

SpanSet®

02

Height Safety
Lifting
Load Control
Safety Management

SpanSet
Certified
Safety



Foreword

Security, innovation, sustainability - these three terms significantly shape our actions.

or almost 60 years, SpanSet has been committed to safety. On the following pages, you will learn how it all began and the crucial role that production in Germany and the expertise of our highly qualified SpanSet employees continue to play.

Innovation means much more than just new products: it reflects our fundamental attitude of taking market demands seriously and finding solutions to ever-increasing requirements. The best proof of this is provided by our VarioForce® slings, which we present on page 56. Of course, our products always meet applicable standards and legal requirements. But our SpanSet factory standards for premium products demonstrate that our own quality benchmarks often go far beyond that.

In recent years, sustainability has developed from a buzzword into a guiding principle worldwide. Even lifting products can be sustainable. The webbing of our Magnum®Force Green heavy-duty round sling is made from a renewable raw material. This innovation not only reduces the carbon footprint of production but also that of the end user.

Dear customer, it is a valued tradition for us to enrich our product catalogues with user stories. In our new lifting technology catalogue, you will once again find vivid examples of impressive projects. Some of them may already be familiar to you – in one way or another – from your everyday work. Feel free to browse through – if you have any questions, our team will be happy to assist you.

With kind regards from Übach-Palenberg

Andreas Höltkemeier
Managing Director

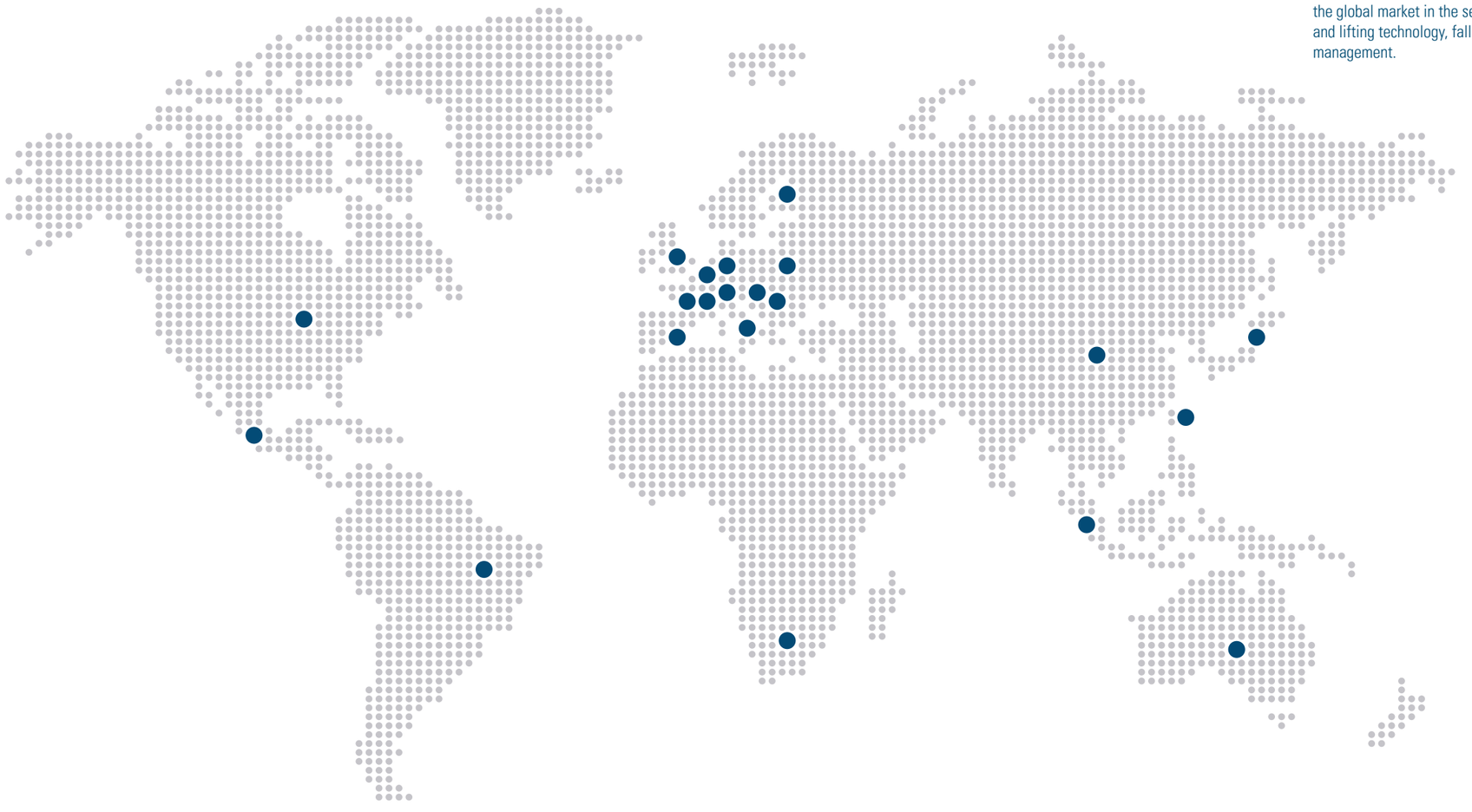
Patrick Schulte
Managing Director





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SpanSet Group world wide
Internationality and worldwide presence

Characterised by continuous growth, the SpanSet Group has developed into a company operating in the global market in the sectors of load securing and lifting technology, fall protection and safety management.

Today, 22 production and sales companies spread across 21 countries belong to the SpanSet Group, so that users on every continent can benefit from the comprehensive know-how and the innovative product developments. The holding company - SpanSet Inter AG - has been based in Switzerland since 1967. Today, the owner-managed company is based in Wollerau near Zurich in the canton of Schwyz.

Competence Centre

Switzerland, Lifting technology
Germany, Lifting technology and Load control
Great Britain, Height safety

Branches

Europe
Spain, France, Italy, Netherlands
Hungary, Poland, Finland, Czech Republic, Austria

Australia, North and South America
Australia, USA, Mexico, Brazil

Asia and Africa
Indonesia, Japan, China, Taiwan, South Africa



© Foto: Volvo Cars

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

The foundation: the development of the vehicle safety belt.
Sixty years ago, cars had no safety belts and accidents, that today leave you unharmed had fatal consequences. For more passenger safety, the car manufacturer Volvo turned to the small Swedish ribbon weaving company AB Textilkonst & Klippan in the late 1950s to jointly develop the world's first car safety belt made of high-strength textile ribbon. This was fitted to the Amazon and 544 models in 1959 and caused great astonishment among the public - but, as we know, soon became a great success.

1966 – SpanSet Germany is founded.
Due to the high level of demand, Erik Ehnimb, the co-owner of Klippan, founded the SpanSet company in Malmö in 1966. The extremely high loading capacity of the straps produced quickly made them quickly ensured their use in areas where chains and wire ropes had previously been used. In the same year, SpanSet GmbH & Co. KG in Germany followed shortly afterwards by SpanSet AG in Hombrechtikon in the Zurich highlands. Subsidiaries in Europe, Asia, America and Australia followed and are still part of the worldwide production and distribution network today.

The 70s, 80s and 90s - decades of innovations
The early 1970s marked the era of international mega-projects. In the field of tube gas business with the former Soviet Union, SpanSet collaborated with Mannesmann Anlagenbau to develop lifting mats for large pipe installations. Cloverleaf slings facilitated the more efficient handling of sack and carton goods on pallets, and with hundreds of thousands of orders, they became a global success. In 1979, the invention of secutex® coating for lifting straps and protective sleeves by today's SpanSet secutex GmbH was a significant breakthrough. For the first time, lifting straps and round slings could be used for lifting and maneuvering rough and sharp-edged loads. In the 1980s, a new generation of round slings with textile wire reinforcement in the protective sheath and raised, woven capacity labels followed, increasing the tear resistance of the protective sheath and making the capacity label easily legible even on dirty round slings.

In addition to developing and marketing innovative products, SpanSet conducted its first customer training in lifting technology and load securing in 1985. Today, SpanSet offers a wide range of specialized seminars in its own training center. In the 1990s, the SpanSet Magnum® round sling, with a capacity of 100 tons and a maximum usable length of 60 meters, faced its ultimate test when it was used to install a 110-meter-long and 300-ton heavy grandstand roof at the Fritz-Walter Stadium. In 1994, TÜV Rheinland also certified SpanSet for operating a quality management system according to DIN ISO 9002/EN 29002. SpanSet is now certified according to DIN EN ISO 9001:2000.

Continuous development in the new millennium
At the beginning of the 2000s, innovative shortening systems for round slings and lifting straps – Vario-Sling and Vario-Web – were introduced. With the Magnum-X® heavy-duty round sling, SpanSet set new standards: it is up to 50% narrower than comparable products, with load capacities of up to 450 tonnes. The MagnumPlus Flex round sling with its flexible protective sleeve, as well as the sustainable Magnum®Force Green, made from recycled fibers, represent further milestones in the development of textile lifting gear. An important step was the integration of today's SpanSet Axzion GmbH in 2019, which expanded the product range to include innovative load-handling devices. The world's largest gripper, the Upending Tool, highlights Axzion's leading role in this field.

Looking back, SpanSet takes pride in its history. Decades of research and development have contributed to increased safety, easier work, fewer accidents, and lower operating costs worldwide. Building on this foundation, SpanSet faces the challenges of the future with over 20 production and distribution companies and approximately 1,000 employees.

SpanSet – Certified Safety

Watch a video
The SpanSet Movie.

How SpanSet ensures the highest level of safety not only in lifting technology.

01 Height Safety



SpanSet offers a large range of products for height safety, which is always developed in close cooperation with the customers. The best example of this is the permanent stainless steel „Safeline“ lifeline system, which is used as horizontal and vertical fall protection and is manufactured for use according to customer requirements. Even for very complex applications we find highly specialised solutions. The international orientation is of great benefit to SpanSet. All over the world, customers benefit from the close cooperation of the SpanSet Group. With the EN standards firmly in mind, we know what the users need and what the legislators demand from users of personal protective equipment against falls from a height (PPE). Our extensive range for height safety technology includes:

- Full body harnesses
- Safety vests
- Lanyards
- Carabiners
- Safety ropes
- Anchor devices, anchor points
- Horizontal securing systems
- Rescue systems

02 Lifting



In the late 1960s, chains or hemp ropes were used to lift heavy loads. During this time SpanSet developed new solutions from high-strength plastic fibres. Today, textile lifting straps and round slings from SpanSet are used worldwide when challenges need to be overcome. Ancient works of art, entire grandstand roofs and ships have been lifted because you can rely on the high-tech lifting gear „Made in Germany“. Through constant innovations and a certified quality assurance standard, SpanSet has developed into the market leader. With SpanSet Axzion, a specialist for the on- and offshore industry also belongs to the group of companies. secutex coatings and protective sleeves complete the unique product range in lifting technology consisting of:

- Round slings up to 450 t load capacity
- Lifting straps
- Round sling and belt hangers
- Protective sleeves, protective plates and clips
- Extensive accessories
- Coil hooks and loading forks
- Pliers and grabs
- Special solutions for the offshore industry

03 Load Control



Safety comes first when it comes to the transportation of goods and the protection of everyone involved. Not only does it ensure a relaxed working environment, it is also required by law. With SpanSet load securing equipment, you effectively avert dangers and accidents and comprehensively comply with legal requirements. Customers include companies with the highest safety demands, such as car manufacturers, the chemical, steel and paper industries, freight forwarders or fire departments. Pressure and tension ratchets for the heaviest loads up to 12,500/25,000 daN permissible tractive force, load securing nets, lashing systems for vehicle transport, edge protectors and much more have been increasing safety in the load securing industry for decades. Our extensive range for load control includes:

- Heavy duty, tension and pressure ratchets
- Clamp lock lashing straps
- Load securing for curtainsiders
- Anti-slip mats
- Load securing nets
- dunnage bags
- Edge protectors and protective sleeves
- Lashing systems for securing vehicles

04 Safety Management



As a partner to our customers, we want to be more than just a supplier of high-quality products - we want to support you in effectively avoiding risks. This naturally includes competent advice, a testing and repair service and other services that sustainably improve and simplify working at height, lifting loads or securing loads. SpanSet therefore offers a wide range of further training opportunities in our safety training centre „STZ“ in Übach-Palenberg and other locations in Germany, where you can deepen specialist knowledge and gain new knowledge from our certified and trained instructors. With know-how and many years of experience, we offer our customers full service safety management consisting of:

- Customer service and project management
- Trainings & workshops
- Inspection service
- Installation & repair
- Useful tools
- Individual solutions

Production site in Germany: Round slings, lifting straps, and more.

From Fiber to Round Sling, Steel to Lifting Appliance, and Polyurethane to Protective Sleeve: SpanSet develops, manufactures, and tests its products at three German locations and one branch in Hungary. The German production site upholds high-quality standards and enables custom manufacturing, special solutions, and comprehensive customer service.

Übach-Palenberg
Lashing straps, round slings and more.
In Übach-Palenberg, approximately 52 weaving machines produce approximately 750,000 meters of belts and hoses in various configurations each month. With wide-band weaving machines, SpanSet has the capability to produce polyester fabrics in-house with widths of up to 600 mm. The use of high-performance fibers is becoming increasingly important. To facilitate production in Germany today, automation technology plays an increasingly significant role. CNC-controlled sewing machines are increasingly used in the sewing department. Additionally, the in-house testing laboratory contributes to quality assurance even during the development phase.

Geilenkirchen
Unique coatings.
SpanSet secutex is the coatings specialist within the SpanSet Group. The development and manufacture of impact, sound and surface protection, e.g. roll coating, protective tubes, hard coatings, edge protectors, but also individual solutions are part of the daily business in Geilenkirchen. From their own premises - just a few kilometres from SpanSet - around 70 employees ensure that secutex® remains a popular choice around the world.

Neustrelitz
Specialists for the On- and Offshore Industry.
SpanSet Axzion stands for „German Engineering" and offers the customer development, production and service from a single source. In Neustrelitz near Berlin, SpanSet Axzion manufactures around 1,200 hoists a year for customers throughout Europe. Special solutions for the onshore and offshore industry in particular are part of the daily business here. The company also has a test tower on its premises that is unique in the world and enables tests to be carried out on load-bearing and lifting equipment weighing up to 1,800 tonnes.



SpanSet factory standard: One step ahead and beyond

SpanSet premium products deliver more!
SpanSet sets an outstanding safety standard with its new factory standard. Certified Safety is integrated into the comprehensive SpanSet Safety Management System, documenting all results and continuously evolving quality requirements. Our own quality standards go beyond norms and laws. To substantiate this, we have developed additional testing procedures. We conduct lifecycle tests, examine the combination of round slings with shackles, and provide recommendations for the safe use of our products. Furthermore, we perform fabric and material analyses, and the results are available to our customers. Premium products that meet the SpanSet factory standard are marked with the Certified Safety logo.

We developed our factory standard in cooperation with the international classification society Det Norske Veritas (DNV). Benefit from certified premium products – with enhanced work safety, application safety, reliability, and extended service life.

Lifetime test
20,000-fold loading at capacity for round slings, including verification of the safety factor at the end of the test.

Tested combinations
Testing of round sling and shackle combinations with equal capacity in collaboration with Dekra and DGUV.

Application Safety
Recording and displaying the thickness and width of the support under load.

Product Recommendation
1:1 combination testing of lifting equipment/protective sleeves on razor-sharp edges under capacity.

Certificate
REACh and RoHS compliance for fabrics, among other things, based on material and product analyses.

Abrasion Test
Wear test over a defined edge radius for webbing with proof of a defined target value.

The SpanSet factory standard, along with our „Quality Seal," ensures reliable test results based on DIN EN 12195-2.



Lifting Technology „Made by SpanSet“

How we protect people and cargo from accident hazards and optimally preserve the material.

When heavy loads need to be moved, safety and care take top priority. This means providing the best protection for the goods and all parties involved. SpanSet is one of the pioneers in the field of lifting with textile lifting equipment. With our lifting equipment and expert guidance from our application engineers, you effectively prevent dangers and accidents while fully complying with legal requirements.

In the late 1960s, when lifting heavy loads, cumbersome chains or hemp ropes were commonly used. During this time, SpanSet developed new solutions using high-strength synthetic fibers. Today, SpanSet's textile lifting slings and round slings are used worldwide to tackle challenging tasks. Antique artworks, entire grandstand roofs, and ships have been lifted using SpanSet's ISO-certified lifting slings and round slings, as the „made in Germany“ high-tech lifting equipment is reliable. Through continuous innovation and ISO-certified quality assurance standards, SpanSet became a market leader. Numerous patents and ongoing practical improvements are visible evidence of our unique expertise in lifting technology.

100% Quality – 100% Safety
From material selection to quality testing, from precise calculations to intelligent use – we deliver 100% performance in every phase. We weave the majority of our lifting slings and round sling covers ourselves – in Germany. To ensure that absolutely reliable and practical lifting equipment reaches your hands, we employ experts from various fields and collaborate with universities and other institutions to develop new products.

Tested and Certified
Our quality management continuously tests materials and end products. In our in-house laboratory and through external testing, they undergo constant scrutiny. We test maximum loads, strength, and durability. For many years, renowned institutions like the Berufsgenossenschaft, DEKRA, TÜV, and DNV GL have regularly tested and certified our products and the organization of our quality management.

By using SpanSet quality products for lifting technology, you can move almost any load – gently on the material and safely for the people involved.

SpanSet – Certified Safety

Lifting sling loop reinforcement

Extra protection against abrasion stress



Loops are subjected to significant stress during lifting, attaching, and detaching. The solution is a loop reinforcement made of high-performance yarns. The load-bearing fabric, thanks to the robust fiber layer, gains significantly increased abrasion resistance, thereby extending its service life.

Reinforced web edge

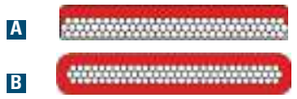
Less susceptible to wear and abrasion.



Highly abrasion-resistant high-tech yarns made from black spun yarn are woven into the outer area of the lifting slings. They provide a highly visible additional protection against chafing at the edge of the strap. Their advantage: extended service life and reduced costs!

Lifting sling coating

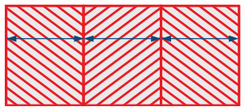
Protection against cutting of the lifting sling



SpanSet lifting slings can be coated with secutex® on one side or **A** on both sides **B**, providing protection to the sling on one side or all around. This makes the lifting sling more robust and safeguards it against sharp-edged loads.

Web pattern

Load capacity measurable



With these lifting slings, you can „measure" the load capacity. Every 30 mm, the webbing pattern of the sling changes, and each „stripe" represents 0.5 t per layer of nominal load capacity, for example:
2-layer lifting sling, 90 mm wide
= 3 x 30 mm x 2 layers = 3 t load capacity.

Replaceable protective cover

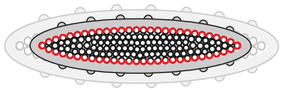
Damages immediately visible



The round sling has an additional outer casing that can be easily replaced in case of damage. The actual load-bearing round sling, covered with a tube sheath in the signal color yellow, is underneath. Even minor damages to the outer casing are thus clearly visible.

Compact cross-section

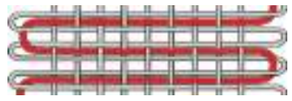
Compact due to an improved production process



The hose and webbing are perfectly matched. The outer fabric tube is made to fit snugly on the sides, making the round sling more compact, lighter, and reducing wrinkles in the longitudinal direction. With smaller crane hooks, the round sling is not compressed, and the formation of folds, which could reduce its strength, is avoided.

Textile wire reinforcement

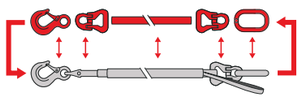
Protection against tearing and creasing



The textile wire woven into the hose provides effective protection against tearing of the round sling and makes it more resistant to further tearing. Additionally, the textile wire reduces the formation of wrinkles on the protective cover. The advantage is a longer lifespan for the round sling.

