



Products for the defence and security sector







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Content

pewag - your partner for military applications

For many years pewag has been a leading supplier for numerous military forces. Now as a technology leader we offer innovative, reliable and proven solutions for the most difficult applications.

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Legende



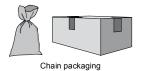












Technical changes and misprints are subject to alteration.



Welcome to the pewag group

We are an internationally operating group of companies. Our track record goes back to the year 1479.

Mission Statement pewag group's Mission Statement expresses the goals of our actions as follows:

With our joy for innovation, we ensure that all products of the pewag group are the best in the respective markets, both now and in the future. The high quality of our products and services as well as our employees' passionate dedication are the foundation to our pursuit of outstanding services and complete customer satisfaction.

Principles of pewag group

Leading in Quality

The values of our premium product brands are demonstrated by our first class quality and innovations and are communicated consistently and coherently.

We anticipate market demands and changes in the environment and adapt our strategies, organizations and actions accordingly to satisfy our customers' needs through providing the best value for the money; timely delivery; efficient and obliging service.

Leading in Responsibility

We commit ourselves to careful treatment of the environment, by reducing the use of energy and raw materials, ensuring the longevity of our products and making them recyclable.

We value an open, honest and team-oriented workstyle, which is based on transparent communication honoring ideas, opinions and experience of our employees as valuable inputs for our decision making process.

We strive for stable and fair partnerships with our employees, customers, suppliers and other business partners and take social aspects into consideration when making business decisions.

Leading in Technology

We secure our technological leadership through highest product quality, constant improvements and innovations of products, as well as manufacturing processes.

We are dedicated to keep on top of product technology. This ensures that our customers always have the best solutions available and that we expand and protect our market position.

Leading in Economics

In all our processes we use due diligent business practices and efficiency and strive to improve these continuously.

In the long-term, we will continuously increase our economic performance to raise corporate value, achieve sustained growth and thus secure a successful future of the organization.





pewag

We are a modern group of companies which looks back to a tradition and experience of more than 500 years. Since our founding years, a lot has changed, but the values that made our success possible from the beginning remain.





History of the pewag group

Quality management

Advantage through tradition

The history of pewag group goes back to the 15th century and therefore makes us the oldest chain manufacturer worldwide. With our experience we are ready for the future.

Timetable of important events

1479 First documented references of a forging plant in Brückl

1787 Foundation of a chain forge in Kapfenberg

1803 Foundation of a chain forge in Graz

1836 Establishment of an iron casting plant in Brückl

1912 Production of the first snow chain in the world

1923 Merger of plants in Graz and Kapfenberg – Creation of the name "pewag"

1972 Foundation of a sales company in Germany

1975 Foundation of a sales company in the USA

1993 Foundation of pewag austria GmbH

1994 Foundation of the first subsidiary in Czech Republic

1999 Acquisition of the Weissenfels Group

2003 Separation from the Weissenfels Group

2005 Reorganization into 2 groups:

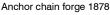
Schneeketten Beteiligungs AG Group – Snow Chains pewag austria GmbH Group – Technical Chains

2009 Acquisition of Chaineries Limousines S.A.S.



Lithography forging plant Brückl 1855







Chain forgers 1956

Our ultimate goal is to achieve customer satisfaction

To reach this goal, the quality management of the pewag group is determined by the principle: "We supply our customers with high-quality products which fully meet technological standards and its usage requirements," this is summarized in the four following mandatory principles:

Market oriented quality

To maintain and improve its competitive position, the quality of products and services of the pewag group must meet both the specifications of our customers and the standards one can expect from the technological leader in the industry.

Economic quality

As a profit-oriented company, the quality is also determined by the material used, labour costs and financial possibilities, i.e. also within the framework awarded by the customer.

Responsibility for Quality

Quality management is the task and obligation of executives at all levels. Every employee of the pewag group has to be integrated by management in the preparations, execution and evaluation of the quality management measures.

Every employee takes the responsibility for the quality of his work.

