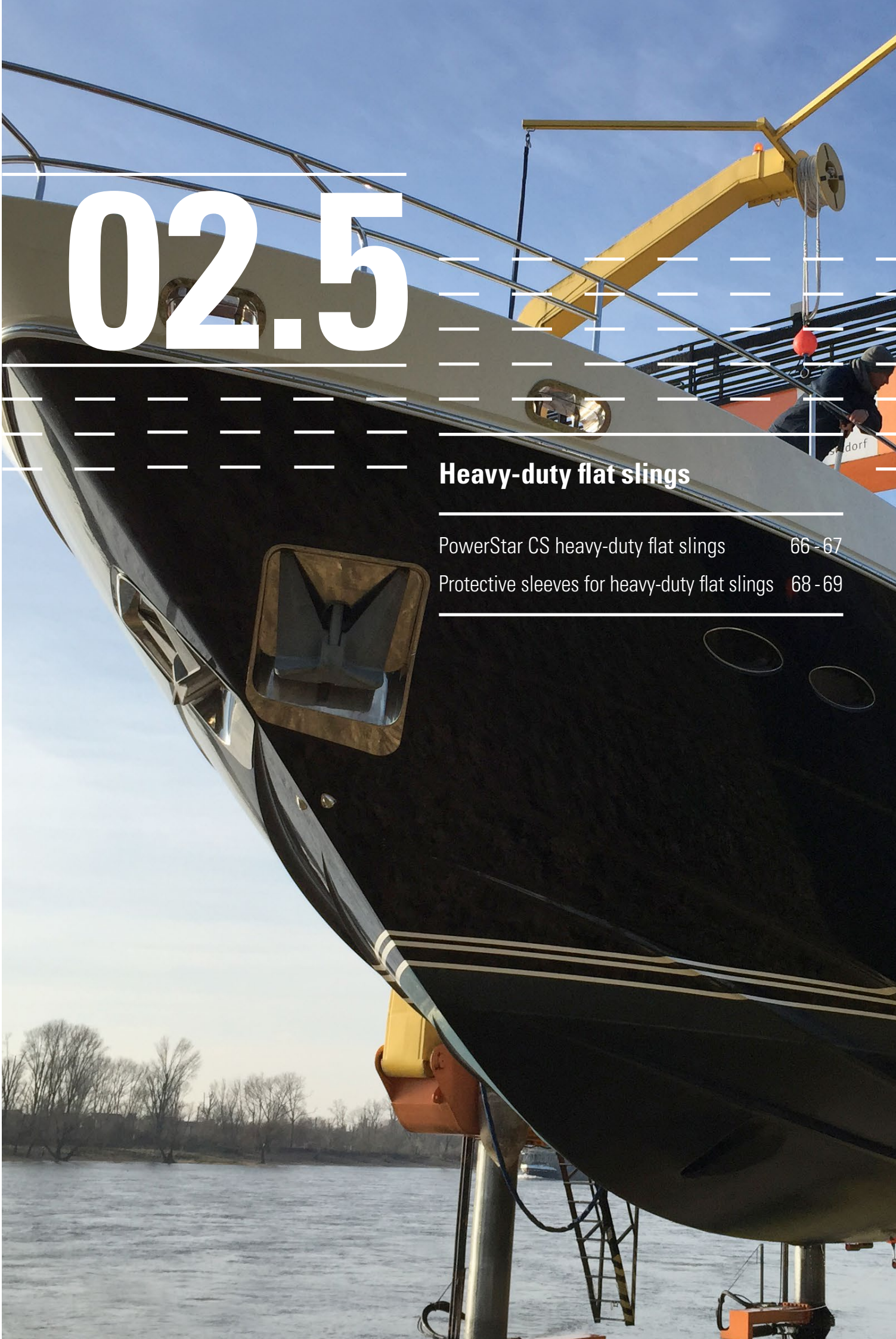


Fig. 1

02.5

Heavy-duty flat slings



How yachts are securely and gently lifted onto shore with 4-ply flat slings

Every year, Messe Düsseldorf welcomes international visitors to the world's biggest yacht and water sports trade fair - the boot Düsseldorf. Many motor and sailing yachts make their way to Düsseldorf by water to be presented at the trade fair „boot". Once they arrive, the yachts - which are up to 30 m long and weigh up to 100 t - are lifted from the Rhine river by Europe's largest ship lift „Big Willi" and then transported to the exhibition halls on flat-bed lorries. But not even „Big Willi" can handle this task on his own. In order to hoist the ships out of the water, the ship lift is equipped with specially designed SpanSet PowerStar CS heavy-duty flat slings. „Because the boats are lifted from below, the flat slings are fitted with snap hooks onto which weights are attached. The weights ensure that the lifting gear sinks quickly and remains in position under water. This helps position the boats precisely in the ship lift and ensures that they can be securely lifted afterwards", said Achim Paar from Messe Düsseldorf GmbH. In addition to the special construction with weights, the 4-ply CS flat slings ensure low surface pressure, which protects the ship's hull. To protect against the sharp edges of the ship's hull – which serve, among other things, as a cutting mechanism for nets floating in the water – NoCut sleeve protective sleeves were fitted on the flat slings. This guarantees gentle and safe transportation of the expensive luxury yachts to shore.

The SpanSet heavy-duty flat slings are the optimal lifting gear not only for the ship lift „Big Willi". The 4-ply flat slings are extremely tough and have twice the load capacity of the 2-ply flat slings, while retaining the same width. The small contact area – relative to its load capacity – and the longitudinal rigidity, which is achieved by the 4 layers and the robust webbed design, characterise the PowerStar CS flat sling. In addition to the version with loops, versions with drop-forged D- and C-links especially adapted to the flat sling, as well as different protective sleeves – coated or woven – ensure a nearly unlimited range of applications.

Whether you need the standard version or a special design – when heavy loads need lifting, the heavy-duty flat slings of the PowerStar range are the perfect lifting gear.

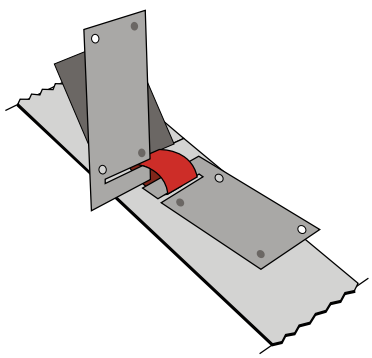
SpanSet – Certified Safety

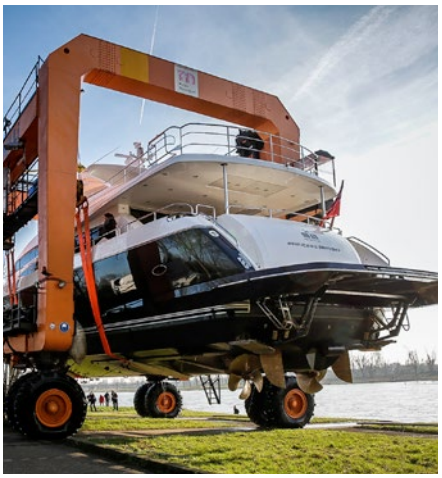
02.5 HEAVY-DUTY FLAT SLINGS

PowerStar CS heavy-duty flat sling
4-ply, 10.0-20.0 t

Retrofitting an RFID transponder

On request you can retrofit the 4-ply heavy-duty flat sling with an RFID transponder to allow for IT-supported asset management (p. 94 et seq.). A fastening strap firmly sewn into the fabric makes for easy fitting of the transponder on our round slings and flat slings.





PowerStar CS heavy-duty flat sling
4-ply, 10.0-20.0 t

– Superior woven load capacity indication
– Tear-resistant label covered with a protective sleeve
– Optional fitting with an RFID transponder
– Loop reinforcement to protect from abrasion

The PowerStar CS heavy-duty flat sling – a 4-ply powerhouse

The PowerStar CS heavy-duty flat sling, which is sewn in four layers, is a true powerhouse. The result: a flat sling that boasts a markedly higher load capacity than one- or two-ply flat slings, all with a narrow strap width. This makes the CS flat slings ideal for applications involving heavy loads that require the use of a narrow strap – for example, to feed under the load or if only a narrow contact area is available. The versions with D1- and D2-links make the sling even easier to use, e.g. when hooking the sling into load lifting gear or crane hooks.

Nominal carrying capacity [kg]	Loop width [mm]	Loop length [mm]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	2 m	3 m	4 m	5 m	6 m	8 m
10.000	80	900	2,4	150	12,8	2,9	2,0	-	**D015967**	**D010723**	**D015968**	**D012100**	**D015969**
12.000	95	1.100	2,8	180	15,2	3,6	2,4	-	**D015971**	**D010781**	**D015972**	**D015973**	**D015974**
16.000	125	1.200	3,0	240	15,2	4,0	3,2	-	**D015976**	**D010724**	**D015977**	**D015978**	**D015980**
20.000	155	1.400	3,4	300	15,2	7,0	4,4	-	-	**D010725**	**D015981**	**D015982**	**D015983**

Nominal carrying capacity [kg]	Loop width [mm]	Loop length [mm]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	2 m	3 m	4 m	5 m	6 m	8 m
10.000	-	-	2,4	150	12,8	14,9	2,0	-	**D041968**	**D041969**	**D041970**	**D041972**	**D041972**
12.000	-	-	2,8	180	15,2	21,5	2,4	-	**D041973**	**D041974**	**D041975**	**D041976**	**D041977**
16.000	-	-	3,0	240	15,2	39,0	3,2	-	**D041978**	**D041979**	**D041980**	**D041981**	**D041982**
20.000	-	-	3,4	300	15,2	63,0	4,4	-	-	-	**D041985**	**D041986**	**D041987**

Nominal carrying capacity [kg]	Loop width [mm]	Loop length [mm]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	2 m	3 m	4 m	5 m	6 m	8 m
10.000	-	-	2,4	150	12,8	14,9	2,0	-	**D047624**	**D047625**	**D047626**	**D047627**	**D047628**
12.000	-	-	2,8	180	15,2	21,5	2,4	-	**D047630**	**D047631**	**D047632**	**D047633**	**D047634**
16.000	-	-	3,0	240	15,2	39,0	3,2	-	**D047636**	**D047637**	**D047638**	**D047639**	**D047640**
20.000	-	-	3,4	300	15,2	63,0	4,4	-	**D047642**	**D047643**	**D047644**	**D047645**	**D047646**

Special designs available on request. Manufactured according to DIN EN 1492-2.

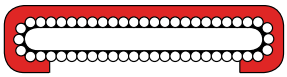
RFID optional

The explanations of the icons can be found on the flap.

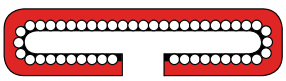
SF-1 and Clip-SC

– One-sided secutex-coating
– Easy to position
– Extremely cut-resistant
– Permanent dimensional stability

secutex SF-1: one contact side and the sleeve side are secutex-coated.



Clip-SC: one-sided secutex-coating, sleeve open on the backside for flexible use.



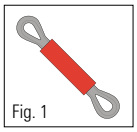


Fig. 1

SF-1 and Clip-SC protective sleeves for PowerStar CS heavy-duty flat slings

secutex SF-1
The secutex SF-1 protective sleeve has been optimally adapted to the PowerStar CS heavy-duty flat sling. The contact side is secutex-coated and is therefore extremely cut-resistant. Easily clipped onto the textile lifting gear, the protective sleeve with the one-sided secutex coating equally protects the lifting gear and the load at the „sharp edges“ and rough surfaces.

secutex Clip-SC
The secutex Clip-SC is quickly attached thanks to the mounting slot at the back. It offers easy handling and short fitting times, which is why it is preferably used wherever flat slings with or without a protective sleeve are required. The secutex protective layer can be placed softly and flexibly on the load, thereby increasing the radius at the critical edges. The leverage forces are extensively distributed and the load remains undamaged.

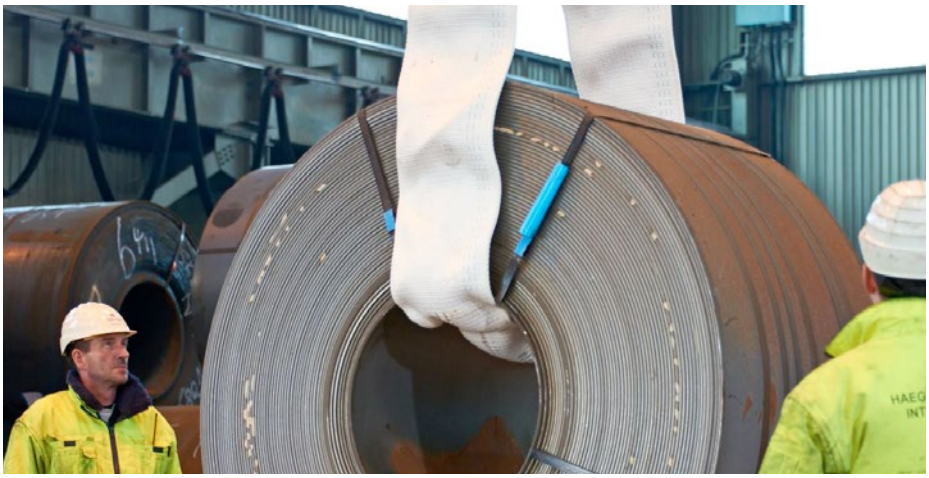
For more information about the protective sleeves for heavy-duty flat slings see p. 78.

SF-1 suitable for	Designation SF-1	Approx. inside width [mm]	Approx. outside width [mm]	Approx. outside height [mm]	Approx. weight per running m [kg]	**PowerStar CS Heavy-duty flat slings**
10.000	**SF-1-PCS 150**	175	210	40	4,8	✓
12.000	**SF-1-PCS 180**	205	230	40	4,9	✓
16.000	**SF-1-PCS 240**	255	280	45	5,9	✓
20.000	**SF-1-PCS 300**	310	340	40	6,8	✓

Clip-SC suitable for	Designation SF-1	Approx. inside width [mm]	Approx. outside width [mm]	Approx. outside height [mm]	Approx. weight per running m [kg]	**PowerStar CS Heavy-duty flat slings**
10.000	**SC-PCS 150**	175	210	40	4,8	✓
12.000	**SC-PCS 180**	205	230	40	4,9	✓
16.000	**SC-PCS 240**	255	280	45	5,9	✓
20.000	**SC-PCS 300**	310	340	40	6,8	✓

Special designs available on request. Protective sleeves can also be fitted by the user as shown in Fig. 1.