Modular system

Convenient replacement of individual parts



In the case of damaged parts, it's not necessary to replace the entire rigging. The modular design principle allows for the replacement of any component, whether it's the round sling, connecting element, hook, or protective sleeve. Additionally, the protective sleeve is equipped with a fixation loop. This allows the sling to be rotated within the protective sleeve, enabling different load points and extending the service life.

Rib reinforcement

Enhanced abrasion and tear resistance



The rib reinforcement provides better abrasion and tear resistance even under the toughest conditions. The ribs are made from high-performance polyester, which is significantly more cut and abrasion-resistant than conventional chemical fibers. This contributes to significantly longer service life and reduced wear and tear.

Fold label

SpanSet lifting accessories have a fold label that is double-stitched. The label is shorter due to a central fold, making it more tear-resistant. Additionally, this design protects the inner-side labeling against abrasion.

Protection against damage with internal text



Protective sleeve label

In addition to tear-resistant construction with a fabric insert, a robust plastic sleeve provides excellent protection for the labeling against abrasion and contamination. In lifting accessories equipped with RFID transponders, the transponder is securely integrated into the protective sleeve, ensuring it is tear-resistant.

Optimally protected, reinforced with an insert



RFID-transponder

In the SpanSet Premium Heavy-Duty Round Slings, an RFID transponder is securely integrated into the label, which, together with IDXpert, significantly simplifies the planning, execution, and documentation of your regular inspections of work equipment.

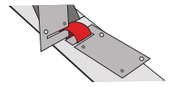
Integrated transponder



RFID optional

All SpanSet lifting accessories can be equipped with an RFID transponder for product management using IDXpert. A securely stitched attachment loop on the lifting accessory allows for easy attachment of the transponder.

Attachment loop for retrofitting



Woven load capacity information

In daily operations, speed is often essential. To ensure that you always select the right round sling, the load capacity information is woven into the sleeve and remains readable even under heavy soiling.

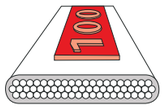
Readable even when dirty



Stitched load capacity information

In everyday use, speed is often essential. To ensure that you always choose the right round sling, the load capacity information is woven into the sleeve and is unlosable, remaining readable even under heavy soiling.

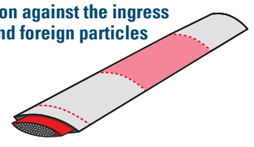
Enhanced application safety



Safety chambers

In the case of the double hose, the layers are interwoven in sections. This creates „compartments" that make it difficult for foreign objects and dirt particles to shift or penetrate in case of damage to the outer casing.

Protection against the ingress of dirt and foreign particles



Sustainable manufacturing

With this lifting equipment, SpanSet prioritizes sustainability. The webbing of the round sling is made from a renewable base material. The production of the biobased high-performance fiber results in significantly less carbon dioxide emissions. This improves the carbon footprint of the round sling and, consequently, the carbon footprint of each individual lifting operation.

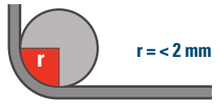
Strong, safe, and environmentally friendly



Extremely cut and abrasion-resistant

The webbing of the lifting sling is made from the highly cut and abrasion-resistant high-performance fiber HMPE (high molecular weight polyethylene). When used to secure loads with sharp edges with a radius of < 2 mm, no additional protection is required – a radius that is prohibited for conventional two-layer lifting slings.

Suitable for use with sharp edge radii

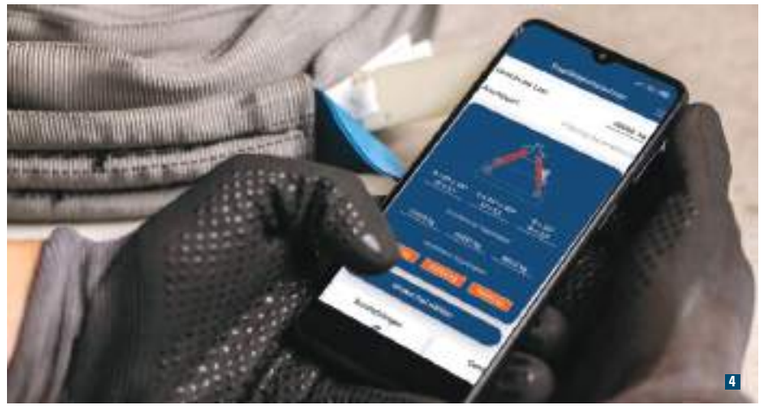




2



3

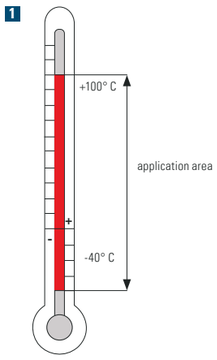

4


5

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

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.

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. 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

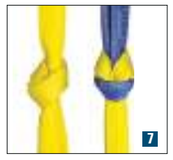
It is important for you to be up-to-date at all times, because impermissible applications are very dangerous. To support you in this, SpanSet offers compact seminars in which you can learn the necessary expertise regarding the correct and compliant use of lifting gear in a practical environment. This means more safety for you, for your employees and for the loads. For more information about our seminars, see pages 116 - 121.

1) Previously BGR 500 section 2.8

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. 60 ff.). For more information please refer to the quick reference guide 5 that is sewn onto every SpanSet sling.


6


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 18 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. 126 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.

Sharp edge


1



2





Definition: Sharp edge

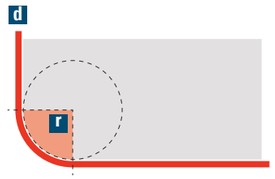
In addition to external factors, such as temperature or mechanical stress, „sharp edges“ still represent one of the main causes of damage to the lifting gear itself and are therefore a frequent cause of accidents. The most damages on sharp or rough edges occur by moving the load transversely to the lifting 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.



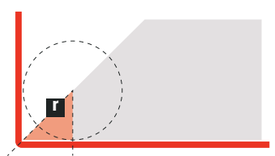
Example of surface pressure:

Magnum®Plus 30 t, support width 170 mm
Magnum-X® 30 t, support width 90 mm

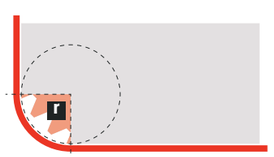
The surface pressure on the Magnum-X® round sling increases by approximately 90%. The surface pressure exerted by the load on the lifting gear is lower

- 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“

More information
Brochure „Scharp edges“

Watch the clip
Workshop „Scharp edges“

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.

We offer:

- 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

Certified Safety

For reliable test results based on DIN EN 12195-2, the SpanSet factory standard and thus our own „quality seal“ are in place.

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“.



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.

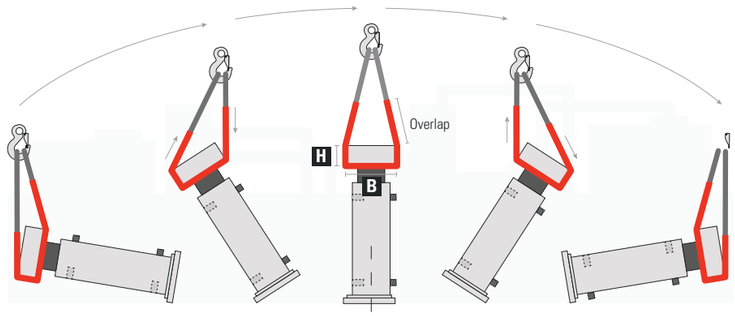


Edge protectors
The exceedingly robust secutex® edge protectors are gentle on the load and on the flat sling. They increase the radius of the edge, thus preventing „sharp edges“. Ask us about it!



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.





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.

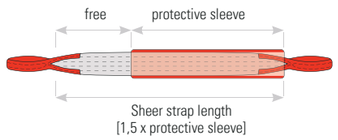
Turning component by 90°

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



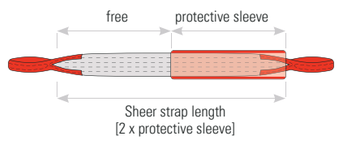
Turning component by 180°

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



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



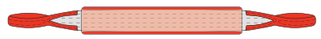


The right type for every application

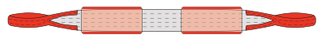
Lifting procedures are just as different as the respective loads themselves. This also apply to the field of application of the various types of protective sleeves, as the latter is adapted to the load and the working range of the lifting gear. This applies to both the NoCut® sleeve and to all secutex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



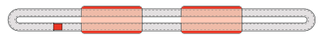
Flat slings: Image type 2
Protective sleeve pair for the contact area



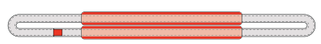
Round slings: Image type 3
Protective sleeve over the entire working length



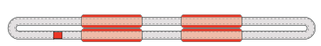
Round slings: Image type 4
Protective sleeve pair for the contact area

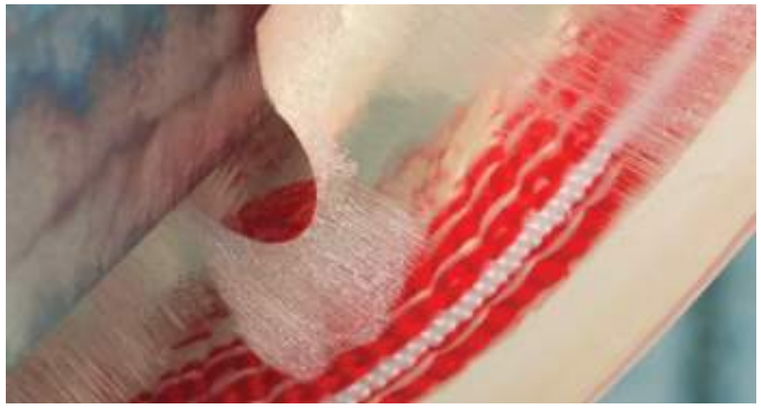


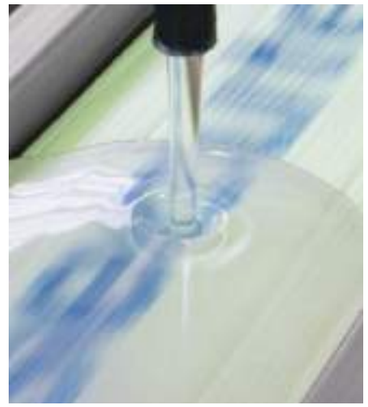
Round slings: Image type 5
Protective sleeve pair over the entire working length



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.

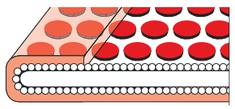


Wave und Miniwave
Large, wave-shaped protrusions make it possible for the load to lock onto the flat sling. A version that is also used as a conveyor belt on turning crossheads.



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.

Load capacity chart







WLL [kg] with a SpanSet round sling, flat sling and 1-leg round sling								WLL [kg] with SpanSet round slings, flat slings and 2-leg round slings				WLL [kg] with 4-leg round slings	
	single layer angle of inclination							Angle of inclination				Angle of inclination	
	straight lift	choked	to 6°	over 6° to 45°	over 45° to 60°	over 6° to 45°	over 45° to 60°	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°
Round slings													
Flat slings													
Slings													
Load lifting factor M [kg]	**1,0**	**0,8**	**2,0**	**1,4**	**1,0**	**0,7**	**0,5**	**1,4**	**1,12**	**1,0**	**0,8**	**2,1**	**1,5**
500	**500**	**400**	**1.000**	**700**	**500**	**350**	**250**	**700**	**560**	**500**	**400**	**1.050**	**750**
1.000	**1.000**	**800**	**2.000**	**1.400**	**1.000**	**700**	**500**	**1.400**	**1.120**	**1.000**	**800**	**2.100**	**1.500**
2.000	**2.000**	**1.600**	**4.000**	**2.800**	**2.000**	**1.400**	**1.000**	**2.800**	**2.240**	**2.000**	**1.600**	**4.200**	**3.000**
3.000	**3.000**	**2.400**	**6.000**	**4.200**	**3.000**	**2.100**	**1.500**	**4.200**	**3.360**	**3.000**	**2.400**	**6.300**	**4.500**
4.000	**4.000**	**3.200**	**8.000**	**5.600**	**4.000**	**2.800**	**2.000**	**5.600**	**4.480**	**4.000**	**3.200**	**8.400**	**6.000**
5.000	**5.000**	**4.000**	**10.000**	**7.000**	**5.000**	**3.500**	**2.500**	**7.000**	**5.600**	**5.000**	**4.000**	**10.500**	**7.500**
6.000	**6.000**	**4.800**	**12.000**	**8.400**	**6.000**	**4.200**	**3.000**	**8.400**	**6.720**	**6.000**	**4.800**	**12.600**	**9.000**
8.000	**8.000**	**6.400**	**16.000**	**11.200**	**8.000**	**5.600**	**4.000**	**11.200**	**8.960**	**8.000**	**6.400**	**16.800**	**12.000**
10.000	**10.000**	**8.000**	**20.000**	**14.000**	**10.000**	**7.000**	**5.000**	**14.000**	**11.200**	**10.000**	**8.000**	**21.000**	**15.000**
15.000	**15.000**	**12.000**	**30.000**	**21.000**	**15.000**	**10.500**	**7.500**	**21.000**	**16.800**	**15.000**	**12.000**	**31.500**	**22.500**
20.000	**20.000**	**16.000**	**40.000**	**28.000**	**20.000**	**14.000**	**10.000**	**28.000**	**22.400**	**20.000**	**16.000**	**42.000**	**30.000**
25.000	**25.000**	**20.000**	**50.000**	**35.000**	**25.000**	**17.500**	**12.500**	**35.000**	**28.000**	**25.000**	**20.000**	**52.500**	**37.500**
30.000	**30.000**	**24.000**	**60.000**	**42.000**	**30.000**	**21.000**	**15.000**	**42.000**	**33.600**	**30.000**	**24.000**	**63.000**	**45.000**
40.000	**40.000**	**32.000**	**80.000**	**56.000**	**40.000**	**28.000**	**20.000**	**56.000**	**44.800**	**40.000**	**32.000**	–	–
50.000	**50.000**	**40.000**	**100.000**	**70.000**	**50.000**	**35.000**	**25.000**	**70.000**	**56.000**	**50.000**	**40.000**	–	–
60.000	**60.000**	**48.000**	**120.000**	**84.000**	**60.000**	**42.000**	**30.000**	**84.000**	**67.200**	**60.000**	**48.000**	–	–
80.000	**80.000**	**64.000**	**160.000**	**112.000**	**80.000**	**56.000**	**40.000**	**112.000**	**89.600**	**80.000**	**64.000**	–	–
100.000	**100.000**	**80.000**	**200.000**	**140.000**	**100.000**	**70.000**	**50.000**	**140.000**	**112.000**	**100.000**	**80.000**	–	–

Surface texture for Coated lifting straps and protective sleeves

Essential for safe lifting: the SpanSet load capacity controller. With it, you can quickly and reliably determine the lifting angle and WLL (Working Load Limit).

Order Number: D020267





Free App

The SpanSet load capacity calculator is available to you as an app free of charge in the Google Play Store and in the App Store.

Please note:

Load capacities for 4-leg slings apply only to symmetrical loads with equal sling lengths! For asymmetrical loads, use the load rating factors for 2-leg slings!

02.1

Round slings

SupraPlus®-X 0,5 - 8,0 t 32 - 33
Twintex® 1,0 - 8,0 t 34 - 35
Liftfix 0,5 - 8,0 t 36 - 37

How to safely lift asymmetrical components, even with sharp edges

The Neuman & Esser Group, based in Übach-Palenberg, is one of the global leaders in compressor systems. These machines often weigh 50 tons or more. Consequently, the lifting operations during assembly, which involve heavy cast and steel components, are highly demanding.

SupraPlus®X round slings are used for all lifting activities. The components are individually tailored to customer needs and are often asymmetrical. „We lift many top-heavy parts, which makes their positioning challenging during processing," describes assembly manager Willi Rosenbaum. During rotation and alignment, the round slings are subjected to greater stress than during linear lifting. „Since we are dealing with sharp-edged components, we use NoCut® sleeves made of cut and abrasion-resistant high-performance fibers for edge protection," says Rosenbaum. „This allows us to attach round slings almost anywhere." Another challenge is the joining of cylinders and crankcases. When attaching the crankcase and during transport with traverse beams, SpanSet Joker® hooks are used to create a secure connection between the round sling and the attachment point. With asymmetrical components, Joker® hooks facilitate lifting operations because they allow round slings to be quickly and easily extended.

With SupraPlus®X, SpanSet has optimized the proven SupraPlus® round sling. The „X" in the name stands for the extremely long service life. This is due to the reinforced ribbed structure of the sleeve, which contains significantly more high-performance polyester than before, increasing its durability. The proportion of these fibers is twice as high as in SupraPlus® „without X." A textile wire reinforcement in the sleeve provides additional protection for SupraPlus®X under challenging operating conditions. Depending on the version, the nominal capacity ranges from 500 to 8,000 kilograms. This premium round sling complies with the SpanSet factory standard developed in collaboration with DNV, which goes well beyond the requirements for the GS quality seal.

SpanSet – Certified Safety

SupraPlus®X
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 X – compact, robust and durable

The reinforced rib construction and the reduction in sleeve width transform the proven SupraPlus® into SupraPlus®X. The latest generation of this premium sling is even more robust and compact.

Versatile and reliable
Egal ob gerader Zug, einfach umgelegt oder Schnürgang: Die sehr kompakte SupraPlus®X passt sich nahezu ohne Falten an die Last an. Die Rundschlinge ist nochmal ca. 9 % schmaler als ihr Vorgänger und wird selbst in kleineren Kranhaken nicht gequetscht. So wird ein unzulässiger Verlust an Tragfähigkeit wirksam vermieden. Universell in jeder Branche einsetzbar, erfüllt die SupraPlusX weltweit die höchsten Maßstäbe in puncto Sicherheit und Qualität.

With fabric reinforcement and textile wire
The ribbed structure woven into the outer sleeve makes SupraPlus®X more resistant to wear. The ribs, made of doubled high-performance fiber, are extremely cut and abrasion-resistant. The textile wire woven into the sleeve provides additional protection against tearing. It's additional safety that also pays off economically. Upon request, SupraPlus®X can be equipped with an RFID chip for computerized product management using IDX-pert Net at the fixed sewn-on attachment loop.

Additional protection
Protective sleeves such as secutex® SF-2 or SpanSet NoCut® are ideal additions. They effectively shield the round sling from sharp edges and enable the rotation and turning of sharp-edged loads.

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]	Item No. for standard lengths 1 m	1,5 m	2 m	3 m	4 m	5 m
500	5	40	0,50	30	0,2	**2002715**	**2003206**	**2002716**	**2003205**	-	-
1.000	5	42	0,50	30	0,3	**2002717**	**2003705**	**2002718**	**2003207**	**2003208**	**2003704**
2.000	7	46	0,50	30	0,5	**2002719**	**2003707**	**2002720**	**2003209**	**2003210**	**2003706**
3.000	8	54	0,75	30	0,6	**2002721**	**2003709**	**2002722**	**2003211**	**2003212**	**2003708**
4.000	10	57	0,75	30	0,8	**2002723**	**2003711**	**2002724**	**2003213**	**2003214**	**2003710**
5.000	10	62	0,75	30	1,0	**2002725**	**2003713**	**2002726**	**2003215**	**2003216**	**2003712**
6.000	11	68	0,75	30	1,3	**2002727**	**2004202**	**2004650**	**2003203**	**2004201**	**2004197**
8.000	13	73	1,00	30	1,8	-	-	**2004199**	**2003702**	**2004198**	**2003703**

L1

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

RFIDoptional



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



CE

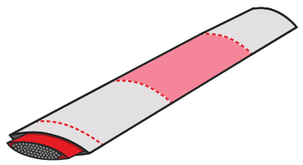
Twintex® – round sling with safety chambers

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 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.