Process oriented quality assurance

The close interaction between sales, product development, production and customer service is regulated within the individual companies by fixed processes and activities, as well as responsibilities with the aim to reach and maintain the defined quality standards.









pewag

Business areas

Environment – we take responsibility

Working with pewag products

The pewag group has a substantial and diverse spectrum of products and services.

Our range of products varies from traction chains for tires (snow chains for passenger cars, trucks and special-purpose vehicles, tire protection chains for mining vehicles) over different industrial chains to products for the do-it-yourself sector (light chains, belts, etc.)



Segment A
Snow and forestry
chains



Segment B Hoist and conveyor chains



Segment C Do-it-yourself



Segment D Engineering



Segment F Lifting and lashing chains and accessories



Segment G
Tire protection chains

Ecological awareness in all areas



We continuously strive to keep the influence of our business on the environment as low as possible. Our production and warehousing is organized so that all legal requirements on environmental protection are fulfilled. Furthermore, we consider ecological aspects for our product

development, processes and distribution channels and include these in our business planning.

Consequently, we are permanently striving for a continuous improvement and development of our established products to reach higher load capacities and safety for our customers with lighter weights and longer life spans.

Wherever we cannot avoid an environmental impact, we strive to reduce the use of energy, environmentally harmful emissions and keep the production of waste to a minimum. When investing in new machines, we consider the technically most adequate and economically feasible state-of-the-art designs for their designated area of

Our environmental management is certified according to ISO 14001:2004. Regular internal audits assist to supervise compliance, test the effectiveness of our set standards and serve as a basis to determine improvement potentials.

Out of this long-lasting tradition, we take responsibility for our products, employees, our sites and the environment very seriously.

We commit to comply with all environment-related regulations and continually improve our performance for the environment by defined goals. For that purpose, we use modern production technologies. We enhance the ecological awareness of our employees by regular trainings.

We engage with our customers, neighbours and government agen-cies in an open communication and inform them about our environmental management wherever appropriate.

By providing advice, we want to inform our customers about the environmental aspects related to the use of our products – especially their long life spans. We are striving to motivate our customers and suppliers to consider environmental protection in their sphere of influence and use the same environmental standards as we do.



Customer Service

International Presence

With its distinguished five-hundred-year history, pewag has developed from a small modest site into a global business group with several subgroups.

pewag documents its claim as the world's #1 chain manufacturer with 11 production facilities, 27 sales sites and other sites in Europe, America and Africa.

In addition to its numerous locations, pewag, as an international company, relies on a finely woven, strong, and professional partner network. These alliances currently enable optimal customer support in over 100 countries around the world.

Production and sales locations

Europa	
Austria	pewag austria GmbH, Graz pewag austria GmbH, Kapfenberg pewag Schneeketten GmbH & Co KG, Graz pewag Schneeketten GmbH & Co KG, Brückl pewag engineering GmbH, Kapfenberg pewag austria Vertriebsgesellschaft mbH, Wien pewag Ketten GmbH, Klagenfurt pewag International GmbH, Klagenfurt
Germany	pewag Deutschland GmbH, Unna pewag Schneeketten Deutschland GmbH, Unna
France	J3C SAS pewag France, Seyssins Chaineries Limousines SAS, Bellac Chaineries Limousines SAS, Limoges
Italy	pewag italia srl, Andrian
The Netherlands	pewag nederland BV, Hillegom APEX International BV, Hillegom Interparts Industrie Mij BV, Hillegom
Poland	pewag polska Sp z o.o., Buczkowice
Russia	OOO "PEWAG", Moscow OOO "pewag russia", Moscow
Croatia	pewag croatia doo, Zagreb, Kroatien