NoCut®sleeve and NoCut®pad



- Very low dead weight
- Flexible construction
- Unique ribbed structure enables turning and rotating of sharp loads
- High operational safety due to tested quality
- High cut resistance
- Sewn label with handling instructions

NoCut® sleeve and NoCut® pad – cut protection from high-performance fibres

Long service life and maximum safety
NoCut® sleeve offers the perfect all-round cut protection for SpanSet heavy-duty flat slings. Simply slipped onto the flat slings, the woven protective sleeve is placed against the sharp edge of the load to protect the lifting gear. NoCut® sleeve can also be fitted by the user as shown in Figure 1.

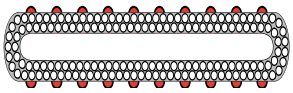
NoCut® sleeve is supple and flexible, allowing the protective sleeve to be easily positioned on the load even in tight spaces. The design of the sleeve with equally high all-round cut resistance allows for a long service life, as it can be used on both sides, and offers the highest level of safety, as application errors are excluded. NoCut® sleeve is delivered as a prefabricated cut with trimmed edges. The protective sleeves are offered at lengths in 250-mm increments as standard.

NoCut® pad - the perfect combination
NoCut® pad is the combination of NoCut® sleeve with an internal fabric bridge that has fastening elements on both ends. NoCut® pad is mounted there where the lifting gear lies flat against the sharp edge. For the user this means: High flexibility, low material requirement and high safety when handling sharp-edged loads! The size of the edge protection can be exactly dimensioned for the danger area and precisely positioned on the sharp edge.

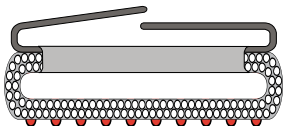
You can use the NoCut product finder to easily help you define what NoCut® pads or NoCut® sleeve you need for your application.

More about NoCut®
For more information about the innovative NoCut® products, see pages 80-87 of the catalogue.

Unique ribbed structure of NoCut sleeve with equally high all-round cut resistance.



NoCut pad is the combination of NoCut sleeve and fabric bridge with a fastening element



NoCut sleeve suitable for	Bezeichnung NoCut sleeve	Approx. inside width [mm]	Approx. outside width [mm]	Approx. outside height [mm]	Approx. weight per running m [kg]	**PowerStar CS Heavy-duty flat slings**
10.000	**NCS-195**	195	205	13	0,4	✓
12.000	**NCS-255**	255	265	13	0,6	✓
16.000	**NCS-315**	315	325	13	0,8	✓

Special designs available on request. Protective sleeves can also be fitted by the user as shown in Fig. 1.

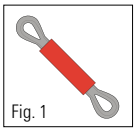


Fig. 1

02.6

Flat slings with secutex®-coating

How only one flat sling is needed for constantly changing loads.

A steel trading company located in the Ruhr area handles more than 750,000 t of steel products every year. Every day, countless steel bars, coils, steel blanks and individual weights of up to 20 t are moved in the production halls. In addition to the safety of the staff and of the loads, the time factor and the wear of the lifting gear are of crucial importance for the company. The often sharp-edged steel parts have to be handled securely and quickly, which is why the flat slings should be flexible to use and also extremely resistant to wear. For this reason, flat slings with a permanent secutex coating are used by the steel trading company, as this guarantees easy and safe use in addition to a long service life. This means that no time gets lost in lifting procedures with constantly changing loads, while no compromise in safety is made.

Coated flat slings come in different standard versions, e. g. with a secutex (S2) or Powerflex coating (P2), or with a combination of the two materials (SX). The secutex-coating penetrates deep into the fabric of the flat sling, creating a bond which cannot be separated. The textile fabric is thus protected from ingress of foreign matter. Available in various degrees of hardness, the damping torque of the coating can be optimally adapted to the lifting procedure and the characteristics of the respective load. The secutex-coating can also be optionally reinforced with steel plates especially for use with razor-sharp edges. „Powerflex“ is a particularly thin spray coating that penetrates deep into the fabric, thus sealing it. Foreign matter and liquids can no longer penetrate the fabric and can be easily removed from the surface of the strap. The two-sided Powerflex-coating (P2) is used wherever fabric protection and extreme resistance to abrasion play a key role, but where the high level of flexibility of the flat sling has to be maintained. Because the flat sling is completely shielded, both sides can be used as contact sides.

An additional loop reinforcement also protects from abrasion, and versions with C- or D-links are also available. Our coated flat slings are thus well-equipped for any and every lifting procedure.

SpanSet – Certified Safety

P2-flat slings 1,0 - 10,0 t

- Two-sided secutex-Powerflex coating
- Tear-resistant label covered with a protective sleeve
- Optional fitting with an RFID transponder
- Loop reinforcement to protect from abrasion

Powerflex P2 flat slings – flat sling with double protection

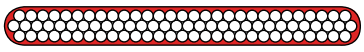
For rough working conditions

P2 flat slings made of hard-wearing material with loop reinforcement have an all-round secutex-Powerflex coating [1] and are thus particularly resistant to wear and abrasion – which considerably increases their service life. Powerflex is a thin spray coating. Thanks to the special manufacturing procedure, „Powerflex" can penetrate deep into the fabric. Foreign matter and liquids can no longer penetrate the fabric and can be easily brushed off the surface of the sling.

Two-sided coating

The Powerflex P2 flat sling is completely enveloped and thus protected from abrasion all-round. Both sides of the flat sling can be used as the contact side. Dangerous mix-ups are thus a thing of the past, and the two-sided coating also prolongs the service life.

1 Powerflex-coating



Nominal carrying capacity [kg]	Loop width [mm]	Loop length [mm]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths (L1) 2 m	3 m	4 m	5 m	6 m	8 m
1.000	30	300	1,0	30	9,1	0,4	0,3	**S000002**	**S000003**	**S000004**	**S000005**	**S000006**	**S000007**
2.000	35	300	1,0	60	9,5	1,0	0,6	**S000008**	**S000009**	**S000010**	**S000001**	**S000011**	**S000012**
3.000	50	400	1,3	90	9,9	1,3	0,8	**S000013**	**S000014**	**S000015**	**S000016**	**S000017**	**S000018**
4.000	65	400	1,3	120	10,9	1,8	1,1	**S000019**	**S000020**	**S000021**	**S000022**	**S000023**	**S000024**
5.000	80	500	1,5	150	10,9	2,4	1,4	**S000025**	**S000026**	**S000027**	**S000028**	**S000029**	**S000030**
6.000	70	700	1,9	180	11,1	3,0	1,7	**S000031**	**S000032**	**S000033**	**S000034**	**S000035**	**S000036**
8.000	90	800	2,2	240	11,1	4,3	2,3	-	**S000037**	**S000038**	**S000039**	**S000040**	**S000041**
10.000	160	1.000	2,6	300	11,5	7,2	2,8	-	**S000042**	**S000043**	**S000044**	**S000045**	**S000046**

Special designs available on request. Manufactured according to DIN EN 1492-2.

The explanations of the icons can be found on the flap.

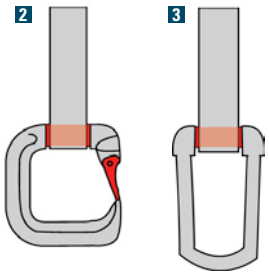
P2-flat slings 1,0-10,0 t
with C-link or D-links

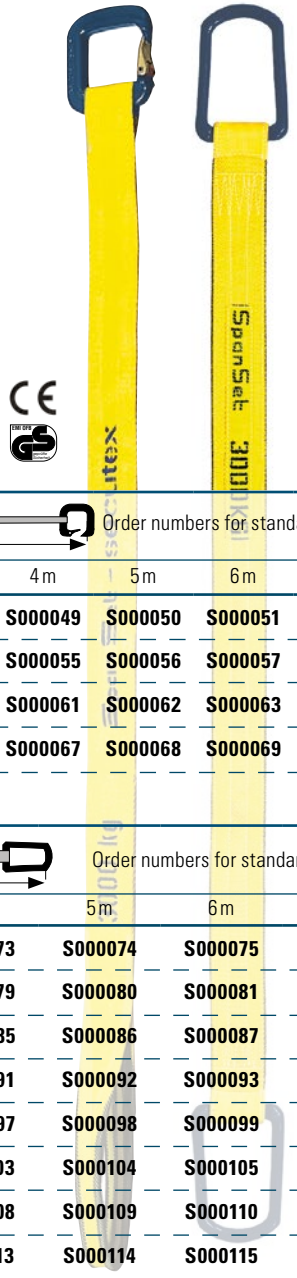
– Two-sided secutex-Powerflex coating
– Optional fitting with an RFID transponder
– Loop reinforcement to protect from abrasion

Powerflex P2 flat slings with a C-link or two D-links

Versions with a C- or D-link are available for lifting in a noose. The C-link can be quickly hooked and unhooked. The safety catch [2] prevents the flat sling from slipping out unwanted and can be easily replaced in the event of damage. The robust D-links [3] are not only suitable for lifting procedures in a noose, but also fit into every crane hook. Both links have a guide channel which supports the entire width of the strap and allows for gliding with minimal wear.

2 C-link with safety catch and guide channel
3 D-link with guide channel





Nominal carrying capacity [kg]	Loop width [mm]	Loop length [mm]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths 2 m	3 m	4 m	5 m	6 m	8 m
1.000	30	300	1,0	30	9,1	0,9	0,3	**S000047**	**S000048**	**S000049**	**S000050**	**S000051**	**S000052**
2.000	35	300	1,0	60	9,5	2,5	0,6	**S000053**	**S000054**	**S000055**	**S000056**	**S000057**	**S000058**
3.000	50	400	1,0	90	9,9	4,3	0,8	**S000059**	**S000060**	**S000061**	**S000062**	**S000063**	**S000064**
5.000	80	500	1,5	150	10,9	10,2	1,4	**S000065**	**S000066**	**S000067**	**S000068**	**S000069**	**S000070**

Nominal carrying capacity [kg]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths 2 m	3 m	4 m	5 m	6 m	8 m
1.000	1,0	30	9,1	1,0	0,3	**S000071**	**S000072**	**S000073**	**S000074**	**S000075**	**S000076**
2.000	1,0	60	9,5	2,0	0,6	**S000077**	**S000078**	**S000079**	**S000080**	**S000081**	**S000082**
3.000	1,0	90	9,9	3,7	0,8	**S000083**	**S000084**	**S000085**	**S000086**	**S000087**	**S000088**
4.000	1,2	120	10,9	5,4	1,1	**S000089**	**S000090**	**S000091**	**S000092**	**S000093**	**S000094**
5.000	1,5	150	10,9	8,7	1,4	**S000095**	**S000096**	**S000097**	**S000098**	**S000099**	**S000100**
6.000	1,8	180	11,1	14,8	1,7	**S000101**	**S000102**	**S000103**	**S000104**	**S000105**	**S000106**
8.000	2,2	240	11,1	22,8	2,3	-	**S000107**	**S000108**	**S000109**	**S000110**	**S000111**
10.000	2,4	300	11,1	34,0	2,8	-	**S000112**	**S000113**	**S000114**	**S000115**	**S000116**

Special designs available on request. Manufactured according to DIN EN 1492-2..

RFID optional

The explanations of the icons can be found on the flap.

SX-flat slings 1,0 - 10,0 t

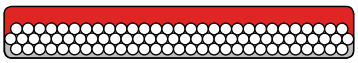
- Cut-resistant contact side due to secutex, abrasion-resistant reverse side due to Powerflex
- Tear-resistant label covered with a protective sleeve
- Optional fitting with an RFID transponder
- Loop reinforcement to protect from abrasion

SX flat slings – flat lifting sling with high cut protection

Cut-resistant in front, abrasion-resistant on back

The contact side of the SX flat sling is secutex-coated and thus extremely cut-resistant 1. The reverse is coated with Powerflex [1]. Powerflex prevents abrasion and additionally protects the fabric from dirt and ingress of foreign matter. In the standard version, the SX flat slings end in loops with robust reinforced fabric. The super-flat design and the flexibility in the longitudinal direction make it easy to insert the SX flat sling into small gaps.

1 secutex-coating (Powerflex on reverse)



Nominal carrying capacity [kg]	Loop width [mm]	Loop length [mm]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths 2 m	3 m	4 m	5 m	6 m	8 m
1.000	30	300	1,0	30	13,1	0,5	0,4	**S000405**	**S000406**	**S000407**	**S000408**	**S000409**	**S000410**
2.000	35	300	1,0	60	13,5	1,2	0,8	**S000411**	**S000412**	**S000403**	**S000413**	**S000414**	**S000415**
3.000	50	400	1,3	90	13,9	1,6	1,3	**S000416**	**S000417**	**S000418**	**S000419**	**S000436**	**S000437**
4.000	65	400	1,3	120	14,9	2,2	1,8	**S000438**	**S000439**	**S000440**	**S000441**	**S000442**	**S000443**
5.000	80	500	1,5	150	14,9	2,8	2,2	**S000444**	**S000445**	**S000446**	**S000447**	**S000448**	**S000449**
6.000	70	700	1,9	180	15,1	3,3	2,7	**S000430**	**S000431**	**S000432**	**S000433**	**S000434**	**S000435**
8.000	90	800	2,2	240	15,1	4,2	3,8	-	**S000425**	**S000426**	**S000427**	**S000428**	**S000429**
10.000	160	1.000	2,6	300	15,5	6,8	4,8	-	**S000420**	**S000421**	**S000422**	**S000423**	**S000424**

Special designs available on request. Manufactured according to DIN EN 1492-2.

The explanations of the icons can be found on the flap.

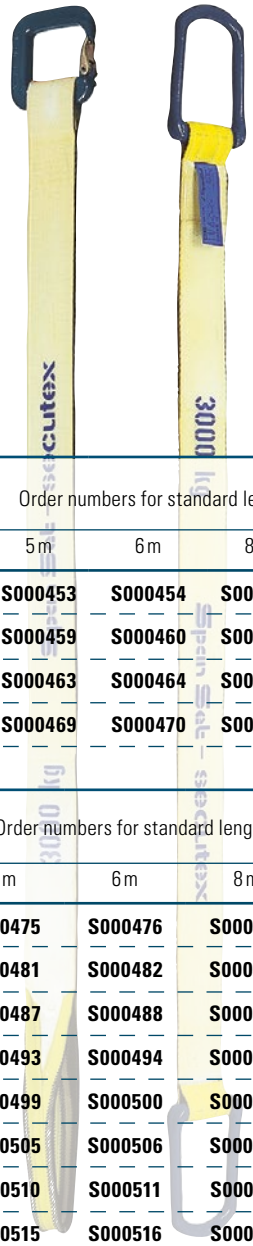
SX-flat slings 1,0 - 10,0 t
with C-link or D-links

– Cut-resistant contact side due to secutex, abrasion-resistant reverse side due to Powerflex
– Tear-resistant label covered with a protective sleeve
– Optional fitting with an RFID transponder

SX flat slings with a C-link or two D-links

Rapid noosing with C-link
With the C-link attached to one end you can also use the SX flat sling for lifting in a noose. Inside the hook, the strap has an extensive contact area and the built-in safety catch prevents the strap from slipping out of the attachment point. If the safety catch is damaged, it can easily be replaced at the C-link.