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]	Item No. for standard lengths 1 m	1,5 m	2 m	3 m	4 m	5 m
1.000	4	46	0,375	30	0,3	**2003714**	**2003715**	**2003218**	available on request	**2002730**	**2002729**
2.000	6	49	0,375	30	0,5	**2003716**	**2003717**	**2003220**	**2003219**	**2002732**	**2002731**
3.000	7	58	0,375	30	0,6	**2003718**	**2003719**	**2003222**	**2003221**	**2002734**	**2002733**
4.000	8	63	0,50	30	0,8	**2003720**	**2003721**	**2003224**	**2003223**	**2002736**	**2002735**
5.000	9	72	0,50	30	1,0	**2003722**	**2003723**	**2003226**	**2003225**	**2002738**	**2002737**
6.000	12	82	0,75	30	1,3	**2003724**	**2003725**	**2003228**	**2003227**	**2002740**	**2002739**
8.000	13	83	0,75	30	1,8	**2003726**	**2003727**	**2003230**	**2003229**	**2002742**	**2002741**

L1

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

RFIDoptional

SpanSet Certified Safety

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 50.

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® or also the secutex® protective clip SC.

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]	Item No. for standard lengths (L1) 1 m	1,5 m	2 m	3 m	4 m	5 m
500	3	38	0,375	30	0,2	**2002797**	**2002798**	**2003282**	**2003283**	**2003385**	**2003840**
1.000	5	42	0,375	30	0,3	**2002799**	**2002800**	**2003284**	**2003285**	**2003752**	**2003753**
2.000	7	43	0,375	30	0,5	**2002801**	**2002802**	**2003286**	**2003287**	**2003754**	**2003755**
3.000	7	57	0,375	30	0,6	**2002803**	**2002804**	**2003288**	**2003289**	**2003756**	**2003757**
4.000	8	65	0,375	30	0,8	**2002805**	**2002806**	**2003290**	**2003291**	**2003758**	**2003759**
5.000	9	68	0,5	30	1,0	-	**2002807**	**2002808**	**2003292**	**2003293**	**2003760**
6.000	10	81	0,75	30	1,3	-	-	**2002809**	**2002810**	**2003294**	**2003295**
8.000	13	84	0,75	30	1,8	-	-	**2002940**	**2002811**	**2002812**	**2003296**

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

RFIDoptional



02.2

Heavy-duty round slings

Magnum-X®	40 - 41
Magnum-X® smart	42 - 43
Magnum-X® short	44 - 45
Magnum® Force Green	46 - 47
Magnum® Plus	48 - 49
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How compact Magnum-X® round slings can be used flexibly and quickly.

For a long time, the Berne and Borbecker Mühlbach rivers in Essen served as above-ground sewage channels. The tributaries of the Emscher River literally made the people in the Ruhr metropolis suffer from unpleasant odors and needed to be redirected underground. However, due to subsidence in the former coal mining region, it was challenging to send these waters underground. Now, the mining-related subsidence is diminishing, allowing for the construction of an underground canal system consisting of sewage pipes. The 4.60-meter-diameter tunnel pipes can handle not only river and wastewater but also heavy rainfall to prevent flooding. During the installation, a tunnel boring machine was used. It was lowered into sinkholes and then dug forward up to 460 meters before moving to the next pit. Autokrane Schares GmbH was tasked with recovering the 75-ton tunnel boring machine from the pits and transporting it to the next location using a low-loader. In this process, four Magnum-X® round slings with a load capacity of 50 tons each were employed. „The Magnum-X® served us well," says Schares project manager Michael Klinker. „Because the slings and the sleeve are particularly narrow, we were able to fit four round slings on one hook, simplifying handling." What's more, Klinker highlights the flexibility and speed with which SpanSet provided the lifting equipment: „It greatly helped us that SpanSet was able to deliver the lengths we needed in the shortest possible time."

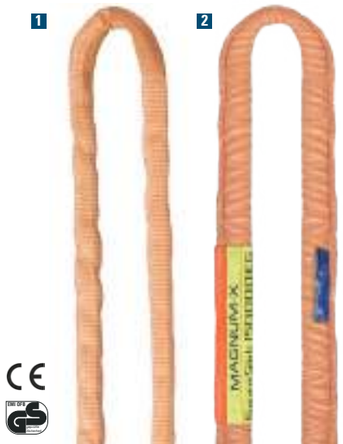
Magnum-X® heavy-duty round slings have been among the bestsellers in the SpanSet product range for years. Their webbing is made of high-performance polyester, and the same material is incorporated into the protective sleeve. This makes them significantly more resistant to sharp edges and rough surfaces compared to using conventional polyester exclusively. Additionally, these heavy-duty round slings are lighter and 50 percent narrower than comparable products. The special advantage on construction sites and in assembly halls: The compact round sling takes up minimal space in the crane hook and is easier and more ergonomic to handle.

SpanSet – Certified Safety

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 ad-ditionally 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 with out 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]	Item No. for standard lengths 4 m	5 m	6 m	7 m	8 m
5.000	✓		10	35	2,0	30	0,5	**2010959**	**2010960**	**2010961**	**2010962**	**2010963**
10.000	✓		12	65	2,0	30	0,9	**2002763**	**2002764**	**2003251**	**2003252**	**2003738**
20.000	✓		19	67	2,0	30	1,8	**2002765**	**2002766**	**2003253**	**2003254**	**2003739**
25.000	✓		19	85	2,0	30	2,4	**2002767**	**2002768**	**2003255**	**2003256**	**2003740**
30.000	✓		25	90	2,0	30	2,9	**2002769**	**2002770**	**2003257**	**2003258**	**2003741**
40.000	✓		25	105	3,0	30	3,9	**2002771**	**2002772**	**2003259**	**2003260**	**2003742**
50.000	✓		19	146	3,0	30	5,2	**2002773**	**2002774**	**2003261**	**2003262**	**2003743**
60.000	✓		21	173	3,0	30	7,1	**2002775**	**2002776**	**2003263**	**2003264**	**2003744**
80.000	✓		24	192	3,0	30	9,4	**2002777**	**2002778**	**2003265**	**2003266**	**2003745**
100.000	✓		35	227	3,0	30	13,6	**2002779**	**2002780**	**2003267**	**2003268**	**2003746**
125.000	✓		39	300	3,0	30	18,7	**2002781**	**2002782**	**2003269**	**2003270**	**2003747**
150.000		✓	51	280	5,0	30	20,0	**2002783**	**2002784**	**2003271**	**2003272**	**2003748**
200.000 1)		✓	49	284	5,0	30	20,0	**2017608**	available on request	available on request	available on request	available on request
300.000		✓	81	330	5,0	30	43,1	available on request	available on request	available on request	available on request	available on request
450.000 1)		✓	79	330	5,0	30	43,1	available on request	available on request	available on request	available on request	available on request

ℹ 1) Safety factor 1:5; manufactured according to DIN EN 1492-2.



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]	Item No. for standard lengths 4 m	5 m	6 m	7 m	8 m
20.000	15	80	2,0	30	2,4	**2002785**	**2002786**	**2003273**	**2003274**	**2003749**
30.000	20	90	2,0	30	3,7	**2002787**	**2002788**	**2003275**	**2003276**	**2003750**
40.000	24	110	3,0	30	4,8	**2002789**	**2002790**	**2003277**	**2003278**	**2003751**

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

SpanSet Certified Safety

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





CE

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. 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 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]	Item No. for standard lengths 0,375 m	1 m	1,5 m	2 m	2,5 m
10.000	10	55	1,0	<2	1,3	available on request[1)]	**2002791**	**2002792**	**2003279**	-
20.000	13	70	1,0	<2	2,1	available on request[1)]	**2002793**	**2002794**	**2003280**	-
30.000	21	100	1,0	<2	3,5	available on request[1)]	**2002795**	**2002796**	**2003281**	-

L1

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

SpanSet Certified Safety

Magnum®Force Green
10,0 - 100,0 t





- Certified CO2 neutral production
- Tear-resistant sewn label with additional protective film
- With RFID chip for storing product data
- Extremely robust and compact round sling
- 50% smaller bearing thickness under load
- 60% lighter than conventional polyester slings



Just as strong and safe – but more sustainable!

The heavy-duty round sling with a reduced carbon footprint.
Magnum®Force Green is the first SpanSet heavy-duty round sling whose webbing is made from a renewable base material. The bio-based high-performance fiber used in its production improves the carbon footprint of the round sling and, consequently, the carbon footprint of each individual lifting operation. Magnum®Force Green, therefore, meets both climate protection and safety requirements.

Bio-based innovation
The ultra-high-molecular-weight polyethylene (UHMWPE) is produced from Scandinavian wood oil, a byproduct of pulp production. When producing one ton of bio-based fibers, significantly less carbon dioxide is generated compared to conventionally produced UHMWPE fibers, resulting in a saving of 29 tons.

Lightweight, strong, versatile
Magnum®Force Green possesses the same strength and resistance to aggressive substances as its counterparts made from conventional materials. UHMWPE webbings are considerably lighter than polyester webbings, making the handling of the round slings easier. The bearing thickness under load is only half that of a polyester sling. The round sling is available with nominal capacities ranging from 10 to 100 tons, with higher capacities available upon request.

More information
Take a look at the MagnumForce Green brochure.

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]	Item No. for standard lengths 4 m	5 m	6 m	7 m	8 m
10.000	7	70	2	30	0,8	2024073	2024074	2024075	2024076	2024077
20.000	18	91	2	30	1,6	2024078	2024079	2024080	2024081	2024082
25.000	20	115	2	30	2,6	available on request	available on request	available on request	available on request	available on request
30.000	22	135	3	30	3,4	2024083	2024084	2024085	2024086	2024088
40.000	23	152	3	30	4,2	2024089	2024090	2024091	2024092	2024093
50.000	23	165	3	30	5,0	2024094	2024095	2024096	2024097	2024098
60.000	27	200	3	30	6,1	2024099	2024100	2024101	2024102	2024103
80.000	35	190	3	30	7,1	2024104	2024105	2024106	2024107	2024108
100.000	35	190	3	30	7,1	2024109	2024110	2024111	2024112	2024113



Magnum®Plus Flex
10,0 - 50,0 t



- Extremely robust and compact round sling
- Elastic protective sleeve minimizes folding
- Double-fabric sleeve prevents ingress of foreign particles
- Fest vernähte Manschette mit Label und RFID-Chip zur Speicherung der Produktdaten



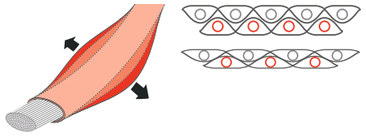
Heavy-duty round sling with elastic protective sleeve

Maximum safety and flexibility f or heavy-duty applications
The Magnum®Plus Flex combines innovative materials with state-of-the-art weaving technology. The combination of proven polyester and elastic elastane ensures the perfect balance of strength, flexibility, and durability.

The specially developed sleeve of the Magnum®Plus Flex automatically adapts to the load-carrying core – regardless of the load. Two different fibers, combined with a special weaving technique, allow the core to expand optimally under load. At the same time, hardly any folds or pinching occur, even in narrow hooks or at tight anchoring points.The unique sleeve is constructed as a type of double fabric: when lifting, the upper layer sinks into the lower one. This ensures high density and prevents the penetration of foreign particles. The construction effectively protects the core from external influences while ensuring optimum adaptation to hooks and anchoring points. Even in confined lifting situations, handling remains simple and safe.

For additional safety, the Magnum®Plus Flex is equipped with a sewn-on cuff. This protects the label and contains an RFID transponder. Using IDXpert Net software, all maintenance and inspection data can be digitally documented and managed.

The sleeve expands under load, reducing fold formation and preventing dirt particles from penetrating the fabric.



More informationen
Check out the Magnum®Plus Flex product brochure.

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]	Item No. for standard lengths 3 m	4 m	5 m	6 m	7 m	8 m
10.000	18	88	1	60	2,1	2027060	2027061	2027062	2027063	2027064	2027065
20.000	22	143	2	60	4,3	2027072	2027073	2027074	2027075	2027076	2027077
30.000	25	180	3	60	6,5	2027677	2027678	2027679	2027680	2027681	2027682
40.000	29	181	3	60	7,5	2027078	2027079	2027080	2027081	2027082	2027083
50.000	35	213	3	60	10,2	2027084	2027085	2027086	2027087	2027088	2027089

Sonderausführungen auf Anfrage. In Anlehnung an DIN EN 1492-2.

SpanSet Certified Safety

Magnum®Plus
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



Magnum®Plus – strong hold for heavy loads

Load capacity of 300 t in a straight pull
The SpanSet Magnum®Plus 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 Magnum®Plus 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 Magnum®Plus 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.

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]	Item No. for standard lengths 4 m	5m	6 m	7 m	8 m
10.000	12	103	1,0	30	2,2	2002743	2002744	2003231	2003232	2003728
15.000	16	115	1,0	30	2,7	2002745	2002746	2003233	2003234	2003729
20.000	18	159	1,3	30	4,0	2002747	2002748	2003235	2003236	2003730
25.000	25	155	1,3	30	5,0	2002749	2002750	2003237	2003238	2003731
30.000	19	170	1,3	30	6,5	2002751	2002752	2003239	2003240	2003732
40.000	22	198	3,0	30	9,7	2002753	2002754	2003241	2003242	2003733
50.000	24	210	3,0	30	12,5	2002755	2002756	2003243	2003244	2003734
60.000	27	220	3,0	30	16,6	2002757	2002758	2003245	2003246	2003735
80.000	47	260	3,0	30	20,8	2002759	2002760	2003247	2003248	2003736
100.000	49	300	3,0	30	24,3	2002761	2002762	2003249	2003250	2003737
150.000	50	430	5,0	30	45,5	available on request	available on request	available on request	available on request	available on request
200.000 1)	55	420	8,0	30	45,5	available on request	available on request	available on request	available on request	available on request
300.000 1) 2)	50	440	8,0	30	45,5	available on request	available on request	available on request	available on request	available on request

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



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.

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.

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.

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]	Item No. for standard lengths 1 m	1,5 m	2 m	3 m	4 m	5 m
10.000	12	103	1,0	60	2,2	-	-	-	**2002813**	**2002814**	**2003297**
15.000	16	115	1,0	60	2,7	-	-	-	**2002815**	**2002816**	**2003298**
20.000	18	159	1,3	60	4,0	-	-	-	**2002817**	**2002818**	**2003299**
25.000	25	155	1,3	60	5,0	-	-	-	**2002819**	**2002820**	**2003300**
30.000	19	170	1,3	60	6,5	-	-	-	**2002821**	**2002822**	**2003301**
40.000	22	198	3,0	60	9,7	-	-	-	**2002823**	**2002824**	**2003302**
50.000	24	210	3,0	60	12,5	-	-	-	**2002825**	**2002826**	**2003303**
60.000	27	220	3,0	30	16,6	-	-	-	-	**2002827**	**2003304**
80.000	47	260	3,0	30	20,8	-	-	-	-	**2002829**	**2003305**
100.000	49	300	3,0	30	24,3	-	-	-	-	**2002831**	**2002832**

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



02.3

Round slings and multi-leg slings

VarioWeb	56 - 57
VarioWeb	58 - 59
Single-leg RS slings	60 - 61
Double-leg RS slings	62 - 63
Quadruple-leg RS slings	64 - 65
Fittings for RS slings	66 - 67
Joker®-Hook	68 - 69

How to place asymmetrical components horizontally on a low loader

When components are asymmetrical, the lifting operation adds an extra „dimension." If a ton-heavy load hangs at an angle, it cannot be placed horizontally and thus safely. This challenge arose at the end of 2022 during the preparation of a transport between the Axzion locations in Langenfeld and Großefehn. Two 7-ton side components of a 600-ton test stand for lifting equipment embarked on the 300-kilometer journey. Transporting them horizontally would have exceeded the permissible width. Therefore, each component was mounted at a slight angle with an approximately one-ton supporting structure. An indoor crane was supposed to lift the assembly and place it on the low-loader. Because the component and the support frame did not have a central center of gravity, a lifting operation with conventional lifting equipment was not possible: the load would have tilted when lifted. „Such an inclination would significantly complicate the safe placement on the low-loader," said Jörg Scheilen, an application engineer at SpanSet. To avoid such situations, SpanSet developed VarioWeb. The length-adjustable webbing sling allows for precise balancing of the load in centimeters. A 2-leg sling with a 4-ton capacity in a single strand was attached to the rear side of the component. In the front, a single-strand VarioWeb and a round sling were used. VarioWeb was attached to the crane hook and connected to a 2-ton SupraPlus®. Joker® hooks at the attachment point directed the round sling into a „U," doubling its load capacity. This basic setup allowed the entire rigging with VarioWeb to be adjusted in length so that the support frame could be placed horizontally and precisely on the low-loader.

The unique VarioWeb sling can be easily adjusted to the appropriate length with just a few simple steps. The metal parts, such as the shortening elements, are drop-forged from special-grade steel and have no edges or burrs, minimizing the abrasion of the lifting straps and extending their service life. Using a modular design, individual VarioWeb components can be replaced. SpanSet offers VarioWeb webbing slings with one, two, and four strands and load capacities ranging from 1 to 4.2 tons.

SpanSet – Certified Safety

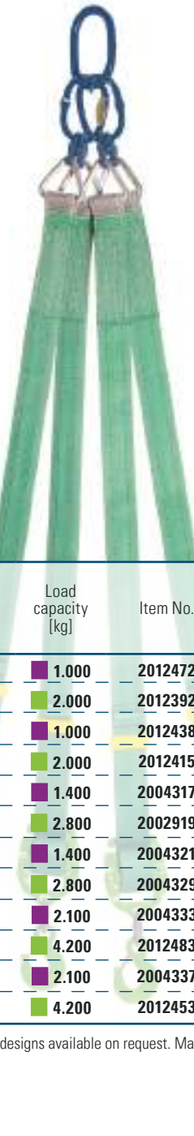
Note: There is no helmet requirement for this application.

VarioWeb multi-leg slings
1, 2 and 4 legs, 1,0 - 4,2 t

- 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







CE

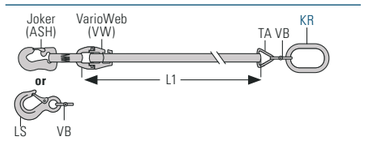
SpanSet VarioWeb – for lifting asymmetrical loads

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]	Item No.	L1 min. [m]	Can be shortened to [mm]	Weight 1st m [kg]	Weight per running m [kg]	Fittings				
							KR/KRR	VarioWeb	TA	VB	LS/ASH (Joker)
1	1.000	2012472	2	730	2,62	0,2	1 x KR	1 x VW	1 x TA	2 x VB	1 x LS
1	2.000	2012392	2	880	5,35	0,3	1 x KR	1 x VW	1 x TA	2 x VB	1 x LS
1	1.000	2012438	2	960	2,82	0,2	1 x KR	1 x VW	1 x TA	1 x VB	1 x ASH
1	2.000	2012415	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	2004317	2	730	5,04	0,4	1 x KR	2 x VW	2 x TA	4 x VB	2 x LS
2	2.800	2002919	2	880	10,30	0,6	1 x KR	2 x VW	2 x TA	4 x VB	2 x LS
2	1.400	2004321	2	960	5,24	0,5	1 x KR	2 x VW	2 x TA	2 x VB	2 x ASH
2	2.800	2004329	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	2004333	2	890	10,08	0,8	1 x KRR	4 x VW	4 x TA	8 x VB	4 x LS
4	4.200	2012483	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	2004337	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	2012453	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.