Europa		
Sweden	pewag sweden AB, Emmaboda	
Slovakia	pewag slovakia sro, Nitra	
Czech Republic	Řetězárna Česká Třebová sro, Česká Třebová pewag sro, Vamberk KOMAP Dědov sro, Dědov KOMAP Dědov sro, Chrudim	
Ukraine	TOV pewag Ukraine, Lviv	
North Ameri	ca	
USA	pewag Inc, Bolingbrook, Illinois pewag Inc, Rocklin, California pewag Traction Chain Inc, Pueblo	
Africa		
South Africa	HMV Engineering (Pty) Ltd, Houghton Johannesburg	
Australia		
Australia	pewag australia Pty Limited, Barrack Heights	



pewag group presents itself on the internet. More ... www.pewag-group.com www.pewag.com







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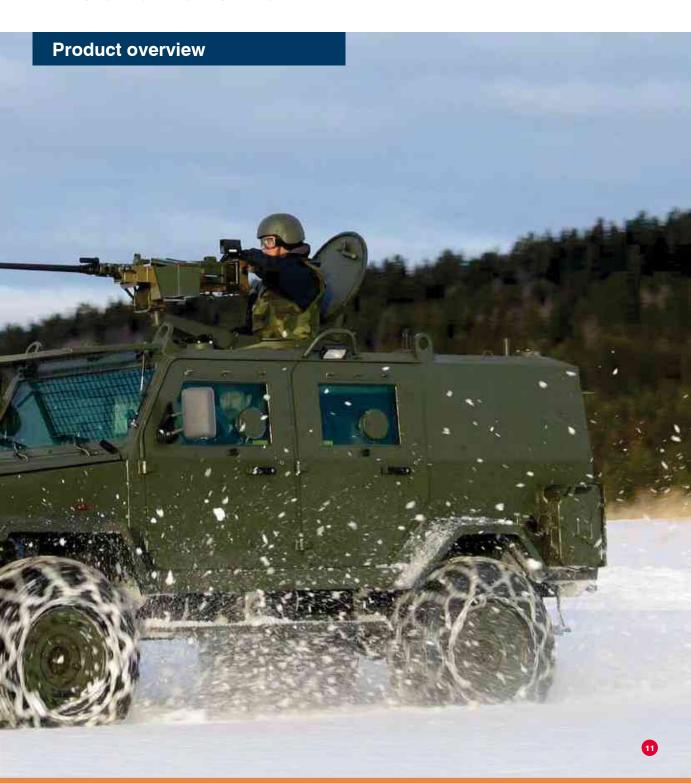
Traction chains

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Professional. Economical. Safe.

pewag traction chains for military vehicles. Innovative solutions for varying challenges.

The traction chain product range made of special alloy steel, combined with wear bars, offers improved wear resistance and service life, as well as outstanding driving characteristics allowing the vehicle to be driven at higher speeds. pewag traction chains guarantee security and reliability even in the most severe conditions. The lower chain weight ensures easy handling and storage.

Our products are the preferred brand of NATO and other countries and are listed with NATO stock numbers.

In co-operation with the leading manufacturers of military vehicles, pewag is also engaged in customizing traction solutions that will meet your specific requirements.







pewag

pewag cervino

The standard chain for medium-duty military vehicle use.

pewag cervino is the approved allround-model: Due to its light, but still tough design it is recommended especially for delivery vans and light trucks.

Product description

The proven and popular pewag cervino is the standard chain for medium military duty use. The light weight of the chain allows it to be mounted easily, nevertheless providing perfect traction.

pewag cervino is produced in different link diameters (4.5, 5.6 and 7.0 mm), depending on the chain size. To cope with the pressure of bigger vehicles and tires, pewag relies on welded rings in 7 mm and in other diameters on side hooks to link the running mesh to the side chains.



TITANGrip





pewag austro super reinforced

Strengthened model – with new wave profile. Chain for heavy military duty use.

pewag austro super reinforced is the right choice for professional offroad use. This proven chain was developed further by pewag and now has the innovative wave profile for increased traction.

Product description

pewag austro super reinforced is the big brother of the popular austro super. This chain is made from TitanGrip® in different link diameters (5.6, 7.0 and 8.2 mm), depending on the chain size. Welded rings connect the chain mesh to the side chain and therefore guarantee a long life span and high resistance.