More possibilities with D-links
With D-links attached to both ends, you have considerably more flexibility. Simply thread one end of the strap through the opposite link – this ensures a lacing in which nothing can slip. Furthermore, the D-link makes it easier to hang the sling into spreader beams or crane hooks when applied in a single layer, as the links do not require a large contact area.



Nominal carrying capacity [kg]	Loop width [mm]	Loop length [mm]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths 2 m	3 m	4 m	5 m	6 m	8 m
1.000	30	300	1,0	30	13,1	1,0	0,4	**S000450**	**S000451**	**S000452**	**S000453**	**S000454**	**S000455**
2.000	35	300	1,0	60	13,5	2,7	0,8	**S000456**	**S000457**	**S000458**	**S000459**	**S000460**	**S000461**
3.000	50	400	1,0	90	13,9	3,6	1,3	**S000401**	**S000402**	**S000462**	**S000463**	**S000464**	**S000465**
5.000	80	500	1,5	150	14,9	10,6	2,2	**S000466**	**S000467**	**S000468**	**S000469**	**S000470**	**S000471**

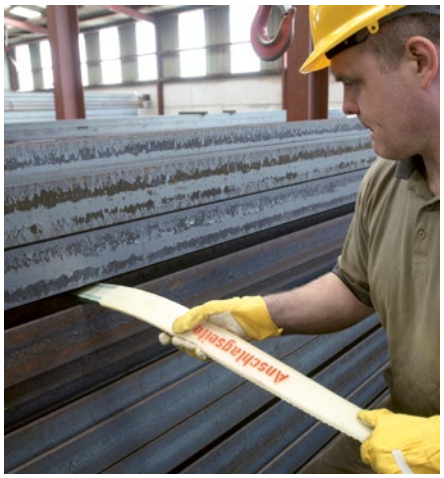
Nominal carrying capacity [kg]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths 2 m	3 m	4 m	5 m	6 m	8 m
1.000	1,0	30	13,1	1,1	0,4	**S000472**	**S000473**	**S000474**	**S000475**	**S000476**	**S000477**
2.000	1,0	60	13,5	2,2	0,8	**S000478**	**S000479**	**S000480**	**S000481**	**S000482**	**S000483**
3.000	1,0	90	13,9	4,0	1,3	**S000484**	**S000485**	**S000486**	**S000487**	**S000488**	**S000489**
4.000	1,2	120	14,9	5,6	1,8	**S000490**	**S000491**	**S000492**	**S000493**	**S000494**	**S000495**
5.000	1,5	150	14,9	9,1	2,2	**S000496**	**S000497**	**S000498**	**S000499**	**S000500**	**S000501**
6.000	1,8	180	15,1	15,1	2,7	**S000502**	**S000503**	**S000504**	**S000505**	**S000506**	**S000507**
8.000	2,2	240	15,1	23,0	3,8	-	**S000508**	**S000509**	**S000510**	**S000511**	**S000512**
10.000	2,4	300	15,5	34,1	4,8	-	**S000513**	**S000514**	**S000515**	**S000516**	**S000517**

Special designs available on request. Manufactured according to DIN EN 1492-2.

RFID optional

The explanations of the icons can be found on the flap.

S2-flat slings 1,0-10,0 t



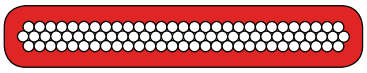
- Two-sided secutex-coating
- Tear-resistant label covered with a protective sleeve
- Optional fitting with an RFID transponder
- Loop reinforcement to protect from abrasion

S2 flat slings – secutex-protected on both sides

Double protection – longer service life
Our S2 flat slings with two-sided secutex coating [1] are real workhorses. The coating penetrates deep into the fabric of the flat sling, creating an inseparable bond with unusually high structural strength. The advantage of the two-sided coating is that the flat sling can be placed against the load on both sides – application errors are thus excluded. The loops of the flat slings have a robust reinforced fabric, which withstands in particular the abrasion forces in the crane hook.

Optional: secutex-Tropic
As with all secutex-coated flat slings, the S2 slings can also be coated with secutex-Tropic on request. This is particularly useful in permanently moist conditions, e. g. in offshore operations. The hydrolysis-resistant coating prevents moisture and salt deposits from penetrating the textile fabric – two factors that can severely reduce the total load capacity of the flat sling.

1 Two-sided secutex-coating.



Nominal carrying capacity [kg]	Loop width [mm]	Loop length [mm]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths 2 m	3 m	4 m	5 m	6 m	8 m
1.000	30	300	1,0	40	17,1	0,9	0,8	**S000200**	**S000201**	**S000202**	**S000203**	**S000204**	**S000205**
2.000	35	300	1,0	70	17,5	1,4	1,4	**S000206**	**S000207**	**S000208**	**S000209**	**S000210**	**S000211**
3.000	50	400	1,3	100	17,9	2,0	2,1	**S000212**	**S000213**	**S000214**	**S000215**	**S000216**	**S000217**
4.000	65	400	1,3	130	18,9	2,7	2,9	**S000218**	**S000219**	**S000220**	**S000221**	**S000222**	**S000223**
5.000	80	500	1,5	160	18,9	3,4	3,7	**S000224**	**S000225**	**S000226**	**S000227**	**S000228**	**S000229**
6.000	70	700	1,9	190	19,1	3,8	4,4	**S000230**	**S000231**	**S000232**	**S000233**	**S000234**	**S000235**
8.000	90	800	2,2	250	19,1	4,6	6,1	-	**S000236**	**S000237**	**S000238**	**S000239**	**S000240**
10.000	160	1.000	2,6	310	19,5	7,0	7,6	-	**S000241**	**S000242**	**S000243**	**S000244**	**S000245**

Special designs available on request. Manufactured according to DIN EN 1492-2.

The explanations of the icons can be found on the flap.

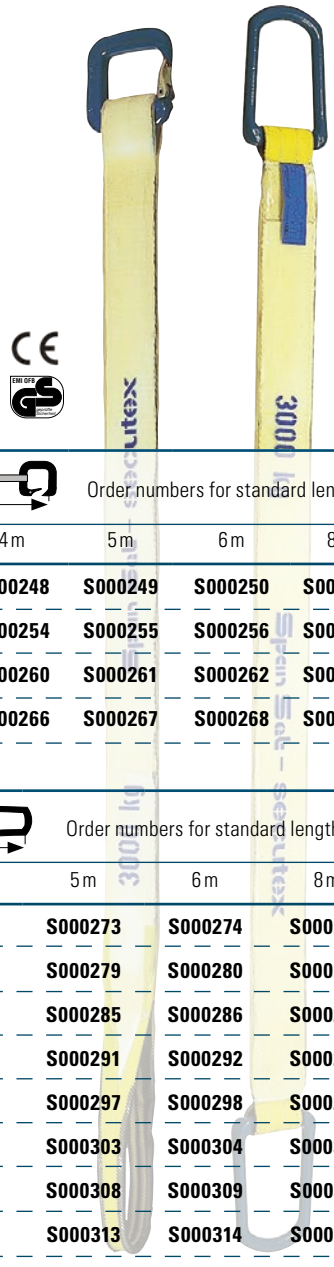
S2-flat slings 1,0-10,0 t
with C-link or D-links

– Two-sided secutex-coating
– Tear-resistant label covered with a protective sleeve
– Optional fitting with an RFID transponder
– Loop reinforcement to protect from abrasion

S2 flat slings with a C-link or two D-links

The S2 flat slings also come in versions with a C-link or two D-links. The link has a guide channel (see illustration on p. 73) which supports the entire width of the strap and allows for gliding with minimal wear. The C-link can be quickly hooked and unhooked. The safety catch prevents the flat sling from slipping out unwanted and can be easily replaced in the event of damage.

The robust D-links give you considerably more flexibility. Simply thread one end of the strap through the opposite link – this ensures a lacing in which nothing can slip. Furthermore, the D-link makes it easier to hang the sling into spreader beams or crane hooks when applied in a single layer, as the links do not require a large contact area.



Nominal carrying capacity [kg]	Loop width [mm]	Loop length [mm]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths 2 m	3 m	4 m	5 m	6 m	8 m
1.000	30	300	1,0	40	17,1	1,4	0,8	**S000246**	**S000247**	**S000248**	**S000249**	**S000250**	**S000251**
2.000	35	300	1,0	70	17,5	2,9	1,4	**S000252**	**S000253**	**S000254**	**S000255**	**S000256**	**S000257**
3.000	50	400	1,0	100	17,9	5,0	2,1	**S000258**	**S000259**	**S000260**	**S000261**	**S000262**	**S000263**
5.000	80	500	1,5	160	18,9	11,2	3,7	**S000264**	**S000265**	**S000266**	**S000267**	**S000268**	**S000269**

Nominal carrying capacity [kg]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths 2 m	3 m	4 m	5 m	6 m	8 m
1.000	1,0	40	17,1	1,4	0,8	**S000270**	**S000271**	**S000272**	**S000273**	**S000274**	**S000275**
2.000	1,0	70	17,5	2,6	1,4	**S000276**	**S000277**	**S000278**	**S000279**	**S000280**	**S000281**
3.000	1,0	100	17,9	4,5	2,1	**S000282**	**S000283**	**S000284**	**S000285**	**S000286**	**S000287**
4.000	1,2	130	18,9	6,4	2,9	**S000288**	**S000289**	**S000290**	**S000291**	**S000292**	**S000293**
5.000	1,5	160	18,9	9,8	3,7	**S000294**	**S000295**	**S000296**	**S000297**	**S000298**	**S000299**
6.000	1,8	190	19,1	15,8	4,4	**S000300**	**S000301**	**S000302**	**S000303**	**S000304**	**S000305**
8.000	2,2	250	19,1	23,6	6,1	-	**S000306**	**S000307**	**S000308**	**S000309**	**S000310**
10.000	2,4	310	19,5	34,3	7,6	-	**S000311**	**S000312**	**S000313**	**S000314**	**S000315**

Special designs available on request. Manufactured according to DIN EN 1492-2.

RFID optional

The explanations of the icons can be found on the flap.

02.7

Protective sleeves, protective plates and clips

Crane lifts crane – safely and protected with NoCut® pad

The Franz Plum GmbH & Co. KG specialises, among other things, in the rental of heavy-duty vehicles and cranes. For the construction of an apartment building, a truck-mounted crane weighing 24 t had to be lifted into the future underground garage of the building by an even larger crane with a load capacity of up to 130 t. This kind of lifting procedure is not uncommon, but in many cases it leads to problems. In consultation with our application engineer, the angle, weight of the crane, sharp edges, design of the load-bearing crane and many other factors were taken into account. Four MagnumPlus round slings with a load capacity of 25 t were eventually used, and the slings were protected from the razor-sharp edges of the crane by NoCut®pad. The crane operator at Plum, Toni Gottschalk, commented about NoCut®pad: „Unbelievable, what these ‚knee pads' can handle. I would not have thought it possible." The four-layer NoCut® pads were equipped with buckles and sliders and were designed for particularly sharp edges, which allows for fixation directly on the sharp edges. This way it was possible to safely lift the crane without damaging the round slings.

If the radius or an edge is „sharp", the edges of the load can damage the textile lifting gear in a major way, or even sever it in the worst case. In addition to NoCut® pad, NoCut® sleeve is the latest product for protecting against sharp edges. The protective sleeves and pads made of the high-performance fibre HPME are DEKRA-certified, have a high cut and abrasion resistance and are characterised by their low dead weight and a particularly flexible design. NoCut® is designed with a fabric rib on both sides. On the outside, the ribbed design increases the cut resistance, and on the inside it makes it easier for the lifting gear to slide back and forth in the sleeve, which enables the turning and rotation of sharp-edged loads. As the leading manufacturer of polyurethane-coated protective sleeves, the SpanSet Group has for many years been producing tried-and-tested protective sleeves such as the SF-2, secuwave or the Clip-SC made of secutex, the polyurethane elastomer that is particularly cut- and wear-resistant.

With our extensive range of protective measures, we always have the right tool against the „sharp edge".

SpanSet – Certified Safety

02.7 PROTECTIVE SLEEVES

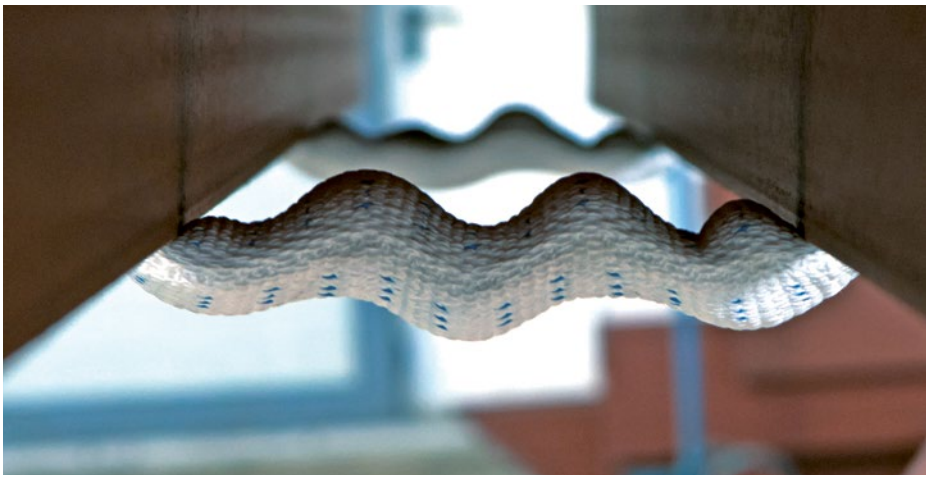
NoCut®

Certified: DEKRA-tested!