VarioForce multi-leg slings
1, 2, 3 and 4 legs, 1,0 - 4,2 t

- Tool-free, centimeter-precise adjustment
- Lifting of asymmetrical loads
- Low weight and exceptional robustness
- Modular design enables part replacement
- Identification with a plaque
- Integrated RFID chip for digital storage of product data







Balancing asymmetrical loads in no time

When handling asymmetrical loads, a precise length adjustment of one or more legs is required to align the center of gravity exactly. With VarioForce, you can balance your load quickly and easily for safe and efficient lifting operations. The rope, braided from high-performance HMPE fibers, is simply combined with round slings to form a 2-, 3-, or 4-leg sling assembly.

Compact, lightweight, and effortless to use
The legs can be continuously adjusted by up to 2 meters, with an integrated shortener allowing centimeter-precise adjustment of the rope – quickly, effortlessly, and without tools. VarioForce is supplied as a fully assembled sling system. In combination with round slings, only the number of legs required for the application need to be configured as VarioForce. Depending on the lifting case, you decide how many round slings are needed in combination with VarioForce.

The rope meets the strict requirements of the SpanSet factory standard. Whether on rough surfaces or exposed to oil and grease – VarioForce remains powerful and reliable even under extreme conditions.

More informations

View PDF: VarioForce brochure

Watch clip: VarioForce in action

Legs	Load capacity (WLL) [kg] up to 45°	up to 60°	Sling combinations		
1-leg	1.000 2.000 3.000		1 **1 x VarioForce**		
2-leg	1.400 2.800 4.200	1.000 2.000 3.000	2 **1 x VarioForce** **1 x Round sling**	3 **2 x VarioForce**	
3-leg*	1.400 2.800 4.200	1.000 2.000 3.000	4 **1 x VarioForce** **2 x Round sling**	5 **2 x VarioForce** **1 x Round sling**	6 **3 x VarioForce**
4-leg*	1.400 2.800 4.200	1.000 2.000 3.000	7 **2 x VarioForce** **2 x Round sling**	8 **3 x VarioForce** **1 x Round sling**	9 **4 x VarioForce**

Nominal length L1 [m]	Adjustability [m]	Adjustment range [m]	Load capacity [kg] 1.000	2.000	3.000
1,5	+/- 0,5	1,0 - 2,0	●	●	–
2,5	+/- 1,0	1,5 - 3,5	●	●	●
4,0	+/- 1,0	3,0 - 5,0	●	●	●

*Asymmetrical loads affect the load capacity.
For 3- and 4-leg slings, the load capacities of the 2-leg sling apply..

RFID



SpanSet Certified Safety

Single-leg RS sling
Typ LS, 1,0 - 30,0 t

- 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

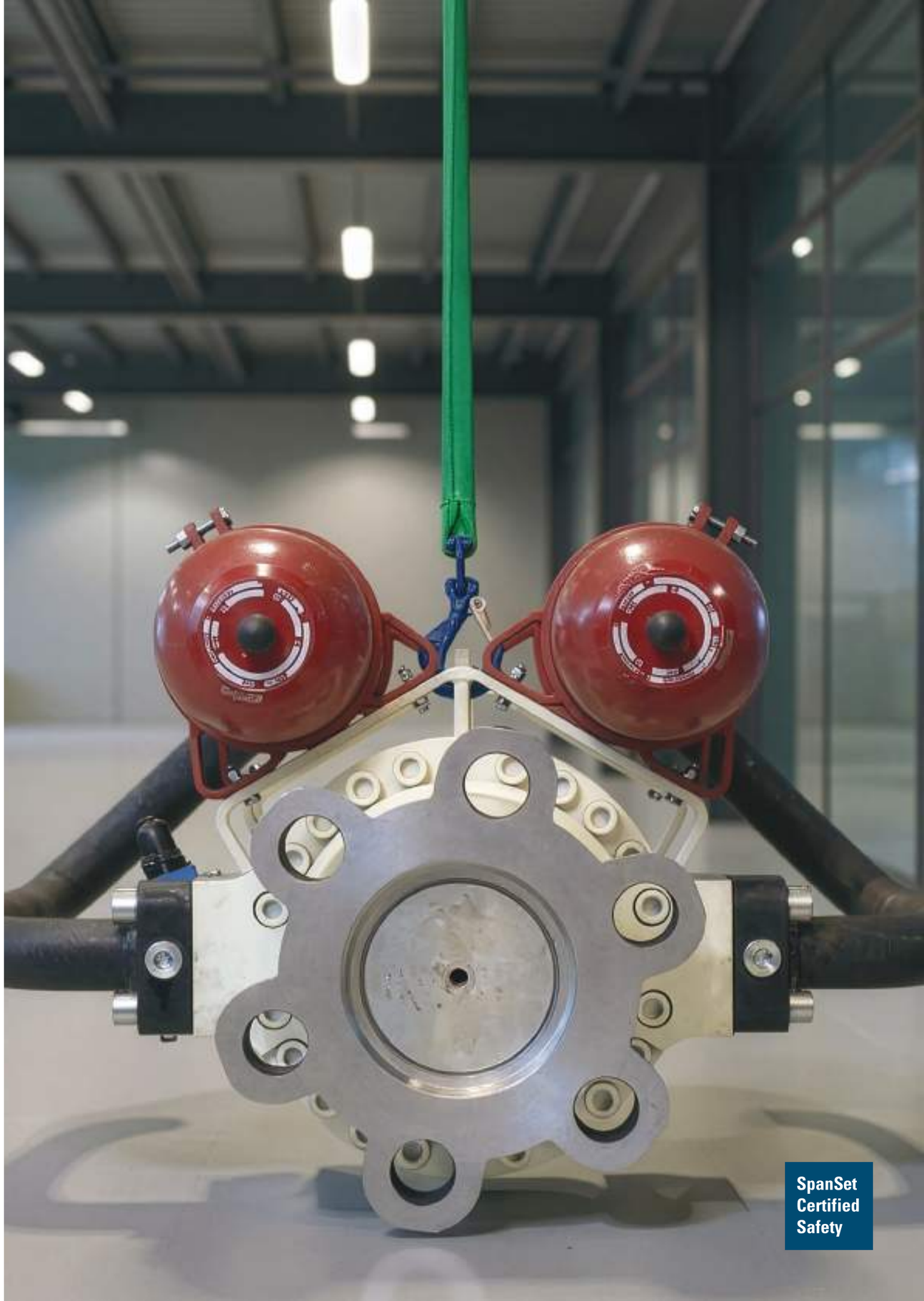
The 1-leg RS sling is particularly suitable if your work involves frequently having to move or reposition loads with a fixed attachment point. Using the round sling fittings also makes sense from an economical perspective.

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]		Item No. for L1=1 m	Item No. 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	-	-	**2024691**	**2002836**	0,375	10	1,4	0,3	1,5	KE 2,0	1,4
2.000	-	-	**2024694**	**2002838**	0,375	10	2,5	0,5	2,5	KE 2,0	2,5
3.000	-	-	**2024697**	**2002840**	0,375	20	3,7	0,8	4,0	KE 3,15	4,0
4.000	-	-	**2024699**	**2002842**	0,375	20	5,7	1,0	4,0	KE 5,3	4,0
5.000	-	-	**2024700**	**2002844**	0,375	20	6,6	1,1	6,7	KE 5,3	5,6
6.000	-	-	**2024701**	**2002846**	1,000	20	9,1	1,4	6,7	KE 8,0	6,7
8.000	-	-	**2024702**	**2002848**	1,000	20	9,4	1,8	10,0	KE 8,0	10,0
10.000	-	-	**2024692**	**2002850**	2,500	50	23,0	2,5	10,0	KE 12,5	10,0
15.000	-	-	**2024693**	**2002852**	2,500	50	36,0	3,5	16,0	KE 15,0	22,4
20.000	-	-	**2024695**	**2002854**	2,500	50	56,0	5,0	20,0	KE 21,2	22,4
25.000	-	-	**2024696**	**2002856**	2,500	50	89,0	6,0	27,0	KE 31,5	25,0
30.000	-	-	**2024698**	**2002858**	2,500	50	94,0	8,0	31,5	KE 31,5	43,0

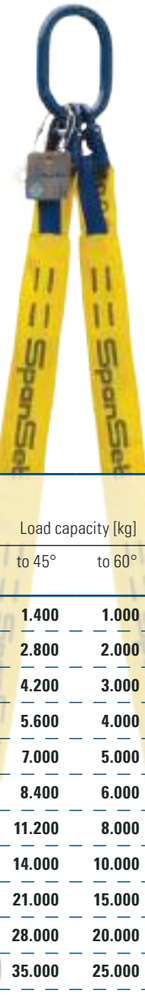
Special designs available on request. Manufactured according to DIN EN 1492-2.



Two-leg RS sling
Typ LS, 1,0 - 30,0 t



- 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

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.

Nominal carrying capacity [kg]	Load capacity [kg] to 45°	Load capacity [kg] to 60°	Item No. for L1=1 m	Item No. for L1=2 m	L1 min. [m]	L1 max. [m]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	LS 2 x LS	KE 4 x KE	KR 1 x KR
1.400	**1.400**	**1.000**	**2024703**	**2002860**	0,375	10	3,8	0,6	1,5	KE 2,0	1,4
2.800	**2.800**	**2.000**	**2024704**	**2002862**	0,375	10	5,6	1,0	2,5	KE 2,0	4,0
4.200	**4.200**	**3.000**	**2024705**	**2005924**	0,375	20	9,0	1,6	4,0	KE 3,15	5,6
5.600	**5.600**	**4.000**	**2024706**	**2002865**	0,375	20	12,9	2,0	4,0	KE 5,3	5,6
7.000	**7.000**	**5.000**	**2024707**	**2002868**	0,375	20	13,3	2,2	6,7	KE 5,3	10,0
8.400	**8.400**	**6.000**	**2024708**	**2002870**	1,000	20	22,9	2,8	6,7	KE 8,0	10,0
11.200	**11.200**	**8.000**	**2024709**	**2002872**	1,000	20	24,9	3,6	10,0	KE 8,0	14,0
14.000	**14.000**	**10.000**	**2024710**	**2002874**	2,500	50	40,0	5,0	10,0	KE 12,5	14,0
21.000	**21.000**	**15.000**	**2024711**	**2002876**	2,500	50	69,0	7,0	16,0	KE 15,0	22,4
28.000	**28.000**	**20.000**	**2024712**	**2002878**	2,500	50	108,0	10,0	20,0	KE 21,2	28,0
35.000	**35.000**	**25.000**	**2024713**	**2002880**	2,500	50	143,0	12,0	27,0	KE 31,5	43,0
42.000	**42.000**	**30.000**	**2024714**	**2002882**	2,500	50	156,0	16,0	31,5	KE 31,5	43,0

LS KE KE KR — L1

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

RFID optional

SpanSet Certified Safety

Four-leg RS sling
Typ LS, 2,1 - 63,0 t

- 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

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 140 et seq.

Nominal carrying capacity [kg]	Load capacity [kg] to 45°	Load capacity [kg] to 60°	Item No. for L1=1 m	Item No. for L1=2 m	L1 min. [m]	L1 max. [m]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	LS 4 x LS	KE 8 x KE	KRR 1 x KRR
2.100	**2.100**	**1.500**	**2024715**	**2002884**	0,375	10	9,1	1,2	1,5	KE 2,0	3,0
4.200	**4.200**	**3.000**	**2024716**	**2002886**	0,375	10	11,8	2,0	2,5	KE 2,0	5,3
6.300	**6.300**	**4.500**	**2024717**	**2002888**	0,375	20	18,4	3,2	4,0	KE 3,15	8,0
8.400	**8.400**	**6.000**	**2024718**	**2002890**	0,375	20	27,1	4,0	4,0	KE 5,3	14,0
10.500	**10.500**	**7.500**	**2024719**	**2002892**	0,375	20	32,0	4,4	6,7	KE 5,3	14,0
12.600	**12.600**	**9.000**	**2024720**	**2002894**	1,000	20	43,0	5,6	6,7	KE 8,0	14,0
16.800	**16.800**	**12.000**	**2024721**	**2002896**	1,000	20	46,3	7,2	10,0	KE 8,0	21,2
21.000	**21.000**	**15.000**	**2024722**	**2002898**	2,500	50	102,0	10,0	10,0	KE 12,5	21,2
31.500	**31.500**	**22.500**	**2024723**	**2002900**	2,500	50	168,0	14,0	16,0	KE 15,0	33,5
42.000	**42.000**	**30.000**	**2024724**	**2002902**	2,500	50	260,0	20,0	20,0	KE 21,2	53,0
52.500	**52.500**	**37.500**	**2024725**	**2002904**	2,500	50	343,0	24,0	27,0	KE 31,5	53,0
63.000	**63.000**	**45.000**	**2024726**	**2002906**	2,500	50	363,0	32,0	31,5	KE 31,5	70,0

LS KE KE KRR — L1

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

RFID optional



Fittings
according to DIN EN 1677

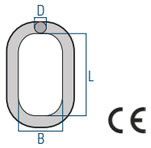


- Particularly robust: forged fittings protect the round sling from wear thanks to an intelligent design

Fitting KR



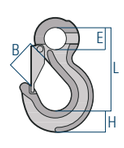
Crane ring [KR]

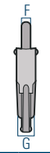


CE

Load capacity [kg]	Item No.	B [mm]	D [mm]	L [mm]	Weight [kg]
1.400	**1049851**	51	13	91	0,29
2.500	**1062800**	56	16	107	0,53
4.000	**1050257**	69	18	130	0,79
5.600	**1050290**	80	20	137	1,10
6.700	**1050256**	90	22	155	1,50
10.000	**1048763**	105	26	175	2,30
14.000	**1050291**	125	32	230	4,40
22.400	**1048873**	160	40	290	8,60
25.000	**2004312**	150	38	250	7,00
28.000	**2004313**	150	40	250	8,00
43.000	**2004314**	200	50	300	15,00

Load hook [LS]





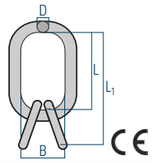
CE

Load capacity [kg]	Item No.	B [mm]	E [mm]	F [mm]	G [mm]	H [mm]	L [mm]	Weight [kg]
1.500	**2002908**	24	22	10	17	20	94	0,40
2.500	**2002909**	26	27	12	17	23	108	0,60
4.000	**2003377**	35	34	14	23	30	134	1,10
6.700	**2003800**	42	43	18	28	38	166	2,10
10.000	**2003801**	51	56	22	36	47	203	4,10
16.000	**2003802**	61	61	26	42	60	229	6,50
20.000	**2003803**	73	64	31	43	67	267	8,70
27.000	**2003804**	81	66	32	51	75	301	13,20
31.500	**2004315**	93	76	38	61	80	333	18,90

Fitting LS



Crane ring for multi-strand slings [KRR]



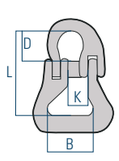
CE

Load capacity [kg]	Item No.	B [mm]	D [mm]	L [mm]	L_1 [mm]	Weight [kg]
3.000	**1050295**	56	16	107	165	1,00
5.300	**1050294**	78	20	138	200	2,20
8.000	**1050293**	105	26	175	265	3,80
14.000	**1050292**	125	32	230	345	7,70
21.200	**1048766**	160	40	290	420	13,00
33.500	**1048875**	190	50	335	500	24,80
53.000	**2003798**	260	80	470	750	46,00
70.000	**2003799**	260	80	470	750	71,00

Fitting KRR



Coupling element [KE]





CE

Load capacity [kg]	Item No.	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 KE





SpanSet Certified Safety

Joker® hook
1,0 - 10,0 t

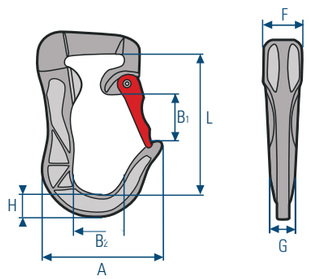


- Colour-coded components according to DIN EN 1492-1
- Hard-wearing fittings according to DIN EN 1677
- Turns round slings into multi-leg RS slings
- Ideal connection between two items of lifting gear









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.

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.

Load capacity [kg]	Item No.	A [mm]	B_1 [mm]	B_2 [mm]	F [mm]	G [mm]	H [mm]	L [mm]	Weight/ Unit [kg]
1.000	**2002833**	89	29	31	31	14	17	133	0,7
2.000	**2002834**	105	35	40	36	21	24	156	1,1
3.000	**2003304**	125	36	48	47	25	29	170	1,6
6.000	**2003762**	155	48	60	60	35	35	215	4,0
10.000	**2003763**	204	70	80	70	50	58	303	9,9



02.4

Flat slings

PowerStar CS, 4-ply	72 - 73
PowerStar B, 2-ply	74 - 77
PowerForce®, 1-ply	78 - 81
Liftfix flat sling, 2-ply	82 - 83
Powerband flat sling, 1- und 2-ply	84 - 85
Flat slings, 1-ply	86 - 87
ASG flat slings, 1-ply	86 - 87

How SpanSet lifting straps contribute to the ecological footprint

ZF Friedrichshafen AG is a globally active technology group that provides systems for the mobility of passenger cars, commercial vehicles, and industrial technology. The company operates in 32 countries. At the location in Lommel, Belgium, ZF Wind Power Antwerpen NV specializes in the development of custom and modular gearbox designs for turbines in the onshore and offshore industries. When it comes to the transport and assembly of individual components, ZF relies on SpanSet PowerStar lifting straps, which, when used in combination with protective sleeves, are perfect for lifting and turning sharp-edged loads with the smallest edge radii. The individual elements of the gearboxes are precision work to the millimeter. Damage would be very time and cost-intensive, which is why ZF trust SpanSet. Especially with the several-ton and sharp-edged gears, the lifting equipment paired with the optimally coordinated protective sleeves provide the necessary safety for employees and components.

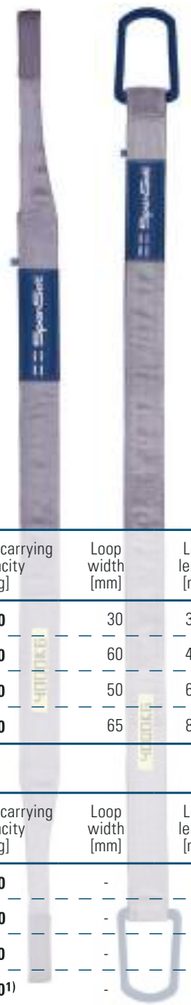
The PowerStar series of lifting straps is available in 2-ply and 4-ply versions, each with different product advantages. The 4-ply PowerStar CS lifting straps are ideal for use with narrow contact surfaces or limited space for attaching the lifting accessory. New to the product range are the PowerForce® lifting straps made from the highly cut and abrasion-resistant high-performance fiber HMPE. The advantage: When attaching to sharp edges with a radius of more than 2 mm, no additional protection is needed, which is already considered razor-sharp for conventional, 2-ply lifting straps and is strictly prohibited. Lifting strap slings that combine the benefits of a round sling and a lifting strap, as well as disposable lifting straps for single use, complete our product range. Versatile in their applications while ensuring the highest safety for the user and the load – that's what sets our lifting straps apart.

SpanSet – Certified Safety

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-shackles



CE

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-shackles as standard, which make PowerStar even more convenient to use. The version with D-shackles 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 88.