The latest innovation of pewag's engineers – chain links with wave profile (from 5.6 mm) – improves the traction of pewag austro super reinforced and allows for a longer life span of the chain. pewag austro super reinforced differs from pewag austro super in the material diameter. While the A 97 S for example has 7.0 mm square links, the A 97 SV has 8.2 mm square links. Therefore pewag austro super reinforced is very suitable for extreme off-road use.











pewag universal ED

Strengthened version. The chain for high demands.

The reinforced version of the popular pewag universal chain has welded wear bars added to the chain links providing resistance and durability even in the toughest environment.

Product description

The strengthened version of the pewag universal was designed specifically for heavy-duty use.

Additional wear bars made of square steel are welded to each link in the chain mesh to significantly increase both grip and durability of the chain. If these parts are worn-out, the chain can be reversed (like every pewag chain) and kept being used.

pewag universal ED is made of TitanGrip® material and is, depending on the vehicle and range of use, available in different material diameters between 5.6 mm and 12 mm.

For wide-base tires, pewag offers a version with a staggered chain mesh. The wider chain mesh provides a higher wear resistance, longer life span and smoother running.









pewag uniradial SED

Strengthened version. The chain for extreme demands.

Due to its special reinforcement features the pewag uniradial SED is very wear resistant.

Product description

The strengthened version of pewag uniradial, is especially manufactured for extreme use in any terrain.

Each recumbent link of the chain mesh has wear bars out of rectangular steel attached. Furthermore, additional wear elements are welded onto those parts of the chain that are exposed to extreme pressure. By using this design the grip and life span of the chain are increased notably. If the additional wear elements are worn-out, the chain can be reversed (like every pewag chain) and kept being used.

pewag uniradial SED is made out of TitanGrip® steel and is available in material thicknesses 5.6 and 7 mm, depending on the vehicle and range of use.















pewag unimove TT

Brand new technology ThickThin®. The professional chain for heavy-duty use.

pewag sets a benchmark with the new and innovative ThickThin® technology. TT (ThickThin®) stands for the new pewag technology to manufacture chains using various link shapes and diameters. By using this technology the new generation of pewag unimove is up to 10 % lighter than its predecessor.

Product description

pewag unimove TT is the first chain type worldwide, which unites different link shapes in one chain mesh. The projecting link has a wave profile with a material thickness of 8.2 mm; due to this wave shape the grip on snow-covered, icy ground and muddy surfacesis improved. The profile of the recumbent link is rectangular in material thickness 6.5 mm; due to this small cross-section the weight is reduced without influencing its running characteristics.



pewag erzberg ED

An even stronger piece of equipment. Chain for extreme professional use on heavy vehicles.

pewag recommends pewag erzberg ED for extreme military use on all surfaces.

Product description

pewag erzberg ED has a tight chain mesh with robust forged rings with additional welded wear bars. The forged closing hooks ensure a smooth ride and provide reliability and easy handling even under the toughest conditions.

For extreme heavy-duty use pewag recommends pewag erzberg ED for military use in any terrain.

pewag erzberg ED is – depending on the chain size – available in material diameters 8.2, 10 and 12 mm. The use of the special steel TitanGrip® increases the life span.





реwag austro ^{sт}

Professional chain for medium to heavy duty use.

Product description

This net-style chain in track design is the perfect model for military vehicles with medium to heavy duty use. The square-link chain net made of non-aging nickel-manganese alloy fine grained high-grade steel combined with a special heat treatment is designed to provide a perfect fit between links which reduces twisting of the chains and provides excellent traction. Additional pressed-on links with welded wear-bars increase the lifetime of the chain significantly. The special chain designensures a smooth ride even at higher speeds.



pewag radial spur sed

Profi net chain for extreme use with heavy duty vehicles.