The protective effect of NoCut® sleeve and NoCut® pad was tested on edges with varying degrees of sharpness and certified by DEKRA.

Movie: NoCut® in operation!

Want to see how NoCut® works e. g. when raising or lifting sharp-edged loads? Watch the application video at **www.spanset-nocut.de**. Simply scan the QR code.



NoCut®

- Very low dead weight
- Flexible construction
- Unique ribbed structure enables turning and rotating of sharp loads
- High operational safety due to tested quality
- High cut resistance
- Sewn label with handling instructions

NoCut® – the textile high-tech cut protection

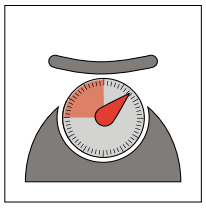
Optimal protection against the „sharp edge“
In addition to the external factors, such as temperature, chemical environment or mechanical stress, „sharp edges“ still represent one of the main causes of damage to the lifting gear itself and are therefore a frequent cause of accidents. The majority of damages on sharp or rough edges occur by moving the load transversely to the lifting gear. If the edge is „sharp“, it can, in the worst case, cut through the lifting gear – accidents and damage are bound to happen. You should therefore protect your lifting gear with edge protection made of high-performance fibres developed especially for sharp edge: NoCut®!

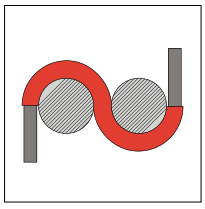
Cut protection made of high-performance fibres
The high cut and wear resistance of HMPE (high-molecular polyethylene) led to the development of NoCut® sleeve and NoCut® pad. A trend in lifting technology! Because of their excellent properties, high-performance fibres are being used more and more frequently in the development of textile cut protection, sleeve hoses and lifting gear.

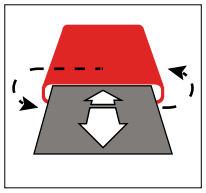
For the development of NoCut®, special testing equipment was constructed and built to allow the cut resistance of the fabric to be determined while testing the cutting impact at nominal load. The protective effect of NoCut® sleeve and NoCut® pad was tested on edges with varying degrees of sharpness and certified by DEKRA. Defined knowledge that does not leave any question unanswered during use and that has been certified by DEKRA!

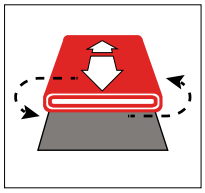
Excellent properties
Of course NoCut® has been adapted to the different widths of the SpanSet flat slings and round slings. NoCut® is therefore excellent for protecting textile lifting gear, such as PowerStar flat slings and SupraPlus round slings – especially against damages caused by sharp edges when lifting loads. NoCut® cut protection has a very low dead weight and a compact design to ensure particularly ergonomic handling with less effort.

Learn more about NoCut® sleeve and NoCut® pad on the following pages!

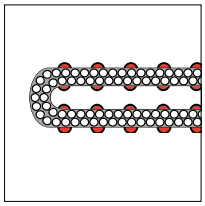

Low dead weight


Flexible construction




Equally high all-round cut resistance

Tested cut protection

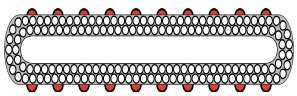

Unique ribbed structure

02.7 PROTECTIVE SLEEVES

NoCut® sleeve

- Very low dead weight
- Flexible fabric construction
- Unique ribbed structure enables raising of sharp loads
- High operational safety due to tested quality
- High cut resistance
- Sewn label with handling instructions

Unique ribbed structure of NoCut sleeve with equally high all-round cut resistance.



NoCut® sleeve – woven protective sleeve for more safety

NoCut® sleeve is a woven protective sleeve for flat slings and round slings. The protective sleeve is simply slid over the lifting gear and positioned on the sharp edge of the load to protect the lifting gear. To protect the lifting gear, the fabric sleeve can also be used either for flat slings as shown in Fig. 1 or for round slings as shown in Fig. 3. On request, the single legs of a round sling can also be fitted with NoCut® sleeve as shown in Figure 5.

Flexible and extremely cut-resistant
NoCut® sleeve is designed with a fabric rib on both sides. On the outside, the ribbed design increases the cut resistance, and on the inside it makes it easier for the lifting gear to slide back and forth in the sleeve, which enables raising of sharp-edged loads. The textile construction of NoCut® sleeve is supple and flexible, allowing NoCut® to be easily positioned on the load even in tight spaces.

The design of the sleeve with equally high all-round cut resistance allows for a long service life, as it can be used on both sides, and offers the highest level of operational safety, as application errors are excluded. This is further supported by the label with handling instructions and clear identification sewn into the NoCut® sleeve.

Low dead weight
Products of the NoCut® series have a markedly low dead weight in comparison with conventional protective sleeves and are thus easier to handle. The material HMPE enables the use of NoCut® sleeve at a temperature range of -40 °C to +60 °C. The protective sleeve is delivered as a prefabricated cut with trimmed ends.

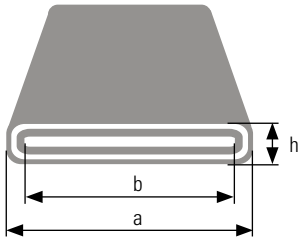
Tested safety
The cut resistance of NoCut® has been successfully tested in the laboratory and in field tests and certified by DEKRA. On page 86 you will find details about the edge radii on which NoCut® sleeve can be used.

NoCut® sleeve – protective sleeve with a low dead weight

The protective sleeve NoCut® sleeve is available for use with flat slings and round slings with lengths in 250-mm increments as standard. Widths of 45 mm to 315 mm are available, so that NoCut® sleeve is suitable for both the compact 0.5-t SupraPlus and for the 25-t powerhouse MagnumPlus sling.

Designation **NoCut sleeve**	Approx. outside width a [mm]	Approx. outside height h [mm]	Approx. weight per running m [kg]	**combinable with flat slings** as shown in Fig. 1	**combinable with round slings** as shown in Fig. 3
NCS-045	55	13	0,4	PowerStar 1.000 Liftfix 1.000	
NCS-075	85	13	0,6	PowerStar 2.000 Liftfix 2.000 CS-Hebeband 2.000	SupraPlus 500, 1.000, 2.000 Twintex 1.000, 2.000 Liftfix 500, 1.000, 2.000
NCS- 105	115	13	0,8	PowerStar 3.000 Liftfix 3.000 CS-Hebeband 4.000	SupraPlus 3.000, 4.000 Twintex 3.000 Liftfix 3.000 Magnum-X 10.000
NCS- 135	145	13	1,1	PowerStar 4.000 Liftfix 4.000 CS-Hebeband 6.000	SupraPlus 5.000, 6.000 Twintex 4.000 Liftfix 4.000
NCS- 165	175	13	1,4	PowerStar 5.000 Liftfix 5.000 CS-Hebeband 8.000	SupraPlus 8.000 Twintex 5.000, 6.000, 8.000 Liftfix 5.000, 6.000, 8.000 Magnum-X 20.000
NCS- 195	205	13	1,6	PowerStar 6.000 Liftfix 6.000 CS-Hebeband 10.000	Liftfix 10.000 MagnumPlus 10.000
NCS- 255	265	13	2,0	PowerStar 8.000 Liftfix 8.000 CS-Hebeband 12.000	Liftfix 15.000
NCS- 315	325	13	2,7	PowerStar 10.000 Liftfix 10.000 CS-Hebeband 16.000	Liftfix 20.000, 25.000 MagnumPlus 20.000, 25.000

NoCut® sleeve is available in outer widths of up to 325 mm.



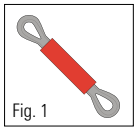


Fig. 1

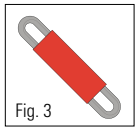


Fig. 3

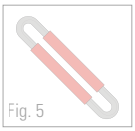


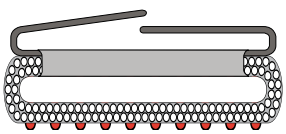
Fig. 5

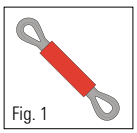
Protective sleeves can also be fitted by the user as shown in Fig. 1 and Fig. 3.
Fitting by the factory as shown in Fig. 5 on request. Special designs available on request.

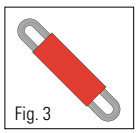
NoCut® pad

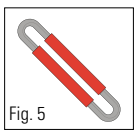
- Very low dead weight
- Flexible fabric construction
- Unique ribbed structure enables raising of sharp loads
- High operational safety due to tested quality
- High cut resistance
- Sewn label with handling instructions

NoCut pad: the combination of NoCut sleeve and fabric bridge with a fastening element.









NoCut® pad – protective plates against the „sharp edge“

NoCut® pad for round slings and flat slings is the combination of NoCut® sleeve with an internal fabric bridge that has fastening elements (see table) on both ends. NoCut® pad is mounted there where the lifting gear lies flat against the sharp edge. For the user this means: High flexibility, low material requirement and high safety when handling sharp-edged loads! The size of the edge protection can be exactly dimensioned for the danger area and precisely positioned on the sharp edge.

Multiple layers against sharp edges
NoCut® pad is offered as a 2-layer or 4-layer version. This multilayer design achieves an extremely high level of cut protection and offers the user many options, also for critical lifting procedures. Even the smallest edge radii are no problem for the pads (see p. 86).

As with NoCut® sleeve, use of the high-performance fibres allows the user to deploy the textile protective plate in temperatures ranging from -40 °C up to +60 °C.

NoCut® product finder
All SpanSet flat slings and round slings can be protected against sharp edges with NoCut® pad. Should you be unable to find the right pads using the table below, you can use the NoCut® product finder, which helps you to easily identify the right NoCut® product for textile lifting gear in just a few steps online (p. 87).

NoCut® pad – various NoCut® fastening elements

Different designs

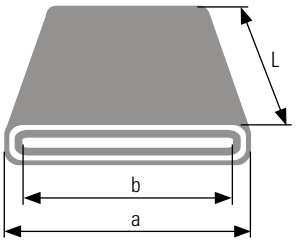
NoCut® pad offers the user three alternatives to fasten the protective plate to the lifting gear: Velcro strap 1 , Velcro strap with a frame buckle 2 or 2-piece metal buckle (frame or triple bridge) 3.

As standard, NoCut® pad is produced in lengths from 500 mm to 1,500 mm in 250-mm increments. The maximum width of the NoCut® pads is 315 mm.

Additional attachment loop

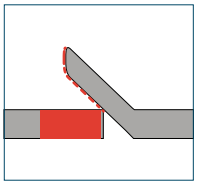
NoCut® pad is usually used in short lengths. Additional attachment loops are available for longer versions. On request, the attachment loops 4 can be optionally supplied with all three fastening elements and for any NoCut® pad width. Ask us about it!

NoCut pad is available in inner widths of up to 315 mm and a length of 1.5 m.

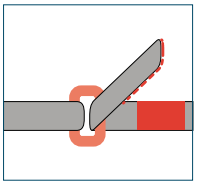


NoCut pad	Approx. inside width [mm] b	Approx. outside width [mm] a	Designation **NoCut pad**
with Velcro strap	45	55	**NCP-055-KB**
	75	85	**NCP-055-KB**
with Velcro strap and frame buckle	105	115	**NCP-115-KR**
	135	145	**NCP-145-KR**
	165	175	**NCP-175-KR**
	195	205	**NCP-205-KR**
	255	265	**NCP-265-KR**
	315	325	**NCP-325-KR**
with frame and triple bridge buckle	45	55	**NCP-055-RD**
	75	85	**NCP-085-RD**
	105	115	**NCP-115-RD**
	135	145	**NCP-145-RD**
	165	175	**NCP-175-RD**
	195	205	**NCP-205-RD**
	255	265	**NCP-265-RD**
	315	325	**NCP-325-RD**

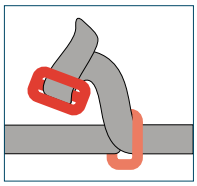
Fastening elements:



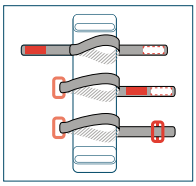
1 Velcro strap



2 Velcro strap with frame buckle



3 Frame with triple bridge buckle



4 Attachment loops

i Protective sleeves can also be fitted by the user as shown in Fig. 1, Fig. 3 and Fig. 5. Special designs available on request.

NoCut®-edge radii

NoCut® – for use with even the smallest edge radii

Even with the smallest radii and razor-sharp edges, NoCut® offers the right protection for your flat slings and round slings. NoCut® is DEKRA-certified. The values marked with the „ tick" in the table refer to the smallest radii on which NoCut® may still be used. Larger edge radii are covered by the respective marking.

Ask us about it!
With the support of our application engineers, even sharper edges can be „managed". Let NoCut® convince you in a practical demonstration. Our SpanSet application engineers will be pleased to give you a live demonstration of NoCut® sleeve at no cost, to answer your questions and support you with valuable know-how. Simply call us and make an appointment!

Lifting gear		NoCut® sleeve			NoCut® pad 2-ply			NoCut® pad 4-ply		
SpanSet flat slings		✓			✓			✓		
MagnumPlus, SupraPlus, Twintex, Liftfix	≤ 20 t WLL	✓			✓			✓		
MagnumPlus, SupraPlus, Twintex, Liftfix	≤ 30 t WLL		✓		✓			✓		
MagnumPlus, SupraPlus, Twintex, Liftfix	≤ 50 t WLL				✓			✓		
Magnum-X	≤ 20 t WLL			✓			✓		✓	
Magnum-X	≤ 30 t WLL						✓		✓	
EK	≤ 20 t WLL			✓		✓		✓		
EK	≤ 30 t WLL					✓		✓		
EK	≤ 40 t WLL					✓		✓		
Radius [mm]		**1**	**2**	**3**	**1**	**2**	**3**	**0**	**1**	**2**

Microsite: NoCut® on the web!

For more information, including important documents and video material about the NoCut® product range, please visit our product homepage:
www.spanset-nocut.de

NoCut®-Produkt-Finder – product selection made easy

In line with the low dead weight of NoCut®, we also make it easy for you to select the right product.

With the free product finder you can easily define the correct NoCut® product for textile lifting gear in just a few steps online.

1 First you have to select the lifting gear being used. The most common flat slings and round slings of SpanSet can be selected in a drop-down menu.