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]	Item No. 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	**2002944**	**2002945**	**2003395**	**2003870**	**2003871**	**2003872**
4.000	60	400	1,3	60	11,2	1,0	0,8	**2002948**	**2002949**	**2003397**	**2003876**	**2003877**	**2003878**
6.000	50	600	1,7	90	12,0	1,5	1,2	**2002950**	**2003398**	**2003399**	**2003881**	**2003882**	**2003883**
8.000	65	800	2,2	120	12,4	2,2	1,6	-	**2002951**	**2003400**	**2003401**	**2003884**	**2003885**

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]	Item No 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	**2002946**	**2002947**	**2003396**	**2003873**	**2003874**	**2003875**
4.000	-	-	1,3	60	11,2	3,0	0,8	**2003879**	**2003880**	**2004348**	**2004349**	**2004350**	**2004351**
6.000	-	-	1,7	90	12,0	6,6	1,2	**2004352**	**2004353**	**2004354**	**2004355**	**2004356**	**2004357**
8.000[1)]	-	-	2,2	120	12,4	11,2	1,6	-	**2004358**	**2004359**	**2004360**	**2004361**	**2004362**

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



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



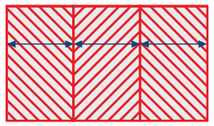


PowerStar – flat sling with „measurable“ load capacity

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.

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.

[1] Alternating weaving pattern every 30 mm.



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]	Item No. for standard lengths (L1) 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	**2002956**	**2003410**	**2003411**	**2003893**	**2003894**	**2003895**
2.000	35	300	1,0	60	5,6	0,6	0,4	**2002958**	**2003414**	**2003415**	**2003899**	**2003900**	**2003901**
3.000	50	400	1,3	90	6,0	1,0	0,6	**2002959**	**2003416**	**2003417**	**2003902**	**2003903**	**2003904**
4.000	65	400	1,3	120	6,2	1,4	0,8	**2002960**	**2003418**	**2003419**	**2003905**	**2003906**	**2003907**
5.000	80	500	1,5	150	6,4	1,7	1,0	**2002961**	**2003420**	**2003421**	**2003908**	**2003909**	**2003910**
6.000	70	700	1,9	180	7,6	2,2	1,2	**2002962**	**2003422**	**2003423**	**2003911**	**2003912**	**2003913**
8.000	90	800	2,2	240	7,6	2,9	1,6	-	**2002963**	**2003424**	**2003425**	**2003914**	**2003915**
10.000	160	1.000	2,6	300	7,6	4,1	2,2	-	**2002964**	**2003426**	**2003427**	**2003916**	**2003917**

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





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

- D-shackle 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-shackles

The D-shackles 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.

Nominal carrying capacity [kg]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Item No. for standard lengths 2 m	3 m	4 m	5 m	6 m	8 m
1.000	1,0	30	5,6	1,4	0,2	**2002957**	**2003412**	**2003413**	**2003896**	**2003897**	**2003898**
2.000	1,0	60	5,6	2,2	0,4	**2002965**	**2003428**	**2003429**	**2003918**	**2003919**	**2003920**
3.000	1,0	90	6,0	4,2	0,6	**2002966**	**2003430**	**2003431**	**2003921**	**2003922**	**2003923**
4.000	1,2	120	6,2	5,4	0,8	**2002967**	**2003432**	**2003433**	**2003924**	**2003925**	**2003926**
5.000	1,5	150	6,4	9,0	1,0	**2002968**	**2003434**	**2003435**	**2003927**	**2003928**	**2003929**
6.000	1,8	180	7,6	15,2	1,2	**2002969**	**2003436**	**2003437**	**2003930**	**2003931**	**2003932**
8.000	2,2	240	7,6	22,6	1,6	-	**2002970**	**2003438**	**2003439**	**2003933**	**2003934**
10.000	2,6	300	7,6	35,2	2,2	-	**2002971**	**2003440**	**2003441**	**2003935**	**2003936**

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



PowerForce®
1-ply, 1,0 - 6,0 t



- Extremely cut-resistant
- Particularly low stretch (Less than 2%) and high tensile strength
- Low weight
- Excellent UV and media resistance
- With RFID transponder
- Loop reinforcement protects against abrasion stress in the crane hook



PowerForce® – high cut resistance with minimal stretch

More Safety, longer service life
The unique feature of the PowerForce® lifting sling is its fabric construction made of the extremely cut and abrasion-resistant high-performance fiber HMPE (high-molecular-weight polyethylene). It does not require additional protection when used on sharp edges with a radius of more than 2 mm - a radius that is already considered razor-sharp and strictly prohibited for conventional, double-layered lifting slings. The low stretch of the high-performance fiber fabric is also advantageous, leading to direct force buildup and enabling precise lifting operations.

A great idea: The seam construction
State-of-the-art, computer-controlled sewing machines ensure consistently high seam quality - made in Germany. The main seam in PowerForce® lifting slings is particularly small and space-saving and is executed with black thread. As a result, there is more contact surface for the load compared to conventional lifting slings of the same length. Additionally, the black thread on white fabric makes visual inspection easier.

The PowerForce® lifting sling is equipped with tear-resistant quality labels with RFID transponders. PowerForce® was designed in accordance with EN 1492-1, which also applies to polyester lifting slings. It is referred to as „in accordance“ because the standard does not consider the HMPE material, and the label is in white.

PowerForce® flat sling with loop

Nominal carrying capacity [kg]	Strap thickness [mm]	Strap width [mm]	Loop width [mm]	Loop length [mm]	min. length L1 [mm]	Approx. weight first running m [kg]	Approx. weight per running m [kg]	L1	Item No. for standard lengths				
									2 m	3 m	4 m	5 m	6 m
1.000	3	40	30	300	1,0	0,18	0,08		**2002972**	**2003442**	**2003443**	**2003937**	**2003938**
2.000	3	80	40	300	1,2	0,36	0,16		**2002973**	**2003444**	**2003445**	**2003940**	**2003941**
3.000	3	120	50	400	1,5	0,59	0,24		**2002974**	**2003446**	**2003447**	**2003943**	**2003944**

PowerForce® endless flat sling

Nominal carrying capacity [kg]	Strap thickness [mm]	Strap width [mm]	min. length L1 [mm]	Approx. weight first running m [kg]	Approx. weight per running m [kg]	L1	Item No. for standard lengths				
							2 m	3 m	4 m	5 m	6 m
2.000	3	40	1,0	0,24	0,16		**2020087**	**2020088**	**2020097**	**2020098**	available on request
4.000	3	80	1,0	0,39	0,32		**2024796**	**2024798**	**2024799**	**2024800**	available on request
6.000	3	120	1,5	0,62	0,48		**2008318**	**2008325**	**2008334**	**2008335**	available on request

ℹ Special designs available on request. Manufactured based to DIN EN 1492-1.



PowerForce® with D-shackles, 1-ply 1,0 - 6,0 t

- Versions with D-attachments
- Extremely cut-resistant
- Particularly low stretch (Less than 2%) and high tensile strength
- Low weight
- Excellent UV and media resistance
- With RFID transponder







PowerForce® – lifting straps with D-attachments

Additional application convenience
SpanSet PowerForce® is available in two additional versions. One with two D1 attachments, and specifically for use in a choked configuration, a combination of a D1 and a D2 attachment (pass-through shackle) is offered.

Successfully tested
SpanSet has extensively examined and tested the cut resistance of PowerForce® lifting slings in laboratory and field trials. Among the tests conducted was a cyclic loading test in which PowerForce® lifting slings were loaded up to their capacity on a 2 mm edge radius 20,000 times, showcasing their impressive cut resistance. Additionally, in the subsequent residual strength test, the safety factor of 7 as required by the standard for production testing of new lifting slings (without fittings) was achieved, which even surprised the developers.

The results, and thus the suitability for use of PowerForce® lifting slings, were confirmed by DNV GL (Det Norske Veritas Germanischer Lloyd).

PowerForce® flat sling with D1-shackles

Nominal carrying capacity [kg]	Strap thickness [mm]	Strap width [mm]	min. length L1 [mm]	Approx. weight first running m [kg]	Approx. weight per running m [kg]	Item No.for standard lengths L1 2 m	3 m	4 m	5 m	6 m
1.000	3	40	1,0	0,57	0,06	**2002975**	**2003448**	**2003449**	**2003946**	**2003947**
2.000	3	80	1,0	0,93	0,16	**2002976**	**2003450**	**2003451**	**2003949**	**2003950**
3.000	3	120	1,0	1,62	0,24	**2002977**	**2003452**	**2003453**	**2003952**	**2003953**

PowerForce® flat sling with D1- and D2-shackle

Nominal carrying capacity [kg]	Strap thickness [mm]	Strap width [mm]	min. length L1 [mm]	Approx. weight first running m [kg]	Approx. weight per running m [kg]	Item No. for standard lengths L1 2 m	3 m	4 m	5 m	6 m
1.000	3	40	1,0	0,93	0,06	**2020090**	**2020091**	**2020092**	**2020093**	**2020094**
2.000	3	80	1,0	1,59	0,16	**2008327**	**2008328**	**2008329**	**2008330**	**2008331**
3.000	3	120	1,0	2,53	0,24	**2025142**	**2024795**	**2025143**	**2025144**	**2025145**

ℹ Special designs available on request. Manufactured based to DIN EN 1492-1.





Liftfix HB
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.

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]	Item No. 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	**2002924**	**2002925**	**2003385**	**2003840**	**2003841**	**2003842**
1.000	30	300	1,0	30	5,2	0,2	0,2	**2002926**	**2002927**	**2003386**	**2003843**	**2003844**	**2003845**
1.500	35	300	1,0	50	6,8	0,4	0,3	**2002928**	**2002929**	**2003387**	**2003846**	**2003847**	**2003848**
2.000	40	300	1,2	60	5,0	0,4	0,3	**2002930**	**2002931**	**2003388**	**2003849**	**2003850**	**2003851**
3.000	50	400	1,5	90	5,0	0,6	0,5	**2002932**	**2002933**	**2003389**	**2003852**	**2003853**	**2003854**
4.000	70	400	1,5	120	6,8	0,9	0,8	**2002934**	**2002935**	**2003390**	**2003855**	**2003856**	**2003857**
5.000	80	500	1,7	150	6,6	1,2	1,0	**2002936**	**2002937**	**2003391**	**2003858**	**2003859**	**2003860**
6.000	100	700	2,1	180	7,2	1,4	1,2	**2002938**	**2002939**	**2003392**	**2003861**	**2003862**	**2003863**
8.000	130	800	2,3	240	7,2	1,8	1,6	**2002940**	**2002941**	**2003393**	**2003864**	**2003865**	**2003866**
10.000	160	1.000	2,6	300	7,4	2,4	2,3	-	**2002943**	**2003394**	**2003867**	**2003868**	**2003869**

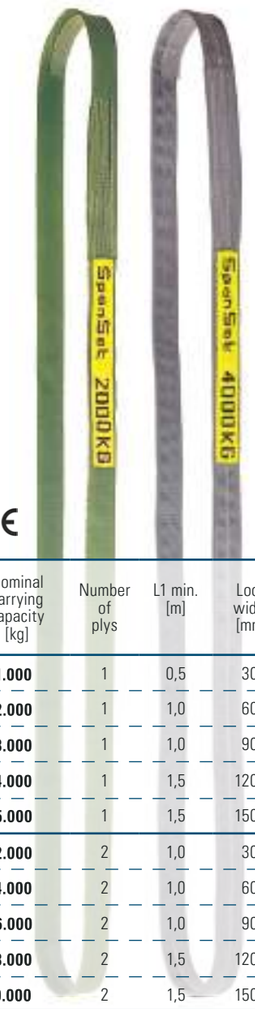
Special designs available on request. Also available with D-links on request. Manufactured according to DIN EN 1492-2.



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



- Sewn patch in signal colour with load capacity indication



CE

Powerband endless flat slings – without hooks and eyes

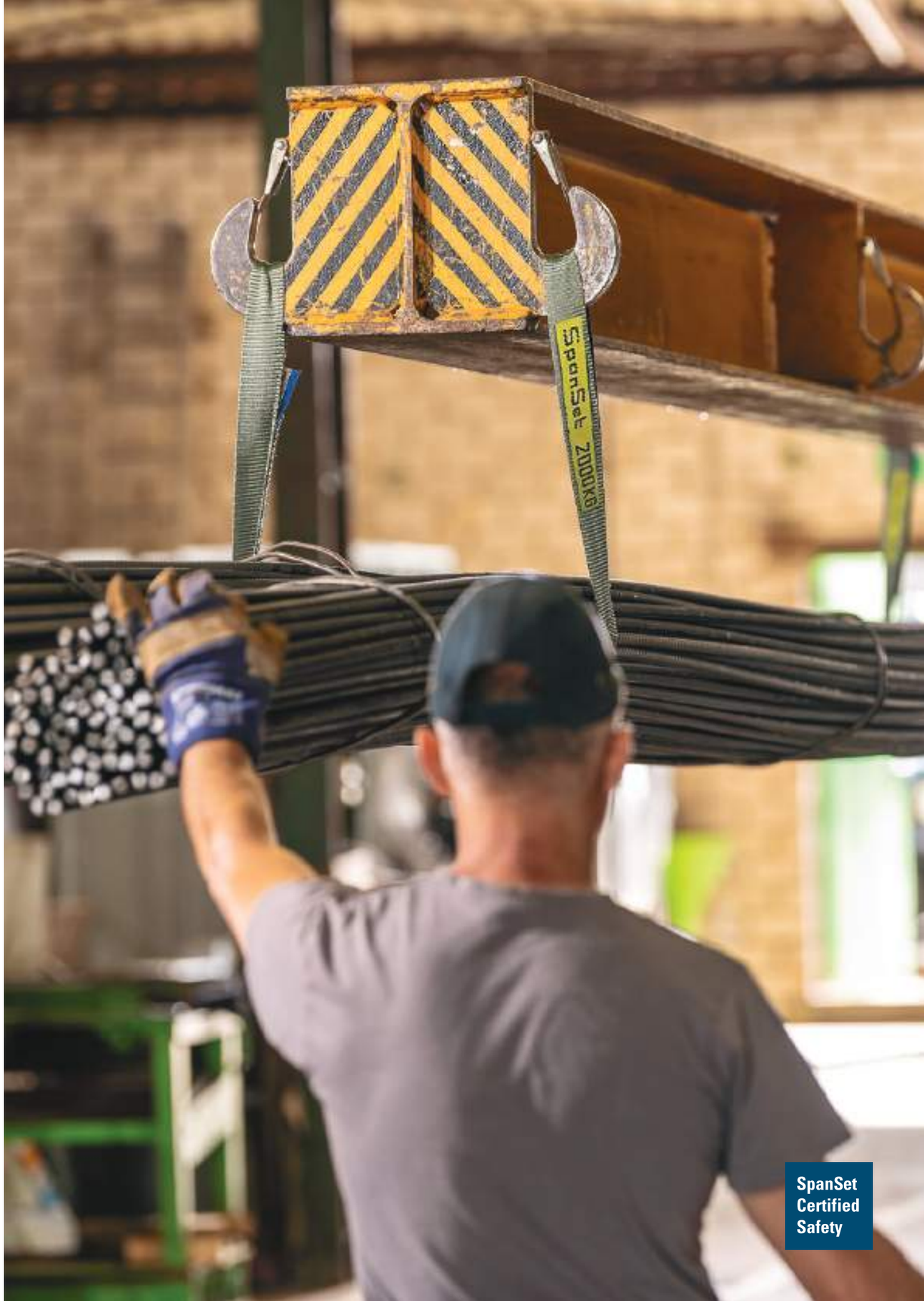
The endless flat sling is sewn using high-strength polyester fabric. It combines the advantages of the round sling and strap: a contact area that is gentle on the load, variable working length and thus ideal for use in frequently changing applications. It can also be easily used with load beams and turning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

Nominal carrying capacity [kg]	Number of plys	L1 min. [m]	Loop width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Item No. 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	**2025051**	**2025052**	**2025053**	**2025054**	**2025055**	**2025056**
2.000	1	1,0	60	2,8	0,3	0,2	**2025057**	**2025058**	**2025059**	**2025060**	**2025061**	**2025062**
3.000	1	1,0	90	3,0	0,4	0,3	**2025063**	**2025064**	**2025065**	**2025066**	**2025067**	**2025068**
4.000	1	1,5	120	3,1	0,6	0,4	**2025085**	**2025086**	**2025087**	**2025088**	**2025089**	**2025090**
5.000	1	1,5	150	3,2	0,8	0,5	-	**2025074**	**2025075**	**2025076**	**2025077**	**2025078**
2.000	2	1,0	30	5,6	0,3	0,2	**2025079**	**2025080**	**2025081**	**2025082**	**2025061**	**2025062**
4.000	2	1,0	60	5,6	0,5	0,4	**2025085**	**2025086**	**2025087**	**2025088**	**2025089**	**2025090**
6.000	2	1,0	90	6,0	0,7	0,6	**2025091**	**2025092**	**2025093**	**2025094**	**2025095**	**2025096**
8.000	2	1,5	120	6,2	1,0	0,8	-	**2025131**	**2025132**	**2025133**	**2025134**	**2025135**
10.000	2	1,5	150	6,4	1,3	1,0	-	**2025136**	**2025137**	**2025138**	**2025139**	**2025140**

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



Flat slings, 1-ply
ASG flat slings, 1-ply





- Cost-effective endless flat slings 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]	Item No.	L1 min. [m]	Approx. strap width [mm]	Approx. strap thickness [mm]	Approx. weight per m circumference [kg]
750	**1.500**	**2002979**	0,300	50	1,3	0,041
750	**1.500**	**2003456**	0,325	50	1,3	0,050
750	**1.500**	**2003457**	0,400	50	1,3	0,060
750	**1.500**	**2003958**	0,425	50	1,3	0,063
1.500	**3.000**	**2002980**	0,300	50	2,8	0,080
1.500	**3.000**	**2003459**	0,400	50	2,8	0,091
1.500	**3.000**	**2024768**	0,500	50	2,8	0,109
1.500	**3.000**	**2024769**	0,600	50	2,8	0,128

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. Advantage: You save costs, because the 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. 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]	Item No.	L1 min. [m]	Approx. strap width [mm]	Approx. strap thickness [mm]	Approx. weight per m circumference [kg]
400	**800**	**2024770**	1,0	25	1,3	0,060
400	**800**	**2024771**	1,5	25	1,3	0,083
400	**800**	**2024772**	2,0	25	1,3	0,109
400	**800**	**2024773**	4,0	25	1,3	0,213

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



02.5

Heavy-duty flat slings

PowerStar CS, 4-ply 90 - 91

How PowerStar heavy-duty lifting slings protect the hull even under load

Some think of exceptionally wide heavy-duty lifting slings in terms of the tremendous payload they can handle, while others consider the large contact area they provide to protect the lifted goods from pressure points. In the case of CIMOLAI Technology, an Italian steel construction company, both aspects are crucial. Travel lifts are a common sight in many ports, resembling smaller siblings of the gantry cranes used in seaports to load and unload ocean vessels. However, in this context, they are used not for unloading container ships but for hoisting boats out of the water and placing them on trailers for land transportation. Often, these are expensive sailboats or yachts destined for exhibitions or extensive maintenance that can only be performed on land. „Our customer wants to prevent the lifting sling from pressing into the hull under load and leaving dents because yacht owners wouldn't appreciate that," says SpanSet Export Manager René Ferreira Tomaz. „That's why CIMOLAI Technology prefers the extra-wide heavy-duty slings, which distribute the force more effectively, thus avoiding point loads. NoCut® protective sleeves ensure that the ship's hull is securely cradled in the lifting slings."

In technical terms, they are referred to as PCS (Point of Contact Spread) lifting slings. Their official SpanSet name is PowerStar CS heavy-duty lifting slings. The four-layer versions are exceptionally strong and have double the load capacity compared to their two-layer counterparts. Thanks to their robust web construction, these slings, which can be up to 30 centimeters wide, have a rated capacity of up to 20 tons.