Product description

This round-link chain made of non-aging nickel-manganese alloy fine grained high-grade steel combined with a special heat treatment is the perfect model for extreme off-road applications. The chain net made of round link chain and pressed-on links combined with wear bars increase the lifespan of the chain. The special track design allows the chain to be driven also at very high speed, nevertheless offering smooth running. The drop-forged closing hook MVX-7 in the tread net provides easy handling and reliable function even under most difficult conditions.









pewag radial zweispur sed

Net chain for extreme off-road use.

Product description

This round-link chain with a staggered hexagonal chain net made of non-aging nickel-manganese alloy fine grained high-grade steel was specifically developed for heavy military vehicles driving on metalled roads as well as off-road. The dense and compact tread net is made of round-steel chain links combined with wear bars to guarantee improved wear resistance, a longer lifespan and outstanding handling characteristics even at higher speeds. The closing hook in the tread net maintains its function due to its special design when mounted loosely, even in deep snow or off-road.











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Industrial chains

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Industrial chains





Industrial chains

pewag winner pro G12 chain system

pewag – the chain industry's innovation leader – was the world's first manufacturer to offer G12 chain systems.

In 2003, pewag was the first manufacturer in the world to offer G12 chain systems using the innovative profile design. The pewag winner pro chain system can be used for lifting, lashing and many special applications.

Features and benefits of pewag winner pro G12 chain systems

Intelligent profile – with intelligent use of material, pewag has designed a chain link with the same cross section as regular round-link chains that has superior characteristics (such as fatigue and bending resistance) by comparison to standard



round-link chains. In order to reach optimum technical performance, material was increased in relevant areas and reduced in independent areas.

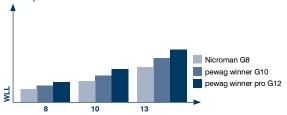
Improved bending resistance: The new G12 links have a 16% higher section modulus compared to regular round-link chains of the same cross section and can therefore better withstand bending forces.

Patented material with optimized strength and toughness at high and low temperatures.

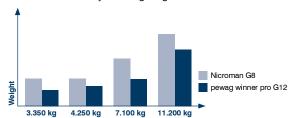
The higher Working Load Limits (WLL) and higher lashing capacity (LC) of the pewag winner G12 program (50% more compared to G8 programs) allows significant weight reduction. Reducing the weight of the chain sling or the lashing chain makes the assembly easier to use for the end-user.

Additionally, the profile of the chain improves the bending resistance of the chain. This is significant when loading the chain over a corner.

- · Intelligent profile
- Optimized bending resistance
- 50% higher load capacity/lashing capacity compared to G8, 20% higher load capacity/lashing capacity (direct lashing) compared to G10



- One dimension smaller compared to G8 and G10 chain slings for many load ranges - thus providing excellent value
- At direct lashing you can downsize to a smaller chain dimension thus obviously reducing weight and costs

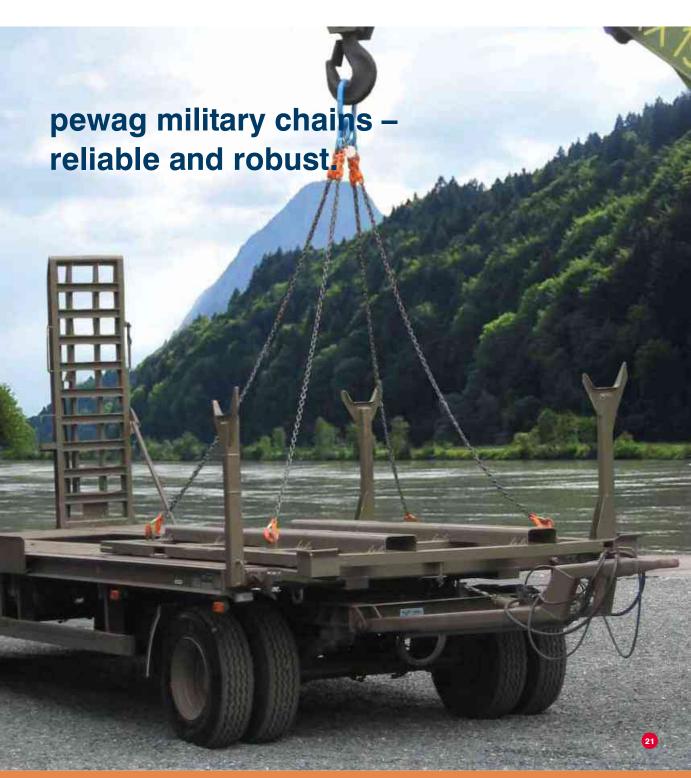


- Patent-registered material
- Longer lasting
- Complete traceability
- · Easy visual identification
- Corrosion protection
- Maximum security
- Quality approved european production