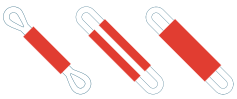
- **Flat slings** HB, PB, PC, PCS
- **Round slings** Liftfix, MagnumPlus, Magnum-X, SupraPlus, Twintex

2 Next, the load capacity [WLL] of the lifting gear has to be selected.

3 The working length of the lifting gear is then entered.

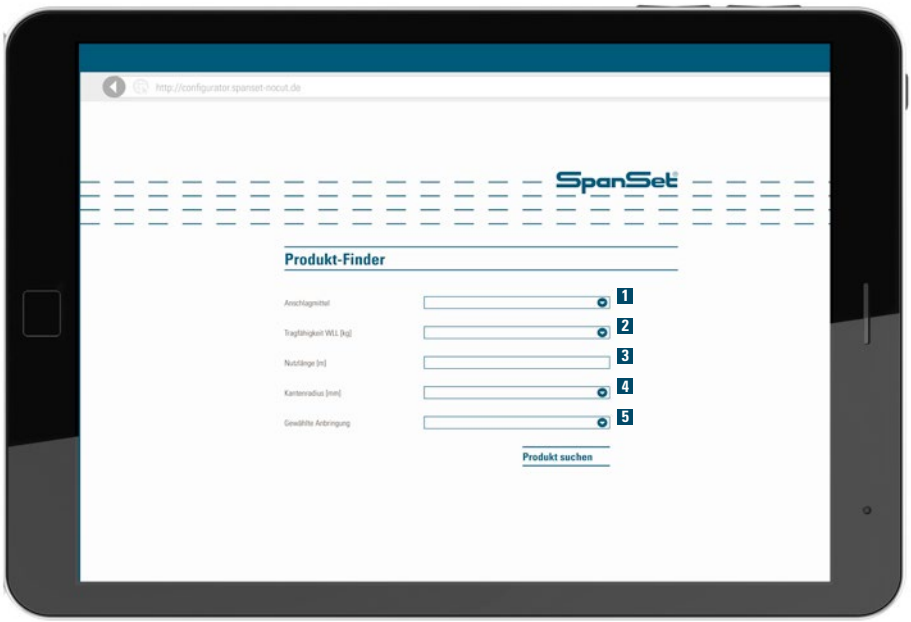
4 After that, you enter the edge radius of the load. Radii from **0 mm to 3 mm** can be entered.

5 In the next step you define whether you want to use a **single- or double-stranded strap**.



6 Finally, the length of the NoCut® sleeve/pad has to be defined. Should NoCut® pad be the right product for your application, you can still choose between different versions of the fastening element.

Simply complete the contact form and send your request – done! A SpanSet employee will contact you to answer any remaining questions. This guarantees that the right cut protection has been selected for the application in question.

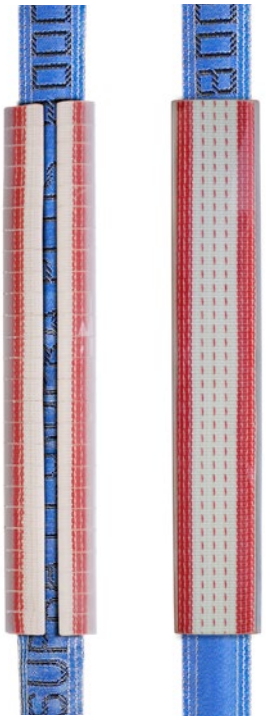


Try it and be convinced

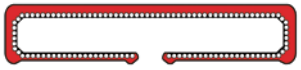
The NoCut product finder is available online at **http://configurator.spanset-nocut.de**, or simply scan the QR code below.

veloxClip

– Particularly flexible in the transverse direction
– Easy to position
– Permanent dimensional stability
– Slit distance freely selectable



Cross-section of the veloxClip.



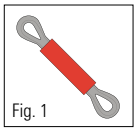


Fig. 1

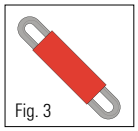


Fig. 3

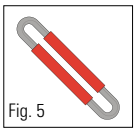


Fig. 5

secutex veloxClip – protective sleeve with perpendicular slits

While the flexibility of conventional protective sleeves often makes for easy lifting, they can be rather uncomfortable when handling loads with a more compact size. Small gaps and limited contact areas make it difficult to handle the rigid protective sleeve.

The veloxClip is made with a slit on the reverse side, which makes it very flexible in the bending direction. In the longitudinal direction, the protective sleeve retains its valued properties and remains rigid. This makes it a very comfortable alternative, especially when lifting loads with more limited contact areas. It is easy to insert through low gaps and adapts flexibly to loads during lifting.

Different slit patterns
The position and distance of the slits can be freely selected, which means that the level of flexibility of the protective sleeve can also be influenced. This also helps to determine the exact position in which the sleeve is meant to be flexible.

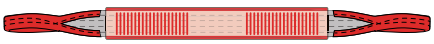
secutex veloxClip is available for:

- SupraPlus round slings
- Magnum round slings
- MagnumPlus round slings
- Liftfix round slings
- 4-ply-CS flat slings
- PowerStar flat slings
- Liftfix flat slings

Slit structure „centre“
The protective sleeve has slits in the centre of the contact area and is very flexible in this area.

Slit structure „continuous“
The protective sleeve has slits along the entire contact area and is very flexible in the bending direction.

Slit structure „asymmetrical“
The slit pattern is adjusted precisely to the load-bearing areas. This allows the protective sleeve to lie particularly close against the load in the critical areas.



Individual slit structure
The spacing of the slits on the reverse can be individually determined. This means that the flexibility factor can be fine-tuned to the individual demands of a lifting procedure.

Clip-SC

- Can be positioned during ongoing lifting procedures
- Virtually indestructible
- Permanent dimensional stability

secutex Clip-SC – protective sleeve with a side opening

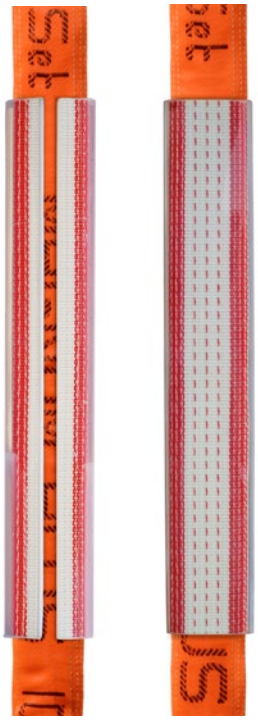
The secutex Clip-SC, which can only be used on one side, can be very quickly clipped onto the lifting gear thanks to the mounting slot on the back. It is preferably used whenever round slings and flat slings with or without a protective sleeve are required on a case-by-case basis. The Clip-SC makes for easy handling and short set-up times. The secutex protective layer can be placed softly and flexibly on the load, thereby increasing the radius at the critical edges. The leverage forces are extensively distributed and the load remains undamaged.

Optionale versatility
secutex Clip-SC is perfectly adapted to the SpanSet round slings and flat slings and is available in versions with different surface finishes and with reinforcement. For more information about secutex and the different surface finishes, see page 17.

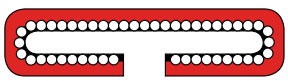
easyClip
Similar to the Clip-SC in terms of design, but with different material properties, easyClip is the simple version of the clip sleeve. For more information, ask us for advice or visit our website at **www.secutex.de**.

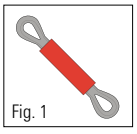
secutex Clip-SC is available for:

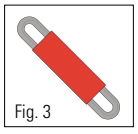
- SupraPlus round slings
- Magnum-X round slings
- MagnumPlus round slings
- Liftfix round slings
- 4-ply CS flat slings
- PowerStar flat slings
- Liftfix flat slings

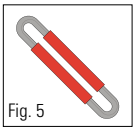


One-sided secutex-coating, sleeve open at the back for flexible use.







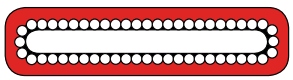


02.7 PROTECTIVE SLEEVES

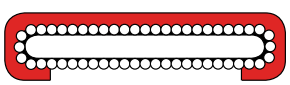
SF-1 and SF-2

– Version with one- or two-sided coating
– Easy to position
– Extremely cut-resistant
– Reduces creasing in the fabric
– Permanent dimensional stability
– Lifting gear is movable inside the sleeve

secutex SF-2: both contact sides and the sleeve side are secutex-coated.



secutex SF-1: one contact side and the sleeve side are secutex-coated.



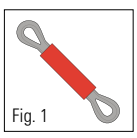


Fig. 1

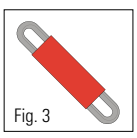


Fig. 3

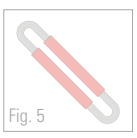


Fig. 5

SF-1 und SF-2 – protective sleeve with coating on one or two-sides

SF-1 – Protective sleeve coating on one side
The secutex SF-1 has been technically designed for optimal use with the SpanSet flat sling range or the SpanSet round slings. The contact side has a secutex coating, is extremely cut-resistant and reduces the formation of creases in the fabric. Easily clipped onto the textile lifting gear, the protective sleeve with the one-sided secutex coating equally protects the lifting gear and the load at „sharp edges“ and rough surfaces.

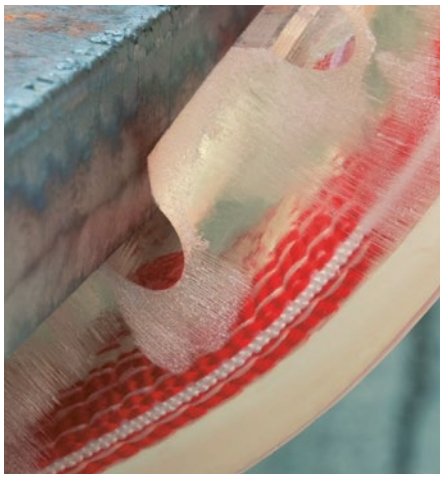
SF-2 – Protective sleeve coating on two sides
The SF-2 is particularly robust and this version has two contact sides to enable working on both sides. Both contact sides have a secutex coating, are extremely cut-resistant and reduce the formation of creases in the fabric. It is no longer necessary to turn the protective sleeve, and application errors are effectively prevented.

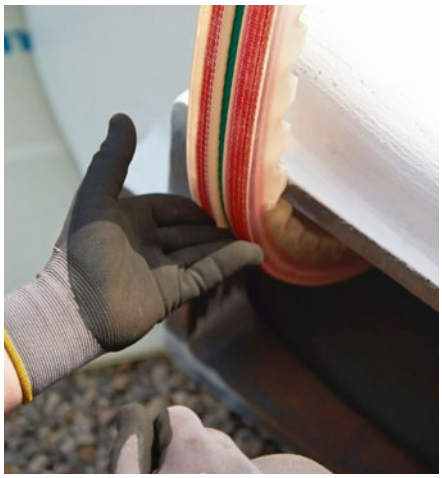
Designed for the application
secutex SF-1 and SF-2 are available in different surface finishes (page 17), such as „ground“, whose surface is slightly roughened. It is used whenever the contact side comes into contact with small amounts of liquids. The rough surface remains permanently slip-resistant.

The use of steel plates (reinforcement), which significantly increases cut resistance, or the Tropic-coating for use in permanently moist environments are optionally available. This means that the protective sleeve can be adapted to your individual application.

SF-1 und SF-2 is available for:

- SupraPlus round slings
- Magnum-X round slings
- MagnumPlus round slings
- Liftfix round slings
- 4-ply CS flat slings
- PowerStar flat slings
- Liftfix flat slings





secuwave

- Prevents contact with the flat sling
- Can be positioned during ongoing lifting procedures
- Two wave profiles available
- Virtually indestructible
- Permanent dimensional stability

secuwave – no contact at critical edges

secuwave can handle every edge
secuwave is a thick coated protective sleeve that features a wave structure on the contact side. The wave structures increases the deflection radius on sharp edges. The edge lies inside the wave trough, while the load rests on the top of the wave. The sharp edge no longer has contact with the protective sleeve.

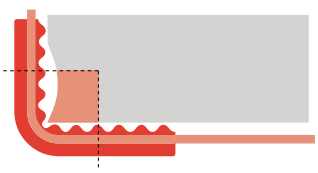
Be sure – but quickly
The secuwave protective sleeve is slipped onto the flat sling. The back of the protective sleeve has a longitudinal opening and can thus be easily slipped onto a round sling or another flat sling at any time – even if the lifting gear is already inside the crane hook.

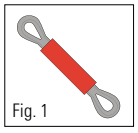
secuwave mini
secuwave comes in two variants. Thanks to the different sizes, the right wave size can always be selected. In the small wave size „secuwave mini", the thick coating is more flexible in the bending direction. The larger wave structure is robust and designed for use on large edges.

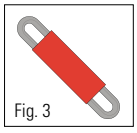
secuwave is available for:

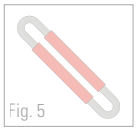
- SupraPlus round slings
- Magnum-X round slings
- MagnumPlus round slings
- Liftfix round slings
- 4-ply CS flat slings
- PowerStar flat slings
- Liftfix flat slings

Side view of the protective sleeve with a load. The secuwave wave profile prevents contact with the flat sling.









02.7 PROTECTIVE SLEEVES

Powerflex

– Working with two contact sides
– Easy to position
– Reduces creasing in the fabric
– Permanent dimensional stability
– Abrasion protection against rough surfaces

Powerflex protective sleeve: effective abrasion protection

Powerflex – protective sleeve and abrasion protection

Increasing the friction values with Powerflex
The Powerflex protective sleeve helps to effectively increase the friction values of smooth surfaces or to protect the flat sling against rough surfaces. The protective sleeve is coated on both sides, which enables working with two contact sides and thus prevents application errors. The Powerflex protective sleeve is optionally available with a re-sealable longitudinal opening on the reverse side.