SpanSet – Certified Safety

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-shackle 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]	Item No. for standard lengths					
								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	-	**2002952**	**2003402**	**2003403**	**2003886**	**2003887**
12.000	95	1.100	2,8	180	15,2	3,6	2,4	-	**2002953**	**2003404**	**2003405**	**2003888**	**2003889**
16.000	125	1.200	3,0	240	15,2	4,0	3,2	-	**2002954**	**2003406**	**2003407**	**2003890**	**2003891**
20.000	155	1.400	3,4	300	15,2	7,0	4,4	-	-	**2002955**	**2003408**	**2003409**	**2003892**

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]	Item No. for standard lengths					
								2 m	3 m	4 m	5 m	6 m	8 m
10.000	-	-	2,4	150	12,8	14,9	2,0	-	**2004368**	**2004369**	**2004370**	**2004371**	**2004372**
12.000	-	-	2,8	180	15,2	21,5	2,4	-	**2004378**	**2004379**	**2004380**	**2004381**	**2004382**
16.000	-	-	3,0	240	15,2	39,0	3,2	-	**2004388**	**2004389**	**2004390**	**2004391**	**2004392**
20.000	-	-	3,4	300	15,2	63,0	4,4	-	-	-	**2004398**	**2004399**	**2004400**

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]	Item No. for standard lengths					
								2 m	3 m	4 m	5 m	6 m	8 m
10.000	-	-	2,4	150	12,8	14,9	2,0	-	**2004373**	**2004374**	**2004375**	**2004376**	**2004377**
12.000	-	-	2,8	180	15,2	21,5	2,4	-	**2004383**	**2004384**	**2004385**	**2004386**	**2004387**
16.000	-	-	3,0	240	15,2	39,0	3,2	-	**2004393**	**2004394**	**2004395**	**2004396**	**2004397**
20.000	-	-	3,4	300	15,2	63,0	4,4	-	**2024821**	**2024822**	**2004401**	**2004402**	**2004403**

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

RFID optional



02.6

Flat slings with secutex®-coating

PowerflexPlus+ lifting sling [P2] 94 - 97

secuflex lifting sling [SX] 98 - 101

secutex® lifting sling [S2] 102 - 105

How coated lifting straps align rails on the right track

Millions of people in Germany commute by train daily. The Ruhr area alone boasts a 1,600-kilometer-long railway network for rail transport. The company Gasthaus, based in the Ruhr metropolis Duisburg, is a qualified supplier to the German Railways (Deutsche Bahn AG) and is one of the manufacturers of railway tracks for rail construction. The fully assembled components are transported to the installation site by freight train from here. For loading, the company relies on SpanSet lifting straps with the special secutex® coating. The coated lifting straps are ideal for narrow attachment points. Due to the double-sided coating, the lifting strap can be attached to the load from both sides, eliminating the possibility of application errors. Gasthaus is firmly convinced: „Despite the fact that some of the components have extremely rough and sharp edges, we do not need additional protective sleeves due to the coating, which makes the attachment significantly easier and faster."

Coated lifting straps come in various standard versions, such as secutex® (S2) or Powerflex coating (P2), or a combination of both materials (SX). The secutex® coating penetrates deep into the fabric of the lifting strap, creating an inseparable connection. The textile fabric is protected against the ingress of foreign substances. Available in different hardness levels, the damping moment of the coating can be optimally adjusted to the lifting operation and the nature of the respective load. As the lifting strap is fully encased, both sides can be used as attachment points. Loop reinforcement also protects against abrasion, and options with C- or D-attachments are also available. This makes our coated lifting straps suitable for any lifting operation.

SpanSet – Certified Safety

PowerflexPlus+ [P2]-flat slings
1,0 - 10,0 t



- Double-sided PowerflexPlus+ coating
- Tear-resistant label protected with sleeve
- Optional RFID transponder available
- Loop reinforcement to protect from abrasion
- Sealed, easy-to-clean surface
- No creasing in the textile



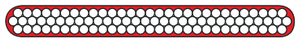
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PowerflexPlus+ – die grüne Beschichtung für eine höhere Lebensdauer

For tough working conditions
Powerflex-coated lifting slings are often used on construction sites, outdoors, and in wet or dirty environments. The Powerflex thin coating has been significantly improved for these applications. By modifying the base components, the service life in combination with moisture resistance has been enhanced. The new, highly compact PowerflexPlus+ thin coating wraps the sling either partially or completely. It is extremely abrasion-resistant, making it ideal for very rough surfaces. The thin PowerflexPlus+ spray coating protects the fabric against dirt and the penetration of foreign particles while maintaining the sling's high flexibility. Reinforced loops further extend the service life of the lifting equipment.

Double-sided coating
The PowerflexPlus+ sling is fully coated, providing complete abrasion protection. Both sides of the sling can be used as the load-bearing side. This eliminates the risk of dangerous mix-ups and also extends the service life due to the double-sided coating.

Powerflex-coating



More information
Check out the secutex PowerflexPlus+ product brochure.

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]	Item No. 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	**2015456**	**2015457**	**2015458**	**2015459**	**2015460**	**2025311**
2.000	35	300	1,0	60	9,5	1,0	0,6	**2015462**	**2015464**	**2015465**	**2015466**	**2015467**	**2025312**
3.000	50	400	1,3	90	9,9	1,3	0,8	**2015469**	**2015470**	**2015471**	**2015472**	**2015473**	**2025313**
4.000	65	400	1,3	120	10,9	1,8	1,1	**2015474**	**2015475**	**2015476**	**2015477**	**2015478**	**2025314**
5.000	80	500	1,5	150	10,9	2,4	1,4	**2015479**	**2015480**	**2015481**	**2015482**	**2015483**	**2025315**
6.000	70	700	1,9	180	11,1	3,0	1,7	**2025316**	**2025317**	**2025318**	**2025319**	**2025320**	**2025321**
8.000	90	800	2,2	240	11,1	4,3	2,3	-	**2025322**	**2025323**	**2025324**	**2025325**	**2025326**
10.000	160	1.000	2,6	300	11,5	7,2	2,8	-	**2025327**	**2025328**	**2025329**	**2025330**	**2025331**

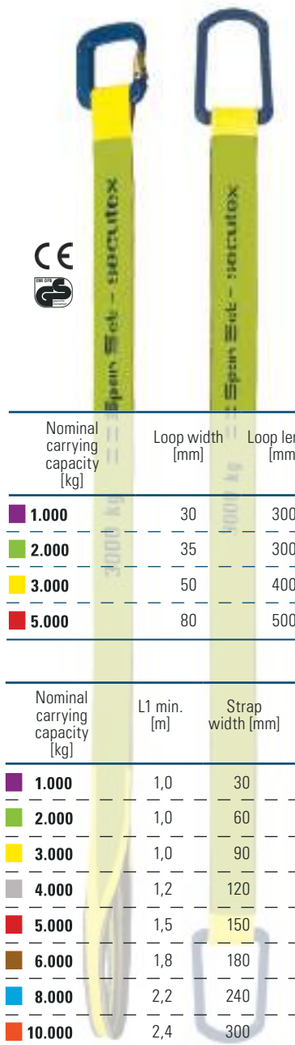
Special designs available on request. Manufactured according to DIN EN 1492-2.



PowerflexPlus+ [P2]-flat slings
with C-shackle or D-shackle, 1,0-10,0 t



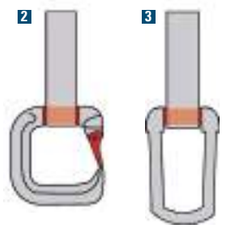
- Two-sided secutex®-Powerflex coating
- Optional fitting with an RFID transponder
- Loop reinforcement to protect from abrasion



Powerflex P2 flat slings with a C-shackle or two D-shackles

Versions with a C- or D-shackle are available for lifting in a noose. The C-shackle 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-shackle 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-shackle with safety catch and guide channel
3 D-shackle 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]	Item No. 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	0,9	0,3	**2025332**	**2025333**	**2025334**	**2025335**	**2025336**	**2025337**
2.000	35	300	1,0	60	9,5	2,5	0,6	**2025338**	**2025339**	**2025340**	**2025341**	**2025342**	**2025343**
3.000	50	400	1,0	90	9,9	4,3	0,8	**2025344**	**2025345**	**2025346**	**2025347**	**2025348**	**2025349**
5.000	80	500	1,5	150	10,9	10,2	1,4	**2025350**	**2025351**	**2025352**	**2025353**	**2025354**	**2025355**

Nominal carrying capacity [kg]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Item No. for standard lengths L1 2 m	3 m	4 m	5 m	6 m	8 m
1.000	1,0	30	9,1	1,0	0,3	**2025402**	**2025403**	**2025404**	**2025405**	**2025406**	**2025407**
2.000	1,0	60	9,5	2,0	0,6	**2025408**	**2025409**	**2025410**	**2025411**	**2025412**	**2025413**
3.000	1,0	90	9,9	3,7	0,8	**2025414**	**2025415**	**2025416**	**2025417**	**2025418**	**2025419**
4.000	1,2	120	10,9	5,4	1,1	**2025420**	**2025421**	**2025422**	**2025423**	**2025424**	**2025425**
5.000	1,5	150	10,9	8,7	1,4	**2025426**	**2025427**	**2025428**	**2025429**	**2025430**	**2025431**
6.000	1,8	180	11,1	14,8	1,7	**2025432**	**2025433**	**2025434**	**2025435**	**2025436**	**2025437**
8.000	2,2	240	11,1	22,8	2,3	-	**2025438**	**2025439**	**2025440**	**2025441**	**2025442**
10.000	2,4	300	11,1	34,0	2,8	-	**2025443**	**2025444**	**2025445**	**2025446**	**2025447**

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

RFIDoptional

SpanSet Certified Safety

secuflex [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. 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)



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]	Item No. 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	**2025156**	**2025157**	**2025158**	**2025159**	**2025160**	**2025161**
2.000	35	300	1,0	60	13,5	1,2	0,8	**2025162**	**2025163**	**2025164**	**2025165**	**2025166**	**2025167**
3.000	50	400	1,3	90	13,9	1,6	1,3	**2025168**	**2025169**	**2025170**	**2025171**	**2025172**	**2025173**
4.000	65	400	1,3	120	14,9	2,2	1,8	**2025174**	**2025175**	**2025176**	**2025177**	**2025178**	**2025179**
5.000	80	500	1,5	150	14,9	2,8	2,2	**2025180**	**2025181**	**2025182**	**2025183**	**2025184**	**2025185**
6.000	70	700	1,9	180	15,1	3,3	2,7	**2025186**	**2025187**	**2025188**	**2025189**	**2025190**	**2025191**
8.000	90	800	2,2	240	15,1	4,2	3,8	-	**2025192**	**2025193**	**2025194**	**2025196**	**2025197**
10.000	160	1.000	2,6	300	15,5	6,8	4,8	-	**2025198**	**2025199**	**2025201**	**2025202**	**2025203**

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

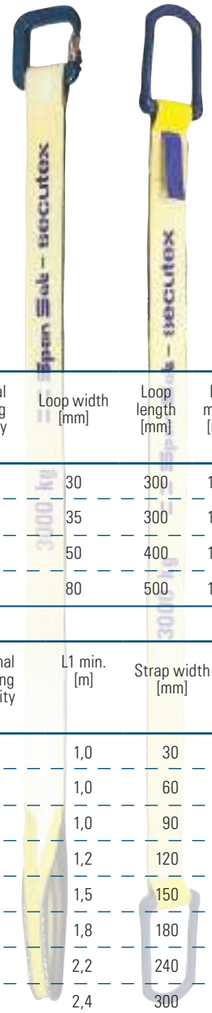


SpanSet Certified Safety

secuflex [SX]-flat slings
with C-shackle or DD-shackles, 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



SX flat slings with a C-shackle or two D-shackles

Quick choking with C-shackle
With the C-shackle at one end, you are allowed to use the SX lifting strap in a choking configuration as well. The strap securely fits in the hook, and the built-in safety catch prevents the strap from slipping out of the attachment point. If the safety catch gets damaged, it can be easily replaced on the C-shackle.

More options with D-attachments
By having D-attachments mounted on both sides, you gain significant flexibility. Simply pass one end of the strap through the opposing D-attachment, and you have a configuration where nothing can slip. Additionally, D-attachments make it easier to hook into crossbeams or crane hooks when used in a straightforward application, as the attachments require only minimal contact area.

Nominal carrying capacity [kg]	Loop width [mm]	Loop length [mm]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	ca. Gewicht 1. m [kg]	Approx. weight per running m [kg]	Item No. for standard lengths (L1) 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	2025204	2025205	2025206	2025207	2025208	2025209
2.000	35	300	1,0	60	13,5	2,7	0,8	2025210	2025211	2025212	2025213	2025214	2025215
3.000	50	400	1,0	90	13,9	3,6	1,3	2025216	2025217	2025218	2025219	2025220	2025221
5.000	80	500	1,5	150	14,9	10,6	2,2	2025222	2025223	2025224	2025225	2025226	2025227

Nominal carrying capacity [kg]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Item No. for standard lengths (L1) 2 m	3 m	4 m	5 m	6 m	8 m
1.000	1,0	30	13,1	1,1	0,4	2025228	2025229	2025230	2025231	2025232	2025233
2.000	1,0	60	13,5	2,2	0,8	2025234	2025235	2025236	2025237	2025238	2025239
3.000	1,0	90	13,9	4,0	1,3	2025240	2025241	2025242	2025243	2025244	2025245
4.000	1,2	120	14,9	5,6	1,8	2025246	2025247	2025248	2025249	2025250	2025251
5.000	1,5	150	14,9	9,1	2,2	2025252	2025253	2025254	2025255	2025256	2025257
6.000	1,8	180	15,1	15,1	2,7	2025258	2025259	2025260	2025261	2025262	2025263
8.000	2,2	240	15,1	23,0	3,8	-	2025264	2025265	2025266	2025267	2025268
10.000	2,4	300	15,5	34,1	4,8	-	2025269	2025270	2025271	2025272	2025273

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



secutex® [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]	Item No. 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	**2015425**	**2015426**	**2015427**	**2015428**	**2015429**	**2018500**
2.000	35	300	1,0	70	17,5	1,4	1,4	**2015430**	**2015431**	**2015432**	**2015433**	**2015434**	**2015435**
3.000	50	400	1,3	100	17,9	2,0	2,1	**2015436**	**2015437**	**2015438**	**2015439**	**2015440**	**2018501**
4.000	65	400	1,3	130	18,9	2,7	2,9	**2015442**	**2015443**	**2015444**	**2015445**	**2015446**	**2018502**
5.000	80	500	1,5	160	18,9	3,4	3,7	**2015447**	**2015448**	**2015449**	**2015450**	**2015451**	**2018503**
6.000	70	700	1,9	190	19,1	3,8	4,4	**2015452**	**2015453**	**2015454**	**2015455**	**2017065**	**2018504**
8.000	90	800	2,2	250	19,1	4,6	6,1	-	**2018505**	**2018506**	**2018507**	**2018508**	**2018509**
10.000	160	1.000	2,6	310	19,5	7,0	7,6	-	**2018510**	**2018511**	**2018512**	**2018513**	**2018514**

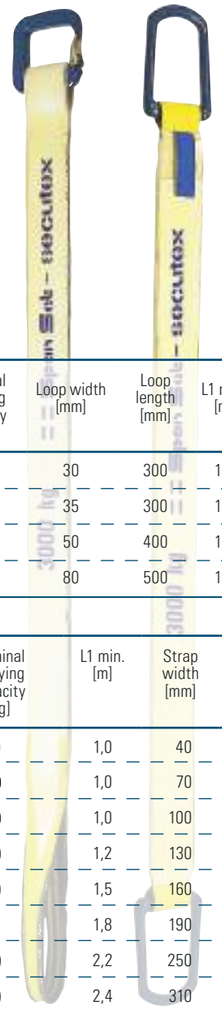
Special designs available on request. Manufactured according to DIN EN 1492-2.

SpanSet Certified Safety

secutex® [S2]-flat slings
with C-shackle or DD-shackles, 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 with a C-shackle or two D-shackles

The S2 flat slings also come in versions with a C-shackle or two D-shackles. The link has a guide channel which supports the entire width of the strap and allows for gliding with minimal wear. The C-shackle 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-shackles give you considerably more flexibility. Simply thread one end of the strap through the opposite shackle – this ensures a lacing in which nothing can slip. Furthermore, the D-shackle makes it easier to hang the sling into spreader beams or crane hooks when applied in a single layer, as the shackles 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]	Item No. for standard lengths (L1) 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	2025449	2025450	2025451	2025452	2025453	2025454
2.000	35	300	1,0	70	17,5	2,9	1,4	2025455	2025456	2025457	2025458	2025459	2025460
3.000	50	400	1,0	100	17,9	5,0	2,1	2025461	2025462	2025463	2025464	2025465	2025466
5.000	80	500	1,5	160	18,9	11,2	3,7	2025467	2025468	2025469	2025470	2025471	2025472

Nominal carrying capacity [kg]	L1 min. [m]	Strap width [mm]	Strap thickness [mm]	Approx. weight 1st m [kg]	Approx. weight per running m [kg]	Item No. for standard lengths (L1) 2 m	3 m	4 m	5 m	6 m	8 m
1.000	1,0	40	17,1	1,4	0,8	2025473	2025474	2025475	2025476	2025477	2025478
2.000	1,0	70	17,5	2,6	1,4	2025479	2015421	2015422	2025480	2025481	2025482
3.000	1,0	100	17,9	4,5	2,1	2015423	2015424	2020671	2025483	2025484	2025485
4.000	1,2	130	18,9	6,4	2,9	2025486	2025487	2025488	2025489	2025490	2025491
5.000	1,5	160	18,9	9,8	3,7	2025492	2025493	2025494	2025495	2025496	2025497
6.000	1,8	190	19,1	15,8	4,4	2025498	2025499	2025500	2025501	2025502	2025503
8.000	2,2	250	19,1	23,6	6,1	-	2025505	2025506	2025507	2025508	2025509
10.000	2,4	310	19,5	34,3	7,6	-	2025510	2025511	2025512	2025513	2025514

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

RFID optional



02.7

Protective sleeves, protective plates and clips

NoCut®	108 - 119
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How textile protective sleeves help securely load sharp-edged steel pipes

VandeGrijp, an international company based in the Netherlands, specializes in the manufacturing of pipes, pipe constructions, and the rental of pipeline tubes for the on- and offshore markets. With production facilities at two locations, VandeGrijp manufactures pipes with lengths of up to 12 meters and internal diameters of up to 1,200 mm. For the loading or handling of sharp-edged steel pipes, the company relies on SpanSet round slings from the Magnum® series, in addition to SpanSet NoCut®, the innovative textile edge protection made from high-performance fibers. VandeGrijp expresses great satisfaction with the use of NoCut: „The protective sleeves are relatively lightweight, easy to install - and most importantly - even with the sharpest edges with a radius of 1 mm, we have no concerns about the safety of our employees and the materials."

When the edge of a load is considered „sharp," it can significantly damage the textile lifting equipment and, in the worst case, even cut through it. NoCut®pad and NoCut®sleeve are innovative textile protective sleeves designed to safeguard against sharp edges. These protective sleeves and pads, made from high-performance fiber HPME, are DEKRA-certified, providing high cut and abrasion resistance, with a low weight and particularly flexible construction. NoCut® is constructed with a fabric rib on both sides. On the outside, the ribbed structure enhances cut resistance, and on the inside, it facilitates the sliding of the lifting attachment within the sleeve, allowing for the rotation and handling of sharp-edged loads. As a leading manufacturer of polyurethane-coated protective sleeves, the SpanSet Group has been producing well-established protective sleeves such as SF-2, secuwave, or Clip-SC made from secutex, an exceptionally cut and wear-resistant polyurethane elastomer.