Industrial chains

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Load lashing systems

pewag winner pro load lashing systems

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Load lashing systems





Load lashing systems

pewag winner pro load lashing systems for load restraint applications

Our lashing systems provide safe transport of equipment for air-, water- and land transport.

Grade 10 chains and suspensions have a load capacity that is 25% higher than that of grade 8 chains with the same chain weight or provide the same load capacity with a lower chain weight. With our grade 12 products, we have achieved a load capacity that is up to 50% higher compared to G8. This weight reduction helps ships and airplanes obtain their optimum load capacity when transporting operations equipment.

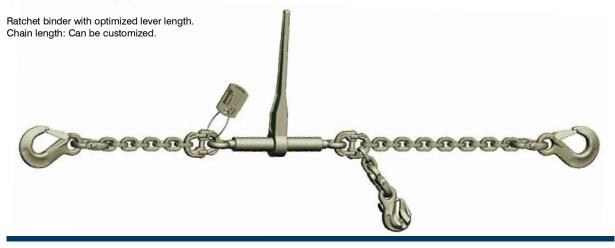


pewag winner PRO

Lashing chain ZRSWP

Product description

pewag winner pro – single leg chain sling with shortening devices and eye sling hooks connected with mechanical connecting links. Grab hook with safety pin that keeps the chain in place during shortening applications. The unit is designed to allow the best use of chain and hooks.



Load lashing systems

pewag





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Lifting systems

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Lifting systems





Lifting systems

pewag winner pro G12 lifting systems

user friendlyness and safety are based on clearly defined and measurable characteristics, which are incorporated in the product development and production process of our products.

Our pewag winner pro lifeline systems are particularly characterized by the higher Working Load Limits (WLL) (50% more compared to G8 programs). This results in a significant weight reduction. Reducing the weight of the chain sling makes the assembly easier to use for the end-user. Additionally, the profile of the chain improves the bending resistance of the chain. This is significant when loading the chain over a corner.



pewag winner PRO

pewag winner pro chain sling

Product description

pewag winner pro - the high performance profile chain in grade 12 offers, combined with different sets and master links, hooks and other accessories, a variety of combinations and possible applications. Novel working load tags with warning information made of stainless steel material therefore increases the safety of the sling chain.

Opposite you will find an example of a finished pewag chain sling that can be commercially ordered (pewag winner pro Illeg chain sling with shortener and safety hook, assembled with connex-connecting links).



Lifting systems

pewag

pewag – your partner for military applications.





Lifting points

pewag profilift lifting points

The new and high quality lifting points are the ideal accessory to complement pewag's winner chain program and enhances the possibilities of its use considerably.

With this latest product-line, pewag has enhanced its growth potential. pewag winner profilift lifting points allow the entry into new applications and markets. Naturally, pewag winner profilift lifting points fulfill the highest quality standards and offer maximum safety. The introduction of pewag's first lifting points creates new dynamics for further growth. At the same time, we are working on the expansion of the lifting points product range with convenience and compatibility being major design criteria.

Safety and the joy of innovation are an integral part of the pewag brand, as it is definitely recognizable with the patented pewag winner prolift gamma anchor point. The specially developed anchor point for tool-free mounting represents a first on the world market.

By means of a pivotable flap connecting the ring and the screw, the anchor point may be screwed on or off. Furthermore it can be separated, so that the ring may rotate freely around the bolt and align itself with the direction of the load.