Powerflex is available for:

- SupraPlus round slings
- Magnum-X round slings
- MagnumPlus round slings
- Liftfix round slings
- 4-ply CS flat slings
- PowerStar flat slings
- Liftfix flat slings

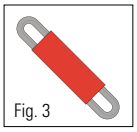


Fig. 3

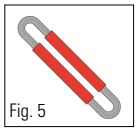
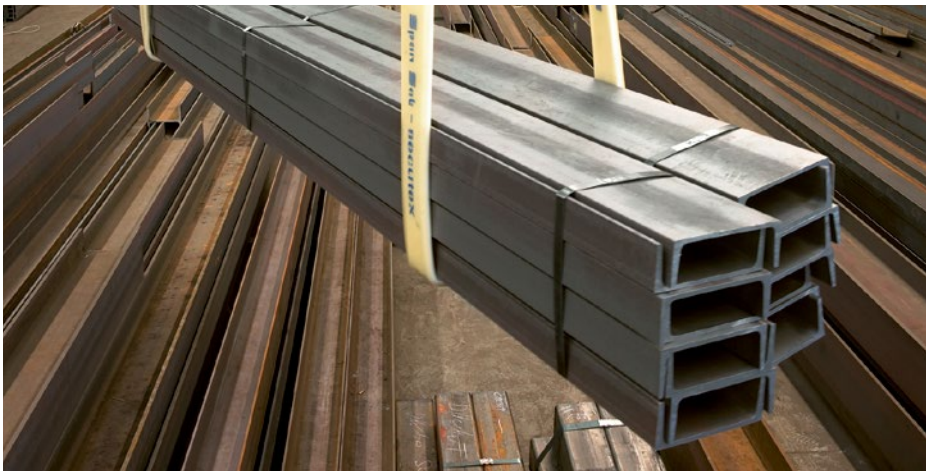


Fig. 5



secumove

– For lifting sharp-edged loads
– Particularly low-wear
– Extremely durable thanks to secutex®-coating
– „Undetachable“ protective sleeve

secumove PB-FS-1 (one-sided) ▪ und PB-FS-2 (two-sided) △

Minimal wear with secumove
The intelligently designed secumove combines the advantages of a flat sling and secutex® protective sleeve for lifting rough loads. The protective sleeve with a secutex®-coating of at least 5 mm is positioned firmly against the edge of the load, while the textile flat sling can glide back and forth inside the tube to equalise the lengths. The result: There is no movement at the edge of the load due to stretching of the strap and positioning of the load. And where there is no movement, there is no wear – secumove therefore boasts an exceedingly high service life.

Typical uses include, for example, the careful lifting of machine parts, sheet packages, coils and other heavy goods with sharp edges.

Undetachable protective sleeve
Another advantage: The protective secutex®-coating is firmly attached to a loop of the flat sling. If you pull secumove from under the load on one side, the protective sleeve remains firmly in position and cannot be lost. This saves you lots of time in your daily work routine, as you no longer have to pull the sleeve up every time. Depending on the intended use, secumove is available with one-sided or two-sided secutex®-coating. To offer protection in particularly rough conditions, we also offer a version with additional reinforcement with metal plates.

Nominal carrying capacity [kg]	L1 min. [m]	Approx. strap width [mm]	Approx. strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Order numbers for standard lengths					
						2 m	3 m	4 m	5 m	6 m	8 m
1.000	2,0 2,0	55 55	25 25	0,3 0,3	0,8 1,0	**S000522**▫ **S000570**△	**S000523**▫ **S000571**△	**S000524**▫ **S000572**△	**S000525**▫ **S000573**△	**S000526**▫ **S000574**△	**S000527**▫ **S000575**△
2.000	2,0 2,0	80 80	25 25	0,6 0,6	1,1 1,9	**S000528**▫ **S000576**△	**S000529**▫ **S000577**△	**S000530**▫ **S000578**△	**S000531**▫ **S000579**△	**S000532**▫ **S000580**△	**S000533**▫ **S000581**△
3.000	2,5 2,5	110 110	25 25	1,0 1,0	1,6 2,9	**S000534**▫ **S000582**△	**S000535**▫ **S000583**△	**S000536**▫ **S000584**△	**S000537**▫ **S000585**△	**S000538**▫ **S000586**△	**S000539**▫ **S000587**△
4.000	2,5 2,5	145 145	25 25	1,4 1,4	2,0 3,6	**S000540**▫ **S000588**△	**S000541**▫ **S000589**△	**S000542**▫ **S000590**△	**S000543**▫ **S000591**△	**S000544**▫ **S000592**△	**S000545**▫ **S000593**△
5.000	3,0 3,0	175 175	25 25	1,7 1,7	2,4 4,4	**S000546**▫ **S000594**△	**S000547**▫ **S000595**△	**S000548**▫ **S000596**△	**S000549**▫ **S000597**△	**S000550**▫ **S000598**△	**S000551**▫ **S000599**△
6.000	4,0 4,0	210 210	30 30	2,2 2,2	2,9 5,2	**S000552**▫ **S000600**△	**S000553**▫ **S000601**△	**S000554**▫ **S000602**△	**S000555**▫ **S000603**△	**S000556**▫ **S000604**△	**S000557**▫ **S000605**△
8.000	4,0 4,0	270 270	35 35	2,9 2,9	3,9 7,2	**S000558**▫ **S000606**△	**S000559**▫ **S000607**△	**S000560**▫ **S000608**△	**S000561**▫ **S000609**△	**S000562**▫ **S000610**△	**S000563**▫ **S000611**△
10.000	5,0 5,0	340 340	35 35	4,1 4,1	5,9 8,7	**S000564**▫ **S000612**△	**S000565**▫ **S000613**△	**S000566**▫ **S000614**△	**S000567**▫ **S000615**△	**S000568**▫ **S000616**△	**S000569**▫ **S000617**△

i secumove PB-FS-1 (one-sided) ▫ und PB-FS-2 (two-sided) △

02.8

Accessories

Why IDXpert significantly facilitates product management

Convinced by the intuitive workflow with IDXpert® – following an extensive testing phase – the inspection and management system was successfully introduced at Axzion GKS Stahl- und Maschinenbau GmbH. Among other things, the customers now benefit from the availability of the documents on the web portal, from where inspection certificates can be downloaded with a smartphone at any time from anywhere in the world. In just a few steps, search functions help to find the desired document in the database. The inspection service provider Sascha Weerda comments: „The self-made Excel solution had reached its limits and no longer met the demands of our customers." Less administration and a better overview of the service life of the lifting gear and recurrent damages are just a few advantages of the inspection and management software. In addition to inspections of e.g. spreader beams or coil hooks on behalf of customers at constantly changing sites of operation, Axzion also equips its own products, such as crane systems, PPE products or also IT equipments with transponders. „With IDXpert®, our inspection service can successfully differentiate itself in the market environment, as our customer gets more value for his money and can concentrate on his core competencies", says Sascha Weerda.

In addition to textile lifting gear and protective sleeves, SpanSet also offers additional aids that make work operations in lifting procedures safer, easier and more economical. For statutory product inspections within the context of accident prevention, SpanSet has played a pioneering role and developed IDXpert®. The system, comprised of hard- and software, simplifies and speeds up inspections and documentation. SpanSet also uses state-of-the-art technology to calculate the load capacity in lifting procedures. In addition to the tried-and-tested load capacity controller, users can download the SpanSet „Lifting app" for smartphones and tablets free of charge. With the SpanSet app, determining the load capacity becomes child's play not only for textile lifting gear, but also for chains and wire ropes. Edge protectors and shackles – also a meaningful addition in lifting procedures – complement our range of accessories.

Also in future you can rely on the fact that we at SpanSet will develop new technologies and aids and continue to set trends as the market leader in textile lifting gear.

SpanSet – Certified Safety

02.8 ACCESSORIES

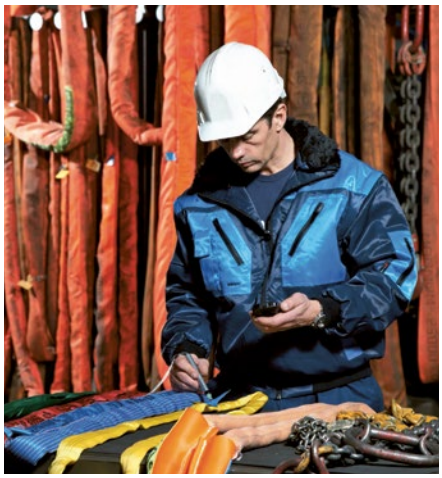
IDXpert®

Spaecial functions

- Creation of multiple users
- Comfortable synchronisation
- Inspection data and product information are stored on IDXpert transponders
- Asset management possible without transponder connection
- Developed in dialogue with customers
- Multilingual (English, French, Spanish, German, Italian and Danish)
- Online IDXpert portal (SSD) with unlimited storage space provided at no cost
- Network-compatible, but also usable as a stand-alone version
- Different writing/reading devices
- Easy import of old inspection data, e. g. from your Excel lists
- Support, seminars and individual programming of modules
- Automatic update

Download: brochure online

For more information about IDXpert® download our product brochure at **www.spanset.de**. Of course you can also order a free copy of the brochure by mail.



IDXpert – versatility and flexibility in asset management

Rundschlingen, Hebebänder, Traversen, Anschlagmittel und -punkte, Magnete, Handhebezeuge, Krane und Rolltore gehören zu den Produkten, deren Funktionstauglichkeit regelmäßig überprüft werden muss. Bei so vielen Produkten und Prüfterminen ist es daher besonders wichtig, den Überblick zu behalten und die gesetzlich vorgeschriebenen Prüftermine nicht aus den Augen zu verlieren.

Rely on testing efficiency
Round slings, flat slings, spreader beams, lifting gear and points, magnets, manual lifting devices, cranes and roller doors are just some of the products whose functionality has to be checked on a regular basis. With so many products and test dates it is particularly important to maintain an overview and not to lose sight of the test dates prescribed by law.

PC, tablet or smartphone
IDXpert® is incredibly flexible and is very different from the all other systems available on the market. The system can be operated in a network where data is synchronised continuously and is accessible to multiple users, or as a stand-alone solution on a PC, laptop or tablet. IDXpert® Mobil can also be operated on a smartphone (Motorola ES400) similar to a stand-alone solution in combination with the IDXpert database. In conjunction with the components, database, reading device and RFID transponder, the user is able to carry out tests with a minimum of hardware (Motorola ES400, IDXchanger MSLB).

Call up data online
In addition, the online platform IDXpert® Portal gives you the option of saving the product and test data you have already collected, free of charge, which allows you to call up and view test data and test certificates at any time over the internet, for example using a smartphone.

Reading devices and RFID transponders
A range of writing/reading devices (p. 98/99) to meet each individual user's requirements is available – from small and handy to particularly robust or protected against dust and spray water. For the transponders, in cooperation with the manufacturers we have developed models that have already proven their worth in the industry. Writing the test and product data to the transponders allows the user to document the testing of a product at any time, without having to call up the database. A major advantage and part of the system philosophy. However, products that are fitted with non-writeable RFID transponders (according to SpanSet specification 1) and products without a transponder can equally be processed by IDXpert®. Flexibility that makes it easy for you to introduce the system and prevents high investment hurdles.

Advantages at a glance

01 More efficiency
Above all else, you will save one thing: Time. Products to be tested can be scanned within seconds, and the output of test certificates is equally quick. A giant leap forward compared with Excel tables that are often used due to a lack of alternatives.

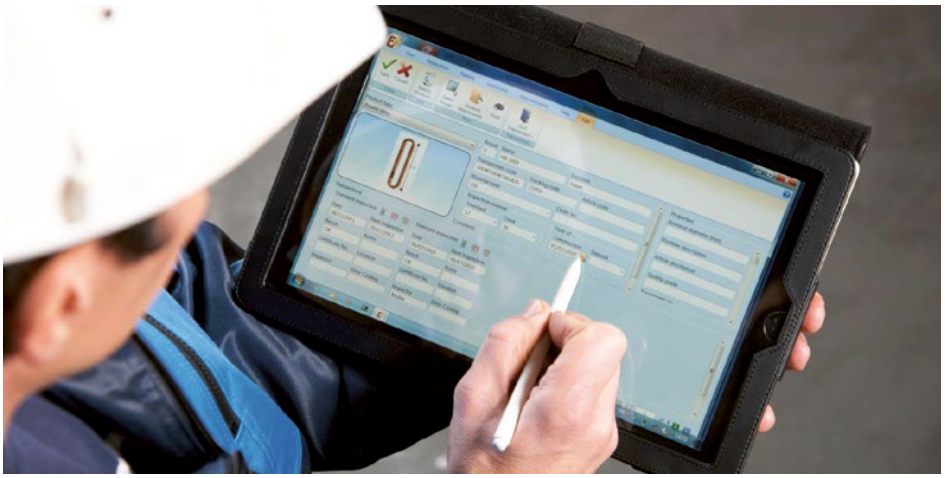
02 More flexibility
Various writing/reading devices, solutions for individual workstations and networks, processing of products with and without transponders as well as a free online portal allow the user to work flexibly and simple.

03 Data security
Full documentation of inspections, repairs, examiners and products is indispensable for safety, legal compliance and also improved accident prevention. IDXpert® closes the gaps!

04 Improved test routine
IDXpert® organises, schedules and documents regular maintenance and servicing intervals for you and shows you at a glance which products are due to be tested. Save money and speed up your inspection routine!

05 Compatibility
Various RFID transponders for different product requirements regarding the attachment, use on a PC, tablet or smartphone and various writing/reading devices increase the compatibility for the user.

IDXpert®



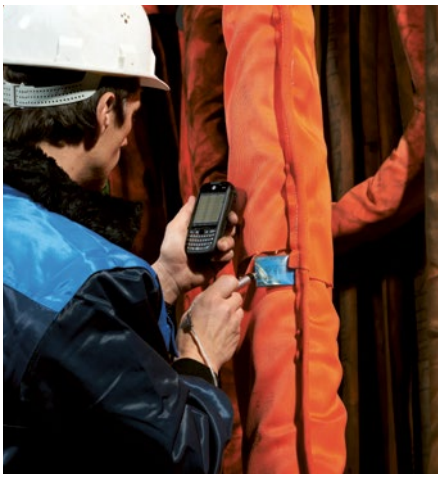
The different reading devices for IDXpert®

The different writing/reading devices of the IDXchanger series meet the individual requirements and needs of the user. Whether small and handy, particularly robust, protected against dust and spray water, with a camera and barcode scanner, with a telephone and internet access, for reading off information from transponders surrounded by metallic objects. Define your requirements and make your choice. We will be happy to support

Reading device	Product description	Technical data
IDXchanger MSLB 	RFID writing/reading pen with a Bluetooth interface. Reads and writes on all SpanSet transponders. Reads the UID from non-writeable transponders.	Diameter: approx. 16 mm Length: approx. 148 mm Level of protection: IP 54
IDXchanger MSLU 	RFID writing/reading pin with a 1.6 m long USB connection cable. Reads and writes on all SpanSet transponders. Also reads the UID from non-writeable transponders.	Diameter: approx. 12 mm Length: approx. 130 mm Level of protection: IP 64 (for the pen)
IDXchanger USB 	RFID writing/reading pen with a Bluetooth interface. Reads and writes on all SpanSet transponders. Reads the UID from non-writeable transponders. Can be used in combination with a laptop or tablet.	Length: approx. 85 mm Width: approx. 21 mm Height: approx. 13 mm Level of protection: IP 20
Motorola ES400 	RFID-Schreib-/-Lesestick. Liest und beschreibt alle SpanSet-Transponder. Liest auch die UID von nicht beschreibbaren Transpondern aus. Smartphone mit kompletter Datenbanksoftware und Funktionalität zum Erfassen von Barcodes.	Length: approx. 130 mm Width: approx. 61 mm Height: approx. 20 mm Level of protection: IP 42
IDXchanger MDE 	RFID writing/reading stick. Reads and writes on all SpanSet transponders. Also reads the UID from non-writeable transponders. Smartphone with complete database software and a function for reading barcodes.	Length: approx. 250 mm Width: approx. 58 mm Height: approx. 40 mm Level of protection: IP 65

Microsite: More information

On the separate microsite you will find all of the relevant information, application images, seminar dates and much more about IDXpert®.
Visit us at **www.idxpert.de**.