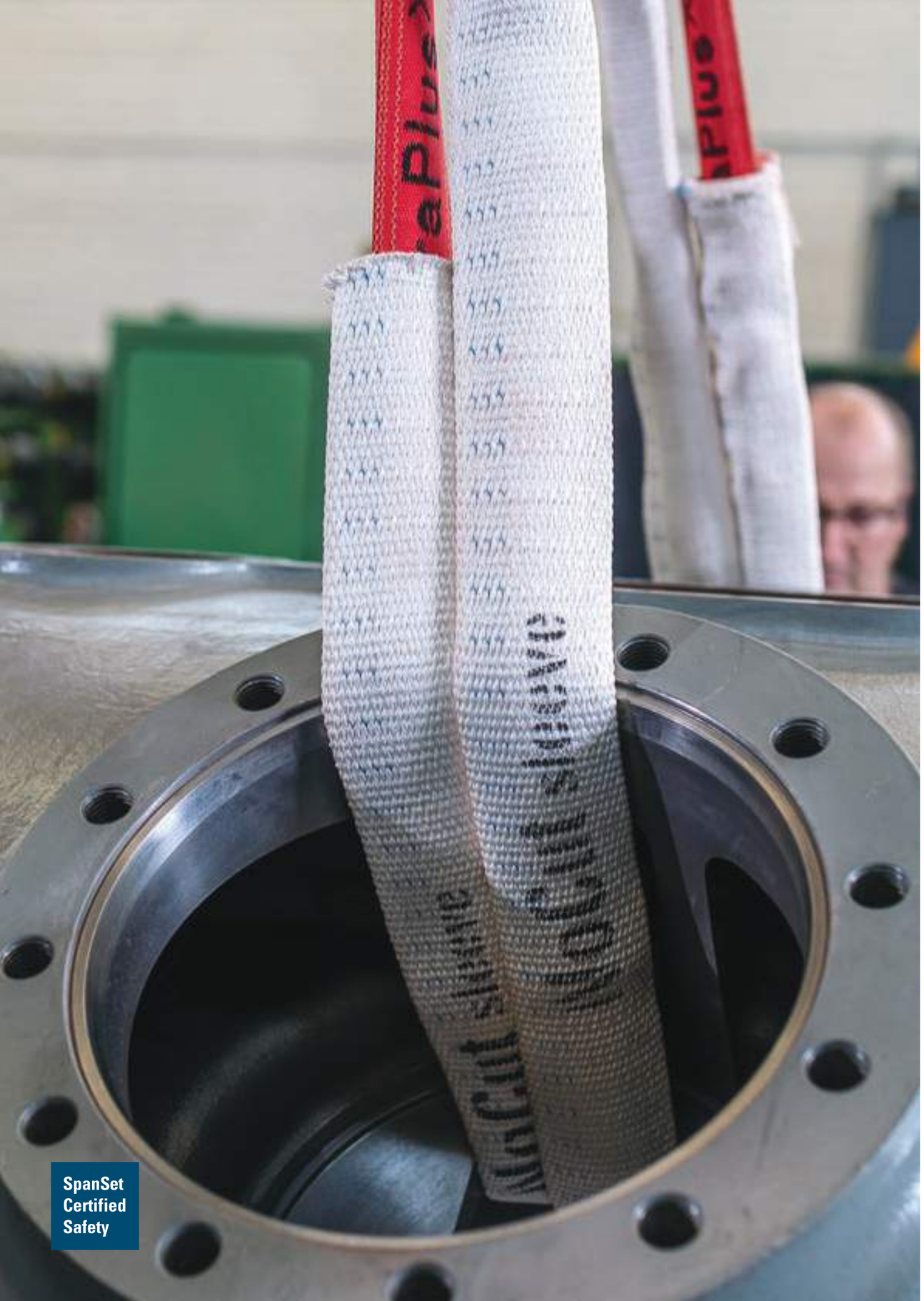
With our extensive range of protective measures, we always have the right tool against the „Sharp Edge."

SpanSet – Certified Safety

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 „sharp edges“
In addition to external factors such as temperature, chemical environment, or mechanical stress, the „sharp edge“ remains one of the primary causes of damage to the lifting equipment itself and, consequently, a frequent cause of accidents. Most damage to sharp or rough edges occurs due to the load‘s movement across the lifting equipment. If the edge is „sharp,“ it can potentially cut through the lifting equipment, leading to accidents and damage. Protect your lifting equipment by using edge protection made from high-performance fibers specifically designed for sharp edges: NoCut®!

Cut protection
from high-performance fibers
The high cut and abrasion resistance of HMPE (high-molecular-weight polyethylene) has led to the development of NoCut® sleeve and NoCut® pad – a trend in the lifting technology industry. High-performance fibers are increasingly used for the development of textile cut protection, hose covers, and lifting equipment due to their outstanding properties.

A special testing facility was constructed and developed for testing NoCut® to determine the fabric‘s cut resistance by subjecting it to cutting forces under rated load. The protective effects of NoCut® sleeve and NoCut® pad on various sharp edges were assessed and certified by DEKRA. These defined insights leave no questions unanswered in practice and are certified by DEKRA!

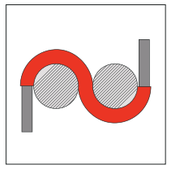
Outstanding characteristics
Of course, NoCut® was adapted to fit the various widths of SpanSet lifting slings and round slings. This makes NoCut® perfectly suitable for protecting textile lifting equipment, such as PowerStar lifting slings and SupraPlus® round slings, particularly against damage from sharp edges during load handling. NoCut® cut protection offers a lightweight design in a compact form for exceptionally ergonomic handling with less effort.

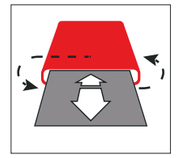
Low weight
Products from the NoCut® series have significantly lower weight compared to traditional protective sleeves, making them easy to handle. The HMPE material allows the use of NoCut® sleeve in a temperature range from -40 °C to +60 °C. The protective sleeve is delivered as a ready-made cut with finished ends.

Verified safety
NoCut® has been successfully tested for its cut resistance in both laboratory and field tests and is certified by DEKRA.




Low dead weight

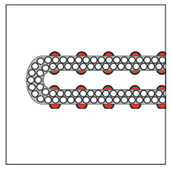

Flexible construction


Equally high all-round cut resistance





Tested cut protection


Unique ribbed structure

NoCut® sleeve



- 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

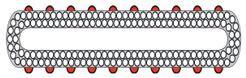
NoCut® sleeve is a woven protective sleeve for flat slings and round slings. The protective sleeve is simply slid over the lifting gear and positioned on the sharp edge of the load to protect the lifting gear. To protect the lifting gear, the fabric sleeve can also be used either for flat slings as shown 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,

The protective sleeve NoCut® sleeve is available for use with flat slings and round slings with lengths in 250-mm increments as

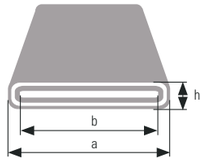
Unique ribbed structure of NoCut sleeve with equally high all-round cut resistance.





NoCut® sleeve – woven protective sleeve for more safety





Designation **NoCut sleeve**	Approx. inside width b [mm]	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-055	55	65	13	0,4	**PowerStar** **Liftfix**	1.000 1.000		
NCS-075	75	85	13	0,6	**PowerStar** **Liftfix** **CS-flat sling**	2.000 2.000 2.000	SupraPlus-X Twintex Liftfix	500 1.000, 2.000 500
NCS- 105	105	115	13	0,8	**PowerStar** **Liftfix** **CS-flat sling**	3.000 3.000 4.000	SupraPlus-X Twintex Liftfix Magnum-X	1.000, 2.000, 3.000 3.000 1.000, 2.000, 3.000 10.000
NCS- 135	135	145	13	1,1	**PowerStar** **Liftfix** **CS-flat sling**	4.000 4.000 6.000	SupraPlus-X Twintex Liftfix	4.000, 5.000, 6.000 4.000 4.000, 5.000
NCS- 165	165	175	13	1,4	**PowerStar** **Liftfix** **CS-flat sling**	5.000 5.000 8.000	SupraPlus-X Twintex Liftfix Magnum-X	8.000 5.000, 6.000, 8.000 6.000, 8.000 20.000
NCS- 195	195	205	13	1,6	**PowerStar** **Liftfix** **CS-flat sling**	6.000 6.000 10.000	Liftfix MagnumPlus MagnumForce Magnum-X	10.000 10.000 10.000 30.000
NCS- 255	255	265	13	2,0	**PowerStar** **Liftfix** **CS-flat sling**	8.000 8.000 12.000	Liftfix MagnumPlus Magnum-X	15.000 15.000 40.000, 50.000
NCS- 315	315	325	13	2,7	**PowerStar** **Liftfix** **CS-flat sling**	10.000 10.000 16.000	Liftfix MagnumPlus Magnum-X	20.000, 25.000 20.000, 25.000 60.000

ℹ 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.

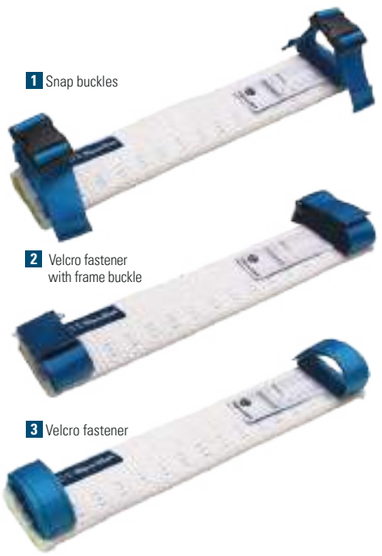


NoCut® pad

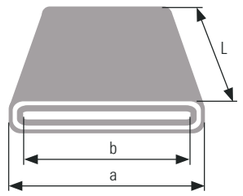




- Very low dead weight
- Flexible construction
- Unique ribbed structure enables turning and rotating of sharp loads
- High operational safety due to tested quality
- High cut resistance
- sewn label with handling instructions



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



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

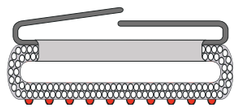



Abb. 1


Abb. 3


Abb. 5

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.

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.

Different designs
NoCut® pad offers the user three alternatives to fasten the protective plate to the lifting gear: Velcro fastener **3** , Velcro strap with a frame buckle **2** or with snap buckles **1**.

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 340 mm.

NoCut pad	Fastening element options	Approx. outside width [mm] a
NoCut pad, 2-layer, 65 mm	1, 3,	65
NoCut pad, 2-layer, 85 mm	1, 3,	85
NoCut pad, 2-layer, 115 mm	1, 2, 3,	115
NoCut pad, 2-layer, 145 mm	1, 2, 3,	145
NoCut pad, 2-layer, 175 mm	1, 2, 3,	175
NoCut pad, 2-layer, 205 mm	1, 2, 3,	205
NoCut pad, 2-layer, 265 mm	1, 2, 3,	265
NoCut pad, 2-layer, 340 mm	1, 2, 3,	340
NoCut pad, 4-layer, 145 mm	1, 2, 3,	145
NoCut pad, 4-layer, 175 mm	1, 2, 3,	175
NoCut pad, 4-layer, 205 mm	1, 2, 3,	205
NoCut pad, 4-layer, 265 mm	1, 2, 3,	265

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® bumper
NoCut® wrap

- very low dead weight
- can be positioned freely
- high operational safety thanks to tested quality
- high cut resistance
- sewn-in label with handling instructions





NoCut® bumper – easy to use without fastening

Optimal protection even in hard-to-reach areas
The NoCut® bumper can be quickly positioned at critical points between the load and the lifting sling without the need for fastening. Depending on the application, the cut protection can be used either crosswise or lengthwise. It consists of a NoCut® sleeve with internal webbing layers that increase the radius at deflection and attachment points on the load. The two-layer, flexible bumper is ideal when the NoCut® sleeve or NoCut® pad cannot be used because of hard-to-reach areas.

The NoCut® bumper can be used on both sides and is matched to the various widths of SpanSet lifting straps and roundslings.

During use, make sure that the ends of the NoCut® bumper extend at least 50 mm beyond the width of the lifting sling. The edge protection can be used as shown in Fig. 1 for lifting straps, or as shown in Figs. 3 and 5 for roundslings.

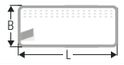
NoCut bumper		ca. Breite [mm]	ca. Länge [mm]	ca. Dicke [mm]
		B	L	
NCB-175		175	340	33
NCB-205		205	400	33
NCB-265		265	520	33




Abb. 1

Abb. 3

Abb. 5

NoCut® Wrap – can always be opened and closed

Edge protection with hook-and-loop fastening
NoCut® Wrap can be wrapped around textile lifting slings in just a few simple steps and secured with a hook-and-loop fastener. Unlike the NoCut® sleeve, which is pulled over the lifting sling as a closed sleeve, the NoCut® Wrap features a reclosable longitudinal opening. After the lifting operation, it can be removed again with ease.

Its well-thought-out design makes handling easier: the edge protection is positioned exactly where the lifting sling comes into contact with the sharp edge, while the hook-and-loop fastener remains free from load. If necessary, the edge protection can be quickly repositioned.

Another advantage: if, during the lifting operation, the sling legs press strongly from the inside against the protective sleeve, the hook-and-loop fastener can open, allowing the sling assembly to spread out freely. Even in the open state, however, the cut protection remains in place.

The NoCut® Wrap is available in various versions with widths from 75 to 315 mm, while the length is adapted individually to customer requirements.

Produkt finder





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**

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 DE-KRA-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!

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.

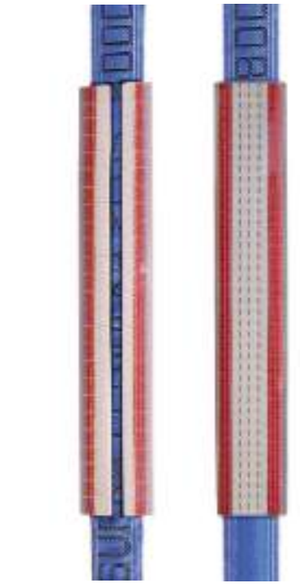
Try it and be convinced

The NoCut product finder is available online at **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.





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
- Magnum®Plus 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

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.

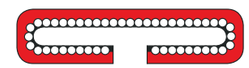
easyClip
Similar to the Clip-SC in terms of design, but with different material properties, easyClip is the simple version of the clip sleeve. For more information, ask us for advice or visit our website at **www.secutex.de**.

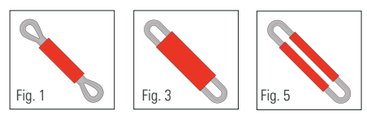
secutex® Clip-SC is available for:

- SupraPlus® round slings
- Magnum-X® round slings
- Magnum®Plus 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.





SF-1 and SF-2

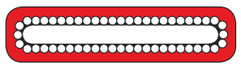
- Version with one- or two-sided coating
- Easy to position
- Extremely cut-resistant
- Reduces creasing in the fabric
- Permanent dimensional stability
- Lifting gear is movable inside the sleeve







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.

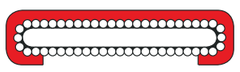



Fig. 1


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
- Magnum®Plus round slings
- Liftfix round slings
- 4-ply CS flat slings
- PowerStar flat slings
- Liftfix flat slings

secuwave

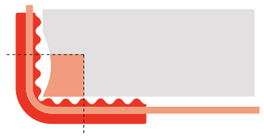
- Prevents contact with the flat sling
- Can be positioned during on going lifting procedures
- Two wave profiles available
- Virtually indestructible
- Permanent dimensional stability







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



secuwave – no contact at critical edges

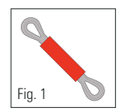
secuwave can handle every edge
secuwave is a thick coated protective sleeve that features a wave structure on the contact side. The wave structures increases the deflection radius on sharp edges. The edge lies inside the wave trough, while the load rests on the top of the wave. The sharp edge no longer 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
- Magnum®Plus round slings
- Liftfix round slings
- 4-ply CS flat slings
- PowerStar flat slings
- Liftfix flat slings


Fig. 1

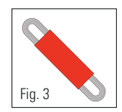

Fig. 3


Abb. 5

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




Fig. 3


Fig. 5

Powerflex – protective sleeve

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
- Magnum®Plus round slings
- Liftfix round slings
- 4-ply CS flat slings
- PowerStar flat slings
- Liftfix flat slings

secumove



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



secumove PB-FS-1 [one-sided] ■ and 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]	Item No. 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

Lifting Clamps

ExoSet Lifting Clamps 124 - 127

Gladiator Lifting Clamps 128 - 131

How SpanSet Lifting Clamps make everyday work on construction sites more efficient

On a newly developed construction site, activity is in full swing. Excavators push earth aside, trucks deliver building materials, and the foundation for a new home is gradually taking shape. But before real progress can be made, there is a major challenge: the ground is uneven and soft – a hazard for construction machinery and vehicles. To create a stable roadway, temporary steel plate roads are laid. Laying these heavy plates must be done quickly, safely, and precisely. This is where SpanSet lifting clamps come into play. Specifically designed for the vertical transport of plates, they allow effortless opening, closing, and gripping – without any additional tools. "Every minute on the construction site counts," says site manager Markus Bergheim. "With ExoSet safety clamps, we not only save time but also reduce stress. The plates can be positioned precisely, and we don't have to worry about sharp edges or slipping loads."

The extensive range of textile lifting equipment is perfectly complemented by the modular SpanSet lifting clamps. They are the ideal solution for vertical transport of plate materials, enabling not only lifting but also 180-degree rotation and exact positioning of the load. An integrated locking mechanism ensures safety both when the clamp is open and closed. Thanks to their modular design, the clamps can be quickly inspected, easily maintained, and individual components can be replaced cost-effectively without having to replace the entire clamp. Additionally, maintenance and service kits are available for all safety lifting clamps, ensuring long service life and sustainable use. With SpanSet lifting clamps, the transport of steel plates becomes not only safer but also more efficient – supporting a smooth construction workflow.

SpanSet – Certified Safety

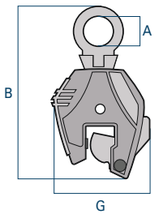
ExoSet® lifting clamps

- Optimal universal lifting ring
- Handle for easier operation
- With integrated RFID chip
- Load capacity color coding
- Shaft made of alloy steel with corrosion protection and traceability code
- Larger lever design for easier opening and closing
- Overload indicator on the housing for improved safety









ExoSet® lifting clamps for vertical plate transport

The corrosion-resistant ExoSet® safety lifting clamps are ideal for lifting, rotating (180°), moving, and vertically transporting plate materials. With their features, the ExoSet® safety clamp represents a significant improvement over conventional lifting clamps. Furthermore, the safety lifting clamps are certified worldwide by DNV.

Improved Safety

The WLL (Working Load Limit) indicator on the lifting ring and handle is clearly visible, making it easy to identify the maximum load. A locking mechanism ensures full safety in both the open and closed positions. Additional safety is provided by an overload indicator. The lifting ring axle has two flat sides, which distributes friction more evenly and helps prevent dents in the clamp body. This extends the service life of the safety lifting clamp.indicator.

Simplified Operation

The use of high-quality welded components and premium Naxtra steel makes the clamps extremely lightweight and robust. The universal lifting ring allows the clamp to position and lift loads from any direction. The handle is designed to give the operator a better grip when attaching the clamp to the plate. An improved and enlarged locking mechanism simplifies opening and closing.

Additional versions

In addition to the universal safety clamp (EVU), there are versions for very hard materials (EVU-H) with a maximum hardness of 473 HV, as well as variants for stainless steel (EVU-S).