The pewag winner prolift gamma may be tightened by hand. It can be aligned with the load direction without the need for additional tools.

The anchor point is highly flexible when in use and is suitable for frequent mounting and dismounting, thus saving time and money.



All pewag profilift lifting points can also be used as lashing points. Thus the permissible tensile force is the duplicate of the nominal load capacity, as in case of the tie-down the 2-fold safety is valid.

You can find more information on our lifting point program in our special brochure.

pewag profilift

pewag profilift eta

Product description

High-tensile eyebolts pewag winner profilift eta, for welding onto machine parts or vehicle bodies. Ideal for hanging of lifting and lashing parts. Due to the integrated spring, the ring will be kept in each requested position. The instructions according to DIN EN ISO 15817 are valid for the welding.



The welding may only be carried out by a welding operator with a valid qualification according to EN 287-1.





Lifting points



pewag winner profilift

pewag winner profilift alpha

Product description

360° rotatable lifting point. The load ring is loadable in a range of 130° and can be positioned at any required angle due to its replaceable and patented spring. Likewise interchangeable is the hexagon-special screw from grade 10.9 material, which is sesecured against loss. The screw is 100% crack detection tested as well as covered with a chromate VI-free protection against corrosion, and marked with the load capacity and thread size.



pewag winner profilift alpha is able to withstand a 4-fold safety against break in all directions. Each lifting point is marked with an individual serial number that allows product traceability. pewag winner profilift alpha is available with metric or UNC-thread, whereas the lifting points with metric thread are also obtainable with customized thread lengths. The table with the working load limit depending on the type of application as lifting gear, number of legs and angle of inclination is a part of the user manual and packed together with each lifting point.

pewag winner profilift gamma

Product description

pewag introduces a worldwide innovation to the market: A patented tool-free pewag winner profilift lifting point. Based on the latest standards of pewag we have designed and manufactured a lifting point for tool-free anchorage, which can be tightened and aligned manually in the direction of the load.

It is 360° rotatable, contains a patented and interchangeable special screw, which is 100% crack-tested as



well as covered with a chrome VI-free finish-protection against corrosion and marked with WLL and thread size. Each lifting point is marked with an individual serial number, that allows traceability, pewag winner profilift gamma is optionally also available with a UNC-thread.

The table with the load capacities depending on the different methods of lifting, number of legs and angle of inclination is a part of the user manual and packed together with each lifting point.

pewag winner profilift beta

Product description

360° rotatable lifting point. The load ring is 180° movable and can be positioned at any required angle due to its replaceable and patented spring. Likewise interchangeable is the hexagon-special screw of grade 10.9 material, which is secured against loss. The screw is 100% crack-tested as well as covered with a chromate VI-free protection against corrosion, and marked with WLL and thread size. It can be tightened with a hexagon wrench or spanner wrench.



The lifting points pewag winner profilift beta are marked with an individual serial number, that allows product traceability and load capacity for the most inappropriate field of operation, which explains the increased WLL in the upright loaded position. In permissible fields of operations the lifting point corresponds to a 5-fold safety. pewag winner profilift beta is available with metric or UNC-thread, whereas the lifting points with metric thread are also obtainable with customized thread lengths. The table with the different load capacities depending on the method of lifting as lifting gear, number of legs and angle of inclination is a part of the user manual and packed together with each lifting point.

pewag winner profilift delta

Product description

Ball-bearing 360° under load rotatable lifting point. High resistant lifting eye 180° movable. The special screws are 100% crack-tested as well as protected against corrosion, and marked with WLL and thread size. Each lifting point is marked with an individual serial number, that allows traceability. pewag winner profilift delta is optionally also available with special designed thread lengths. The table with the load capacities depending on the method of lifting as lifting



gear, number of legs and angle of inclination is a part of the user manual and packed together with each lifting point.

The pewag winner profilift delta lifting points are marked with a WLL for the most inappropriate field of application, which explains the increased WLL in the upright loaded position, with a 4-fold safety against break in all directions of load.







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