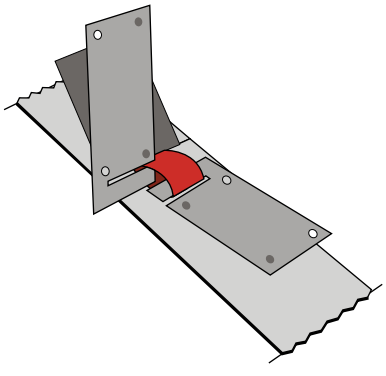


RFID transponders not only for lifting gear

RFID transponders can be fitted on all products that are to be managed with IDXpert®. RFID (radio-frequency identification) allows the user to read off data with writing/reading devices. Through initialisation, the specific product and test data are uploaded to the transponder. The unique UID (Unique Identifier) of the transponder is also printed on the new generation of chips (except for IDXpin) and makes for clear identification of the product.

Transponder	Product description	Technical data
IDXfoil 	Extremely flat, flexible and lean. Particularly suitable for personal protective equipment against falls.	Shape: Rectangle Length x width: approx. 36.0 x 18.0 mm Attachment: adhesive on one side Operating temperature: -25°C to +85°C
IDXpin 	Particularly small, thus space-saving and lean. IDXpin is fitted into a small hole in the product. Particularly suitable for fittings such as hooks and shackles.	Shape: Cylinder Diameter: approx. 6.0 mm Height: approx. 4.0 mm Operating temperature: -25°C to +85°C
IDXdome 	Ideal for fitting onto high-value metallic products, such as wire ropes, lifting clips, chain hoists or spreader beams. It can be stuck and/or screwed onto the products.	Shape: Cylinder Diameter: approx. 30.0 mm Height: approx. 7.0 mm Mounting hole: approx. 4.5 mm; self-adhesive Operating temperature: -25°C - +85°C
IDXtriangel 	Extremely durable and thus ideal for fitting onto multi-leg round slings, chains and steel ropes with e.g. an end chain.	Shape: Droplet Approx. 62.0 x 35.0 mm Height: approx. 9.0 mm Mounting hole: approx. 10.0 mm Operating temperature: -25°C to +85°C
IDXclip 	Contains IDXfoil, which is carried on the inside by two PA platelets and protected. Suitable for retrofitting of SpanSet flat slings and round slings with a sewn-in attachment loop.	Shape: Rectangle Length x width: approx. 57.0 x 23.0 mm Height: approx. 5.2 mm Fitting: clickable mounting slot Operating temperature: -25°C to +85°C

Most round slings and flat slings can be fitted with the IDXclip. An attachment loop firmly sewn onto the lifting gear allows for easy and quick attachment of the transponder.

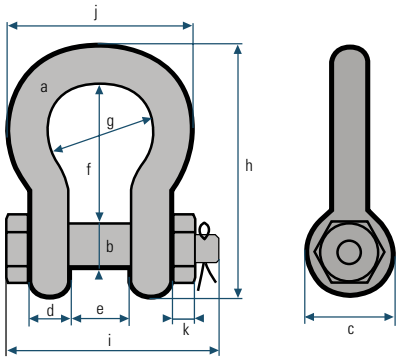


ExoSet shackles

- Shackles and round slings are perfectly adapted to one another
- Optional fitting with an RFID transponder

Optimal fit between the shackles and round slings

SpanSet has tested the ExoSet shackles in extensive test series in combination with the SpanSet round slings. This way, the optimal shackle for each round sling could be identified. This was achieved by perfectly adapting the contact area inside the shackle bracket, whereby shackles and round slings with the same load capacity were tested. At the same time, the ExoSet shackles offer a consistently high manufacturing quality with low tolerances, and its contact surfaces are burr-free and polished.



Order number	Nominal carrying capacity [kg]	Weight [kg]	Bow ⌀a [mm]	Pin ⌀b [mm]	Eye ⌀c [mm]	Eye strength d [mm]	Inside length e [mm]	Inside length f [mm]	Bow width g [mm]	Outside length h [mm]	Pin length i [mm]	Outside length j [mm]	Width of screw nut k [mm]
D041552	2.000	0,42	13,5	16	34	13,5	22	51	32	91	83	63	13
D041553	3.250	0,74	16	19	40	16	27	64	43	114	99	79	17
D041554	4.750	1,18	19	22	47	19	31	76	51	135	115	94	20
D041555	6.500	1,77	22	25	53	22	36	83	58	157	131	107	23
D041556	8.500	2,58	25	28	60	25	43	95	68	176	151	124	25

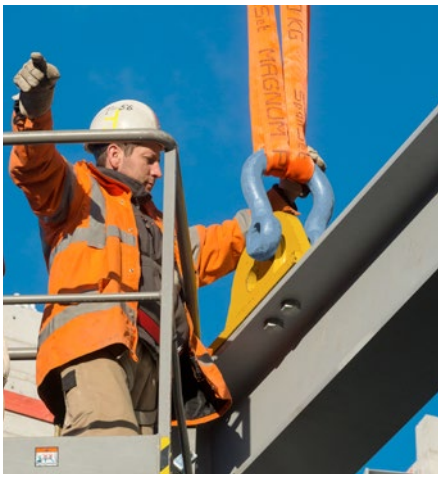
Order number	Nominal carrying capacity [kg]	Weight [kg]	Bow ⌀a [mm]	Pin ⌀b [mm]	Eye ⌀c [mm]	Eye strength d [mm]	Inside length e [mm]	Inside length f [mm]	Bow width g [mm]	Outside length h [mm]	Pin length i [mm]	Outside length j [mm]	Width of screw nut k [mm]
D041557	12.000	4,91	32	35	74	32	51	115	83	218	179	154	31
D041559	25.000	14,22	45	50	104	45	74	178	126	314	244	226	24
D041560	35.000	19,85	50	57	111	50	83	197	134	358	270	250	27
D041560	55.000	39,59	65	70	145	65	105	260	150	463	330	329	33
D041560	85.000	62,00	75	83	163	75	127	329	190	556	376	355	40

Special designs available on request.

RFID optional

The explanations of the icons can be found on the flap.

ExoSet shackles



Tested safety – the ExoSet round sling shackles

The possible combinations of round sling and shackle were tested by SpanSet in cooperation with the DGUV (German Social Accident Insurance Institutions) and subsequently approved. With the ExoSet round sling shackles, users can for the first time benefit from shackles and round slings that have been perfectly adapted to one another and that offer the highest possible level of safety.

Optional mit RFID-Transponder
Starting from a load capacity of 25 t, the ExoSet shackles can be optionally fitted with an RFID transponder 1 . The ultra-compact transponder pin „IDXpin" is used for this. To find out more about electronic asset management with IDXpert®, the various reading devices and transponders, see pages 96 et seq.

You can optionally ask to have the ExoSet round sling shackles engraved 2 with individual data, such as the traceability code.

Shackle with the ultra-compact transponder pin for electronic asset management.

Schäkel mit dem ultrakompakten Transponder-PIN zur elektronischen Produktverwaltung.

Confirmation of the definition of the test configuration by the DGUV.

Movie: View shackle test

Erfahren Sie mehr über die Schäkelprüfung im Videofilm auf unserer Website oder auf YouTube auf dem SpanSet Germany Channel.

Load capacity chart

WLL [kg] with a SpanSet round sling, flat sling and 1-leg round sling

			single layer angle of inclination β				
	straight lift	choked	to 6°	over 6° to 45°	over 45° to 60°	over 6° to 45°	over 45° to 60°
Round slings							
Flat slings							
Slings							
Load lifting factor M	**1,0**	**0,8**	**2,0**	**1,4**	**1,0**	**0,7**	**0,5**
500 kg	500	400	1.000	700	500	350	250
1.000 kg	1.000	800	2.000	1.400	1.000	700	500
2.000 kg	2.000	1.600	4.000	2.800	2.000	1.400	1.000
3.000 kg	3.000	2.400	6.000	4.200	3.000	2.100	1.500
4.000 kg	4.000	3.200	8.000	5.600	4.000	2.800	2.000
5.000 kg	5.000	4.000	10.000	7.000	5.000	3.500	2.500
6.000 kg	6.000	4.800	12.000	8.400	6.000	4.200	3.000
8.000 kg	8.000	6.400	16.000	11.200	8.000	5.600	4.000
10.000 kg	10.000	8.000	20.000	14.000	10.000	7.000	5.000
15.000 kg	15.000	12.000	30.000	21.000	15.000	10.500	7.500
20.000 kg	20.000	16.000	40.000	28.000	20.000	14.000	10.000
25.000 kg	25.000	20.000	50.000	35.000	25.000	17.500	12.500
30.000 kg	30.000	24.000	60.000	42.000	30.000	21.000	15.000
40.000 kg	40.000	32.000	80.000	56.000	40.000	28.000	20.000
50.000 kg	50.000	40.000	100.000	70.000	50.000	35.000	25.000
60.000 kg	60.000	48.000	120.000	84.000	60.000	42.000	30.000
80.000 kg	80.000	64.000	160.000	112.000	80.000	56.000	40.000
100.000 kg	100.000	80.000	200.000	140.000	100.000	70.000	50.000

Load capacity chart
Load capacity controller

WLL [kg] with SpanSet round slings, flat slings and 2-leg round slings				WLL [kg] with 4-leg round slings	
Angle of inclination β				Angle of inclination β	
staight over 6° to 45°	choked over 6° to 45°	straight over 45° to 60°	choked over 45° to 60°	straight over 6° to 45°	straight over 45° to 60°
1,4	1,12	1,0	0,8	2,1	1,5
700	560	500	400	1.050	750
1.400	1.120	1.000	800	2.100	1.500
2.800	2.240	2.000	1.600	4.200	3.000
4.200	3.360	3.000	2.400	6.300	4.500
5.600	4.480	4.000	3.200	8.400	6.000
7.000	5.600	5.000	4.000	10.500	7.500
8.400	6.720	6.000	4.800	12.600	9.000
11.200	8.960	8.000	6.400	16.800	12.000
14.000	11.200	10.000	8.000	21.000	15.000
21.000	16.800	15.000	12.000	31.500	22.500
28.000	22.400	20.000	16.000	42.000	30.000
35.000	28.000	25.000	20.000	52.500	37.500
42.000	33.600	30.000	24.000	63.000	45.000
56.000	44.800	40.000	32.000	–	–
70.000	56.000	50.000	40.000	–	–
84.000	67.200	60.000	48.000	–	–
112.000	89.600	80.000	64.000	–	–
140.000	112.000	100.000	80.000	–	–

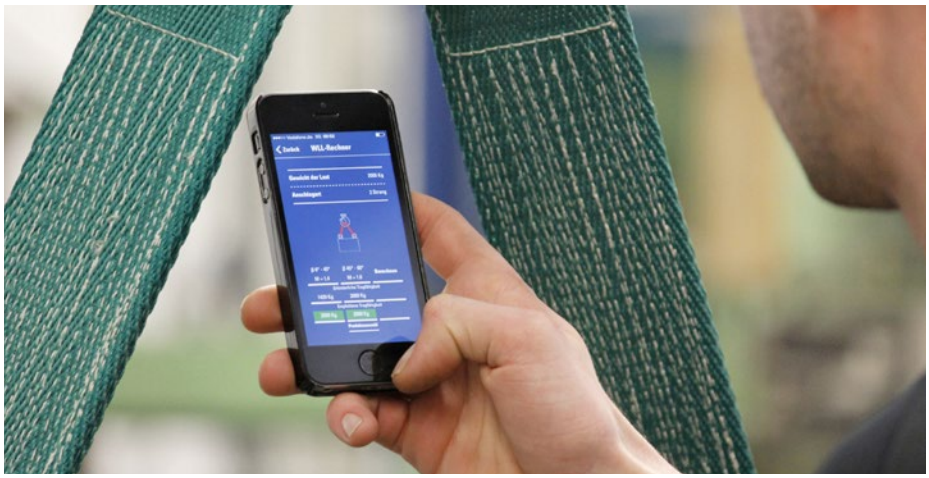
Indispensable for safe lifting: the SpanSet load capacity controller. This helps you to quickly and reliably determine the lifting angle and WLL.

Order number: D020267

Please note:

Lifting capacities for 4-leg slings apply only for symmetric loads and equal leg lengths! For asymmetric loads, please use the load lifting factors of the 2-leg slings.

SpanSet Lifting app



– Load capacity calculation on the basis of DIN EN 1492-2 and 1492-1:2009
– Available in German and English

The SpanSet Lifting app

The SpanSet „Lifting Calculator" is the digital further development of the tried-and-tested analogue lifting force controller and is designed to determine the required lifting gear for any tasks involving lifting and moving loads. Because the same basic laws of physics apply to all types of lifting gear when lifting loads, the SpanSet app can be used not only for textile lifting gear such as flat slings and round slings, but also for chains and wire ropes.

Really easy to use
You just have to enter two parameters: The weight of the load and the slinging configuration, e. g. one leg, several legs, with or without an angle, noosed etc.

In total, the app allows you to choose between 14 different slinging configurations. The angles can then be entered manually if they are known. Alternatively, if the leg length and the length and width of the load are known, you can make measurements with calculations or using sensors on your smartphone. For this purpose, the app has an angle measuring device. To increase the safety and user friendliness, angles that are not within the permitted range are displayed in red and a warning indicates that only angles between 1 and 60 degrees are supported.