Version EVU
for universal use

Item No.	A [mm]	B [mm]	G [mm]	clamping range [mm]	weight/ piece [kg]
2002421	39	226	114	0-16	1,9
2002422	39	237	127	0-20	2,1
2002423	68	375	192	0-35	76
2002424	73	446	229	0-40	14,8
2002425	73	446	229	0-40	16,0
2002426	80	549	284	0-50	24,0



Version EVU-H
for very hard material

Item No.	A [mm]	B [mm]	G [mm]	clamping range [mm]	weight/ piece [kg]
2012561	39	226	114	0-16	1,9
2012562	39	237	127	0-20	2,1
2012563	68	375	192	0-35	76
2012564	73	446	229	0-40	14,8
2012565	73	446	229	0-40	16,0
2012566	80	549	284	0-50	24,0



Version EVU-S
for stainless steel

Item No.	A [mm]	B [mm]	G [mm]	clamping range [mm]	weight/ piece [kg]
2012567	39	226	114	0-16	1,9
2012568	39	237	127	0-20	2,1
2012569	68	375	192	0-35	76
2012570	73	446	229	0-40	14,8
2012571	73	446	229	0-40	16,0
2012572	80	549	284	0-50	24,0



ExoSet® lifting clamps
Spare parts



- Cost-effective replacement of spare parts
- Complete sets for maintenance and revision
- Free service and repair manual
- Traceability of individual components

Maintenance kit



Overhaul kit



Modular system for enhanced safety and cost-effectiveness

Optimal availability of spare parts
The modular system of the Exoset® safety lifting clamp allows for a quick and precise inspection and cost-effective replacement of individual components. Maintenance and revision sets are available for all Exoset® clamps.

Service and Repair
For each Exoset® safety lifting clamp, a service and repair manual is provided. The manual offers clear instructions for inspection, maintenance, and testing. It includes illustrations that explain how the clamps are disassembled and reassembled. Additionally, there is a table with approved tolerances for all parts and guidance on part replacement.

Traceability
The housing and load-bearing parts of the lifting clamp are permanently marked with the SpanSet logo, a serial number, the batch code, the test date, and/or the year of manufacture. Identification points such as clamp type, load capacity, jaw width (in mm and inches) are engraved on the housing of an Exoset® safety lifting clamp.

Load capacity [kg]	Version	Item No. clamp	Item No. Maintenance kit	Item No. Overhaul kit	Item No. handle	Item No. lifting ring
500	Universal / EVU	2002421	2011063	2011069	2011075	2012526
1.000	Universal / EVU	2002422	2011064	2011070	2011076	2012525
2.000	Universal / EVU	2002423	2011065	2011071	2011077	2012527
3.000	Universal / EVU	2002424	2011066	2011072	2011078	2012528
5.000	Universal / EVU	2002425	2011067	2011073	2011079	2012529
6.000	Universal / EVU	2002426	2011068	2011074	2011080	2012530

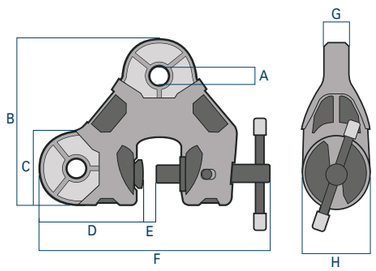
SpanSet Certified Safety

Gladiator lifting clamps

- Ultra-lightweight due to carbon fiber composite material
- With Safe Lifting Indicator, ensuring complete safety through an overload indicator
- Swiveling jaw for generating additional pivoting force
- With integrated RFID chip
- Impact-resistant layer prevents damage to the clamp and the load
- Spindle allows for a larger jaw opening







Gladiator safety lifting clamps are certified for use worldwide.

- European Norm EN 13155
- USA Norm ASME B30.20
- USA Norm ASME BTH – 1
- Australian Norm 4991
- European Machine Directive 2006/42/EC.

Gladiator safety lifting clamps - for lifting in any direction

The new Gladiator safety lifting clamps are suitable for lifting, moving, rotating (180°), and horizontally and vertically transporting sheets, plates, and components. These patented lifting clamps, manufactured in the Netherlands, offer several advantages compared to traditional steel lifting clamps.

Ultra-lightweight and super-strong
The housing of the Gladiator clamp is made of carbon fiber composite material, which is ultra-lightweight and at the same time extremely strong. The material is not susceptible to corrosion and has excellent fatigue properties, ensuring a housing lifespan of 2 million cycles.

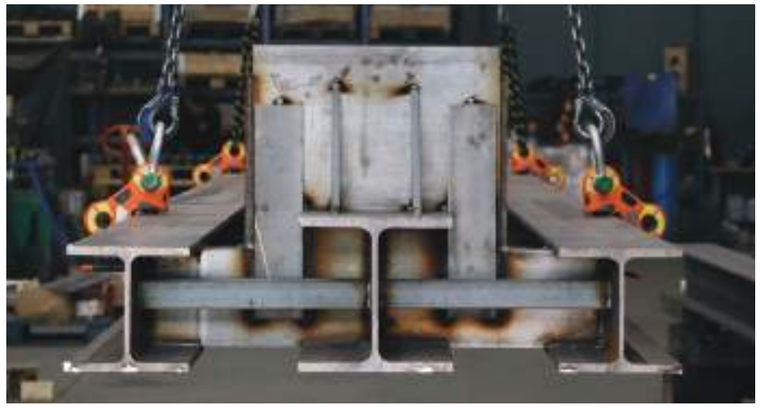
Simplified handling
The design allows the user to have a better grip on the clamp when attaching it to the plate. The use of a spindle creates a larger jaw opening. The handle is designed to open and close more easily.

Improved safety
The maximum allowable Working Load Limit (WLL) is clearly visible on both eyes, and an overload indicator is prominently displayed on the clamp body. All Gladiator safety lifting clamps are equipped with a Safe Lifting Indicator that indicates sufficient clamping force. When the clamp screw is tightened, the indicator moves from the red zone to the green zone. When the indicator shows safe lifting in the green zone, the clamping force is sufficient to carry out a secure lifting operation. All steel components are coated with a corrosion-resistant layer. These innovations enhance safety in the workshop on a daily basis!

Load capacity [kg]	Version	Item No.	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	Weight/ Unit [kg]
3.000	3-AD	**2020491**	30	203	84	126	44	278	30	80	3.5
6.000	6-AD	**2020499**	38	275	117	167	53	357	51	122	8.6
For very hard materials											
3.000	3-AD H	**2020492**	30	203	84	126	44	278	30	80	3.5
6.000	6-AD H	**2020500**	38	275	117	167	53	357	51	122	8.6
For stainless steel											
3.000	3-AD S	**2020493**	30	203	84	126	44	278	30	80	3.5
6.000	6-AD S	**2020501**	38	275	117	167	53	357	51	122	8.6



Gladitor lifting clamps
Spare parts



- Cost-effective replacement of spare parts
- Complete sets for maintenance and revision
- Free service and repair manual
- Traceability of individual components

Maintenance kit



Overhaul kit



The modular system - cost-effective and user-friendly

Optimal availability of spare parts and sets
The modular design of a Gladiator safety lifting clamp allows for a quick and precise inspection of the clamp and cost-effective replacement of individual components. Maintenance and revision sets are available for all Gladiator clamps. The maintenance set is used to replace the swiveling jaw. The revision set includes all consumable parts of the Gladiator clamp.

Service and Repair
For each Gladiator safety lifting clamp, a service and repair manual is provided. The manual offers clear instructions for the inspection, maintenance, and testing of Gladiator clamps. It includes illustrations that explain how the Gladiator clamps are disassembled and reassembled. Additionally, there is a table with approved tolerances for all parts and guidance on part replacement.

Traceability
The housing and load-bearing parts of the Gladiator safety lifting clamp are permanently marked with the short logo, a serial number, the batch code, the test date, and/or the year of manufacture. Identification points such as clamp type, load capacity, jaw width (in mm and inches) are engraved on the housing of a Gladiator safety lifting clamp.

Load capacity [kg]	Version	Item No. clamp	Item No. Maintenance kit	Item No. Overhaul kit
Universal				
3.000	**3-AD**	**2020491**	**2020507**	**2020523**
6.000	**6-AD**	**2020499**	**2020515**	**2020531**
For very hard materials				
3.000	**3-AD H**	**2020492**	**2020508**	**2020524**
6.000	**6-AD H**	**2020500**	**2020516**	**2020532**
For stainless steel				
3.000	**3-AD S**	**2020493**	**2020509**	**2020525**
6.000	**6-AD S**	**2020501**	**2020517**	**2020533**
For gentle and scratch-free lifting				
3.000	**3-AD NM**	**2020494**	**2020510**	**2020526**
6.000	**6-AD NM**	**2020502**	**2020518**	**2020534**

SpanSet Certified Safety

02.9

Safety Management

SpanSet seminars	134 - 137
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SpanSet Lifting App	142 - 143
Service	144 - 145

How sound knowledge helps avoid problems in practical everyday life

As a Trusted Partner in Lifting Technology, SpanSet not only manufactures high-quality textile lifting equipment but also contributes to industry safety by sharing expert knowledge. Regularly, customers, business partners, and users respond to the invitations to workshops and seminars. Just like at the „Meeting at the Sharp Edge“ conference at the Alsdorf ENERGETICON. An edge is considered „sharp“ when the edge radius of the load is smaller than the thickness of the lifting equipment. Not every load is immediately apparent in its potential to damage lifting equipment with its edges. Therefore, the aim was to convey to the approximately 200 attendees through expert presentations, exciting live demonstrations, and the presentation of new products that sharp edges are something that can be managed.

SpanSet supports companies and employees in effectively avoiding risks in their daily work. In the field of lifting technology, SpanSet offers a variety of training and further education opportunities at our Safety Training Center „STZ“ in Übach-Palenberg, as well as at other locations in Germany and Austria, in addition to specialist conferences. Our certified and trained trainers all come from practical backgrounds and help deepen expertise, acquire new knowledge, and understand current changes in one- and two-day seminars. With free brochures, the IDXpertNet product management system, the SpanSet Lifting App, and a qualified service, SpanSet provides comprehensive safety management that continuously enhances workplace safety.

SpanSet – Certified Safety

Seminars





SpanSet seminars – knowledge that advances you with confidence

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.

SpanSet seminars provide you with:

- mmediately applicable practical knowledge
- Up-to-date expertise (regulations, laws, standards, etc.)
- Experienced experts as presenters
- Concrete application examples
- Practical exercises and demonstrations
- Intensive guidance and support
- Customized content if desired
- Comprehensive seminar materials
- Certification of competence

Sicherheits-Trainings-Zentrum
STZ

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

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

The SpanSet seminars on lifting

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

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IDXpert Net®



Summary of benefits

01 More efficiency
You save time above all. Product identification for testing is done in no time, as is the issuance of test certificates. This is a significant advancement compared to the frequently used Excel spreadsheets due to a lack of alternatives.

02 More flexibility
UID capture devices enable the user to work flexibly and easily within the database.

03 Data security
Comprehensive documentation of inspections, repairs, inspectors, and products is essential for safety, legal compliance, and often for better accident prevention. IDXpert® fills the gaps!

04 Improved inspection routine
IDXpert® organizes, plans, and documents regular maintenance and service intervals for you, providing a clear overview of products requiring inspection. Save money and expedite your inspection routine!

05 Compatibility
Various RFID transponders designed for different product requirements during attachment increase compatibility for the user.

IDXpert Net® – versatility and flexibility in product management

Round slings, lifting straps, traverses, lifting equipment, anchor points, magnets, manual lifting tools, cranes, and roller shutters are products whose functionality must be regularly tested. With so many different products and inspection schedules, it is essential to keep track and not lose sight of the legally required inspection dates.

Opt for Inspection Efficiency
IDXpert accelerates and simplifies the mandated product inspections, organizes your documentation, and sends reminders when inspections are due. This essential efficiency enhancement is achieved by combining RFID tags with a modern database. Searching for and archiving inspection certificates becomes unnecessary. The device for reading RFID transponders, the scanner, is connected to the tablet via Bluetooth.

The data is then transferred to the database through the IDXpert app. Synchronization occurs when an internet connection is available, and in offline mode, the scanned data is cached. The app is available for Android systems, with versions planned for smartphones with large displays as well as for iOS.

RFID transponders
SpanSet, in collaboration with manufacturers, has developed transponder designs that have already gained acceptance in the industry. Numerous tests, such as a saltwater spray test and mechanical stress testing, were required for this purpose. Writing the transponders with inspection and product data allows the documentation of product inspections at any time without accessing the database. This is a significant advantage and part of the system's philosophy. The database can also handle products with non-writable RFID transponders and products without transponders, providing flexibility that makes system implementation easy and avoids investment obstacles.

Special features of IDXpert Net®

- Creating multiple users
- Convenient synchronization (tablet)
- UID is included on IDXpert transponders.
- Languages: german, english (others available on request)
- Online IDXpert portal
- Import of legacy inspection Data, e.g., from Excel Lists



IDXpert Net®





The different reading devices for IDXpert Net®

An Android tablet, in combination with the app and the Bluetooth reader, or through the NFC function, can serve as the reading device. Additionally, an RFID/NFC scanner can also be paired as a reading device. This provides the user with various options, allowing them to choose the hardware that best suits their requirements and needs.

The different transponders for IDXpert Net®

RFID transponders can be attached to all products that are to be managed with IDXpert Net®. RFID stands for „radio-frequency identification“ and allows for reading with corresponding read/write devices from the IDXchanger series. Through initialization, specific product and inspection data are loaded onto the transponder located on the product.

Additionally, the distinctive UID (Unique Identifier) of the transponders is printed on the new chip generation (except for IDXpin), making the product visually identifiable even in the unlikely event of a defective RFID chip.

1 IDXFoil



2 IDXPin



3 IDXDome



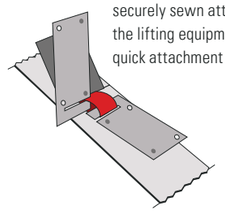
4 IDXTriangel



5 IDXClip



Many round slings and lifting straps can be equipped with the IDXClip. A securely sewn attachment strap on the lifting equipment ensures easy and quick attachment of the transponder.



IDXfoil
Extremely flat, flexible, and non-obtrusive. Particularly suitable for personal fall protection equipment products.

IDXpin
Exceptionally small, space-saving, and non-obtrusive. IDXpin is attached using a small hole in the product, making it ideal for use with fittings such as hooks and shackles.

IDXdome
Ideal for high-quality metallic products, such as wire ropes, lifting clamps, chain hoists, and trolleys. It can be adhered and/or screwed in place.

IDXTriangel
Extremely durable and, therefore, ideal for equipping round sling assemblies, chains, and steel ropes with components like a chain end link.

IDXClip
Contains IDXfoil, supported and protected by two PA plates inside. It is suitable for retrofitting SpanSet lifting straps and round slings with sewn-on attachment loops.



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 - helpful and remarkably simple

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.

User-friendly design
The app is designed for particularly simple operation. Only two parameters need to be entered:

- **Load weight**
- **Type of sling arrangement**
  (e.g., single-leg, multi-leg,
  with or without angles, choker hitch, etc.)

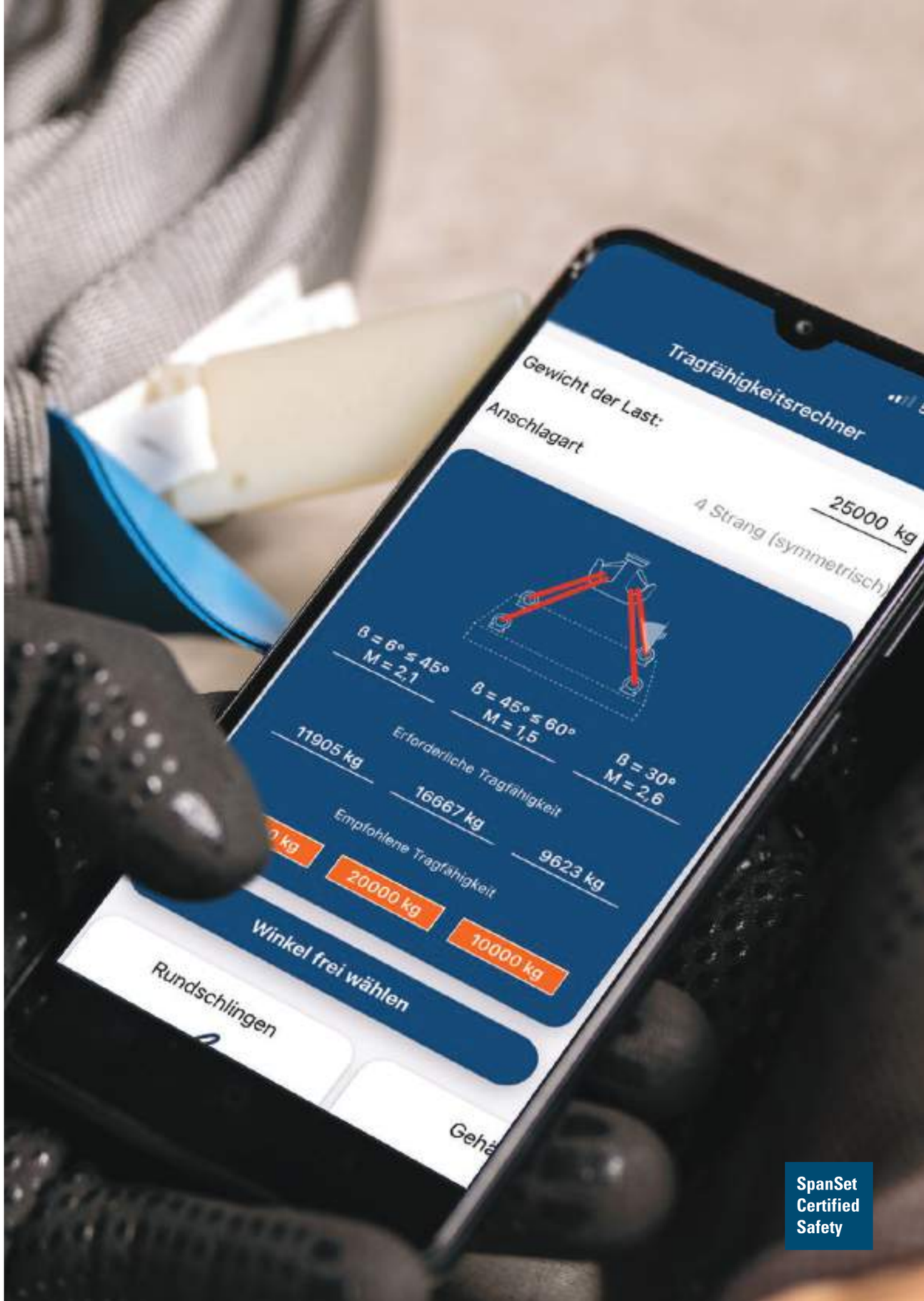
In total, the app allows you to choose between 14 different slinging configurations. The angles can then be entered manually if they are known. Alternatively, if the leg length and the length and width of the load are known, you can make measurements with calculations or using sensors on your smartphone. 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: Use for free!

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



Service







Custom Solutions

Applications with special requirements require individual tools for lifting technology. Not a problem! At SpanSet, customers benefit from the latest know-how and the results of our research and product development. Our experts develop safety concepts for you that are precisely tailored to your needs and make your work easier.

Operating Instructions

For the correct use of securing equipment, comprehensive handling instructions are increasingly required, describing the proper application process. Our operating instructions in various languages are provided with each new product and are intended to minimize incorrect usage. Users can also access the operating instructions online on our website whenever needed.

Consultation & Project Support

The requirements for lifting technology are constantly increasing. As safety experts, we do not see our role solely as a manufacturer and supplier of high-quality products. When it comes to consultation and planning, specialists with comprehensive know-how are deployed, capable of finding and implementing the optimal solution for our customers. Together with the international SpanSet Group and our partner and subsidiary companies, we strengthen our customers' competencies with the right solutions.

Inspection, Maintenance, and Repairs

The demands on rigging and lifting equipment are significant. To minimize downtime during operations, the Axzion service team is available to assist customers with maintenance, repairs, and operation of lifting equipment. In addition to SpanSet's in-house testing laboratory in Übach-Palenberg, our subsidiary, SpanSet Axzion, has a testing tower that can be manually and computer-assisted tested with overloads of up to 300 tons.



NOTES

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