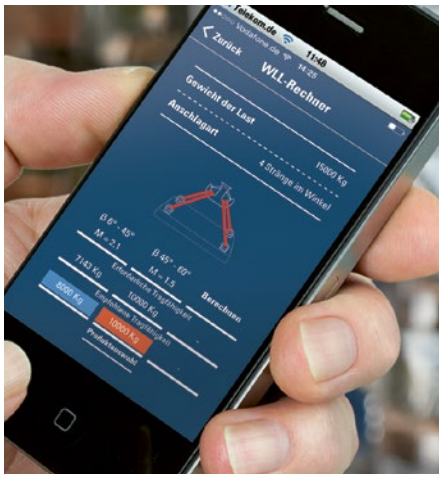
Precise and comprehensive
One special feature of the app is its high precision in the calculation of load capacities determined on the basis of DIN EN 1492-1 and 1492-2. This means that you do not have to simply choose angles in accordance with the norm in the prescribed ranges of 6° to 45° and 45° to 60°. The app also allows you to freely enter intermediate values for the angles. On the basis of these precise rather than approximate lifting angles, the app accurately determines the actually required load capacity of the lifting gear. As well as contributing to increased safety, this can have many economic advantages for the user. The load capacity is displayed as the WLL (Working Load Limit), after which the use can select a corresponding piece of SpanSet lifting gear or order it directly online.

APP: Install free of charge!

You can download the SpanSet Lifting app free of charge from the Google Play Store and in the App Store.

Download on the App Store
Google play

SpanSet Lifting app



How the determination of the load capacity becomes child's play

Determining the load capacity is very easy with the SpanSet Lifting Calculator.

01 The weight of the load first has to be entered and the slinging configuration has to be selected.

02 After that, the app indicates the required WLL of the lifting gear in consideration of the two angle ranges. They are always calculated for the worst possible angle within this range, i. e. 45° and 60°. This is also the procedure followed by the employers' liability insurance association.

Afterwards, the required WLL of the lifting gear has to be entered (in the example these are 11,905 and 16,667 kg), so that the correct lifting gear can then be selected. Alternatively, the round slings and flat slings previously determined by the app can be selected.

03 The user also has the option of calculating the load capacity in consideration of the real angle. To do this, the option „calculate" has to be selected. The user now has the option of determining the angle in three different ways.

04 After that, the lifting app shows the user the required load capacity under the real angle, which is 9,623 kg in the example. The customer can thus carry out this lifting procedure with a round sling with a WLL of 10 t.

Advantage:
The customer can lift the load with a 10-t lifting gear, which has advantages concerning the weight and space requirements of the lifting gear.

1 After entering the weight, you select the slinging configuration.

2

3

4

02.9

Service

Why SpanSet seminars provide for more safety in lifting.

Why SpanSet seminars provide for more safety in lifting.
It is Thursday afternoon and Chris Danneberg from the company Günther Tore System GmbH has just received his seminar certificate and the SpanSet ID card with which he can prove his expertise at any time. Mr. Danneberg and 15 other attendees from other companies have just completed a two-day seminar in lifting technology in which they refreshed their specialist knowledge. The „STZ" training centre on the premises of SpanSet is perfect for offering seminars in lifting. Current know-how is taught in a combination of theoretical knowledge and practical applications. „SpanSet has its own testing laboratory. Here we are able to show the participants in a live demonstration what can happen in the event of application errors or when defective lifting gear is used", says seminar manager Jörg Scheilen. Practical examples, product knowledge, laws and standards are just some of the seminar contents. „For me, the focus on sharp edges and the available protection options are particularly interesting and informative – application errors won't happen to me here", says Chris Danneberg.

As a trusted partner in lifting technology, we want to be more than just a manufacturer of high-quality textile lifting gear. We want to support you and your employees in effectively preventing risks in your daily work. For this reason, SpanSet offers a variety of basic and further training sessions on lifting at our Safety Training Centre „STZ" in Übach-Palenberg, at 14 further locations in Germany and one location in Austria. Our certified and trained speakers all have a practical background and help you to deepen your expertise, to learn new concepts and to understand current changes in the one- and two-day seminars. In addition to our seminars and workshops we offer our customers other aids that make their daily work safer and more effective. For example, the SpanSet departments have developed a brochure all about the „sharp edge" which is available to download from our website free of charge.

Application errors due to lack of knowledge will thus be a thing of the past. We at SpanSet strive to make work safer bit by bit – either in the form of training sessions, brochures or professional advice.

SpanSet – Certified Safety

Seminars

Online: All seminar dates!

Details of the contents and dates of the different SpanSet seminars are published on the internet at:

www.spanset-seminare.de

Seminare

- Current know-how (regulations, laws, standards etc.)
- Experienced experts as speakers
- Concrete application examples
- Practical exercises and demonstrations
- Useful aids for your daily work
- Detailed documentation
- Intensive advice and support

Die 10 Vorteile der SpanSet-Seminare

01 The Safety Training Centre (STZ)
The modern STZ in Übach-Palenberg offers perfect conditions for intensive and practical learning.

02 Seminars at SpanSet locations
To ensure that you do not have to travel any further than necessary, our speakers are there for you at many locations in Germany, Luxembourg and Austria.

03 In-house seminars at your company
This helps you bring your employees up to the same level of knowledge particularly efficiently and carry out mandatory training (for example in accordance with DGUV Regulation 1) in a cost-effective manner while saving time.

04 Individual seminar concepts
Together we will move your company forward in a particularly targeted manner. Through in-depth analysis of your needs, we will draw up an individual training concept.

05 Always at hand – the SpanSet ID card
As a seminar participant in our STZ, you will receive the bankcard-sized SpanSet ID card in addition to your certificates and attestations. It contains details on the training and qualifications you have received from SpanSet – meaning that you can provide proof of your specialist

06 Learn from the professionals
All seminars are given by qualified and certified speakers with many years of experience as application engineers.

07 Seminars focused on practice
In order to give your employees an advantage in terms of their everyday work, our seminars have a particularly strong focus on practice.

08 Extensive training documents
Our training documents will serve as an additional support for you in our seminars and are also a useful aid for your day-to-day work.

09 Refresh your knowledge
At SpanSet, certified refresher seminars also form part of the programme. Here you can brush up on your knowledge – provided you have attended the relevant main seminar in the past five years.

10 Training atmosphere
Modern premises, air conditioning and the latest technology, coupled with attentive support and hospitality, ensure a successful seminar.

Sicherheits-Trainings-Zentrum STZ

SpanSet ID-Card: Always have your proof of training at hand.

Detailed training documents for all participants.
This helps you to refresh your knowledge at any time.

Lifting seminars

Our references

Many renowned companies rely on the expertise and experience of SpanSet – in many cases for many decades already. To name just a few:

Atlas Copco
Bayer AG
Professional fire departments
Bitburger Bier-GmbH
BMW AG
Armed Forces
Daimler AG
DEKRA AG
DEULA
Deutsche Airbus
Deutsche Bahn AG
Deutsche Lufthansa AG
Deutsche Steinkohle AG
Deutsche Telekom AG
Dornier Flugzeugwerke
E.ON AG
EXXON
Flughäfen
Henkel AG
Hydro Aluminium
Miele & Cie. KG
NATO
Opel
RWE Power AG
Salzgitter AG
Siemens AG
THW
Thyssen Maschinenbau
Thyssengas AG
ThyssenKrupp Stahl AG
TÜV
WDR

Learn from the professionals

Know-how for your safety
SpanSet has been a pioneer in the field of safety since its founding. Take advantage of this leading edge in experience: In SpanSet's further training seminars you can refresh, deepen and expand your knowledge. If you and your employees are already up-to-date on specialist knowledge, this helps you to automatically improve the safety in your company.

Practice-based contents
At SpanSet you learn from the professionals. In all of our seminars you are supported by one or more speakers. Our certified speakers boast many years of experience in all areas concerning load control, height safety or lifting. They know how you teach you about all aspects regarding safety in theory and in practice, all in a pleasant learning environment. As a seminar attendee you will benefit especially from our professional seminar documents and the ability of our speakers to explain even the most difficult aspects in simple terms.

Available for everyone
Our recently expanded and modernised Safety Training Centre (STZ) in Übach-Palenberg offers you an optimal learning environment. Furthermore, we offer our seminars in numerous locations in Germany, Austria and Luxembourg. We are also happy to carry out training sessions at your company on request – ask us about the options! On the following page you will find an overview of some of our seminars on lifting, as well as all contact details.

PPE, load control and more
In addition to the training sessions in lifting we also offer a extensive range of seminars on load control, height safety or also lorry seminars. Take a look at our current seminar or safety management catalogue.

The SpanSet seminars on lifting

Specialist seminar on lifting 1 – Textile
In this seminar you will learn how to use textile lifting gear in an economic and correct way. As an expert, after the seminar you will be able to assess the safe condition of flat slings and round slings in accordance with current rules and regulations.
Seminar no. SEM00001

Specialist seminar on lifting 2 – Wire ropes and chains
This seminar is the ideal supplement to the specialist seminar on lifting 1 or as further training for experts in lifting with chains and steel wire ropes.
Seminar no. SEM00023

Basic seminar
Training in the basics of textile lifting
In this half-day training you will learn the correct and professional way to handle textile lifting gear, wire ropes and lifting chains.
You can also refresh your knowledge.
Seminar no. SEM00022

Combined seminar lifting and load control
In this seminar we combine the contents of the „Specialist seminar on load control" (SEM0003) and the „Specialist seminar on lifting 1 – Textile" (SEM00001).
Seminar no. SEM00005

Specialist seminar manual lifting devices 1
In this seminar you will learn the correct and professional way to handle winds, lifting and lashing devices. In addition, you will learn the basics on how to carry out visual and functional tests – always in accordance with the current rules and regulations.
Seminar no. SEM00039

Specialist seminar manual lifting devices 2
You will be in a position to assess the safe condition of manual lifting devices. You will be able to recognise disruptive factors and to eliminate them. Furthermore, you will be in a position to carry out the recurrent yearly testing.
Seminar no. SEM00047

Basic seminar for engineers in lifting and hoisting technology and load control
You will learn about the extensive problems associated with internal transports and about the safe transport on public roads. We will also show you ways to efficiently plan any transport.
Seminar no.SEM00024

Practical seminar on crane operator training
This seminar is designed to provide knowledge about the safe operation of ground-operated cranes and their attachments in accordance with BGB D6, § 29.
Seminar no. SEM00061

Specialist seminar on IDXpert
In addition to providing support with the introduction and operation of the system, this seminar facilitates and speeds up the professional use of the database application. After the training session the attendees will be in a position to realise the full rationalisation potential of the convenient test software.
Seminar no. SEM00060

Abbreviated version of the two-day combined seminar on load control/lifting
In this seminar we offer a combination of the contents from the „Basic seminar on load control" (SEM00026) and the „Basic seminar on textile lifting" (SEM00022).
Seminar no. SEM00027

Book: Online, by telephone or email

You can easily book all seminars online, by telephone or by email. It's as simple as that!

Email: pschmitz-beckers@spanset.de
Telephone: +49(0)2451-4831-230
Internet: **www.spanset-seminare.de**

Tools

All relevant aspects summarised online

In addition to our catalogues and brochures you will find a range of aids online that make your daily work easier, not only regarding lifting procedures.

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
- www.idxpert.de
- www.magnum-x.de
- www.supraplus.de
- www.spansetsafeline.co.uk
- www.spanset-seminare.de

Online-Tools

In addition to the product finder (see p. 85) you will also find the online load control calculator at 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.deyou will find some interesting posters designed to make your everyday 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.

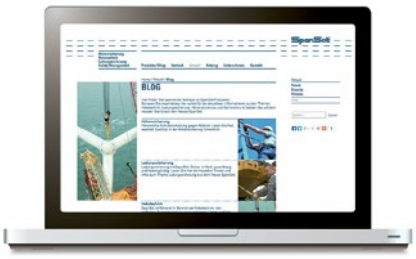
SpanSet-Apps

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 app inspector 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.

We keep you up-to-date!

We keep you up-do-date on a number of channels. Visit us on Facebook, read about news on the SpanSet blog or watch our informative application clips on YouTube.

The SpanSet blog
The SpanSet blog provides you with exciting articles about our products. Visit our blog regularly to receive up-to-date information about various issues regarding lifting, load control and height safety. Get informed about new seminars and stay up-to-date on all things SpanSet.



Facebook, Twitter & co.
SpanSet is active on several online channels. Get in touch with employees on Xing or stay in the loop on Facebook and Twitter.

Informative videos
Why not visit our „SpanSet Germany“ channel on YouTube? Here you will find, among other things, 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.

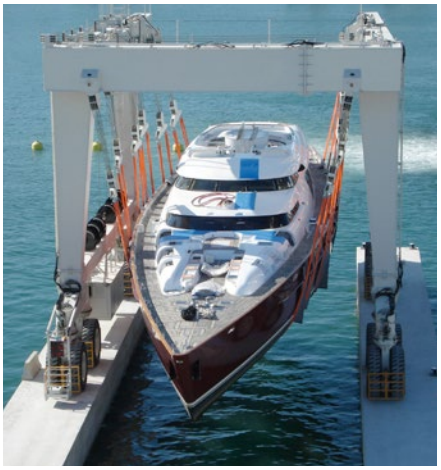
AT WORK – SpanSet news
In addition to the trade fair newspaper ‚Extrablatt‘, our customer and employee newspaper AT WORK is published twice a year. The newspaper provides the latest news from our product range and allows you to take a look behind the scenes at SpanSet. You can download the AT WORK at www.spanset.de.

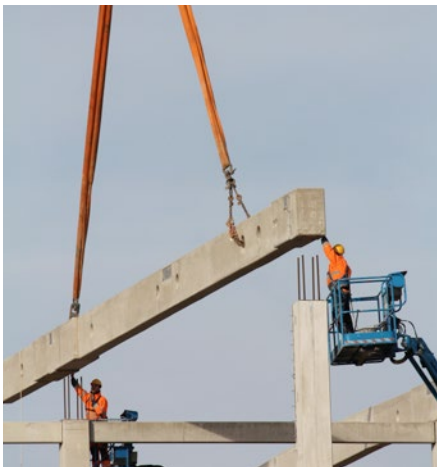
Would you like to receive a printed copy?
Simply send an email with your name, address and company to marketing@spanset.de.

How SpanSet is making lifting safer every day.

Historic church towers, extravagant bridges or even oversized footballs – SpanSet lifting gear has been used to lift some spectacular loads. SpanSet is used wherever someone relies on the highest quality in the field of lifting – in this way, we make a contribution towards increased safety throughout the world, every day.

SpanSet – Certified Safety





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