

PFEIFER

WHEN INNOVATION
AND RELIABILITY
GO HAND IN HAND



1579

1963

1984

1987

1996

2005

2016

PFEIFER makes the difference.

02/2016

Product Line

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SEIL- UND HEBETECHNIK
GMBH**

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PFEIFER makes the difference.

Over 430 years. Few companies in the world can boast such a tradition. And such a remarkable development. From a small family rope making business to a global industrial company. Or, to put it another way: from the hemp rope to continuously new interpretations of the rope – for continuously new application possibilities. The gaps that PFEIFER bridges are also remarkable. Between past and future. Between tradition and trend. Between responsibility and innovation.

PFEIFER Connecting and Lifting Systems has been manufacturing products for the construction industry for the lifting, fastening, connection and reinforcement of concrete structural elements since 1963. The topics of quality and safety are omnipresent due to the types of product alone, which are always safety-relevant.

This naturally concerns not only the product itself as well as its development, design, production, packaging and dispatch, but also customer and application-oriented instructions for use. Only these documents make safe use of the product possible. Illustration and communication are subject to continuous improvement for a continuous increase in safety. That is the only way to keep up with changes in the market. Communication naturally also includes close contact with our customers, whose wishes and requirements represent the basis for all of our developments. With its products, Connecting and Lifting Systems is still a trailblazer in terms of documentation and standardisation, even today.



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Lifting Anchor Systems



PFEIFER Waved Anchor

PFEIFER Socket

PFEIFER Bar Anchor

PFEIFER Flat Steel Anchor

PFEIFER Flared Lifting Loop

PFEIFER Swivel Eye

PFEIFER SAS Manhole Lifting System

PFEIFER Headless Fastening Bolt

PFEIFER Data Clip

PFEIFER WK Quicklift

PFEIFER WK Moulding Insert

PFEIFER Magnetic Disc



Fixing Systems



PFEIFER DB Anchors for Permanent Fixing

PFEIFER Polyamide Sockets

PFEIFER Fixing System for Push-Pull-Props MoFi 16

PFEIFER Concrete Screw ConFi 14

PFEIFER Socket Dowels with angular end

PFEIFER Socket Dowels with cross hole

PFEIFER Socket Dowels with cross hole & nailing plate

PFEIFER Socket Dowels with crimped end

PFEIFER Socket Dowels with crimped end & nailing plate

PFEIFER Nailing Plates

PFEIFER Nail Plugs for Polyamide Sockets



Connection Systems



PFEIFER Column Shoe PCC

PFEIFER Wall Shoe

PFEIFER Earthing System BEB

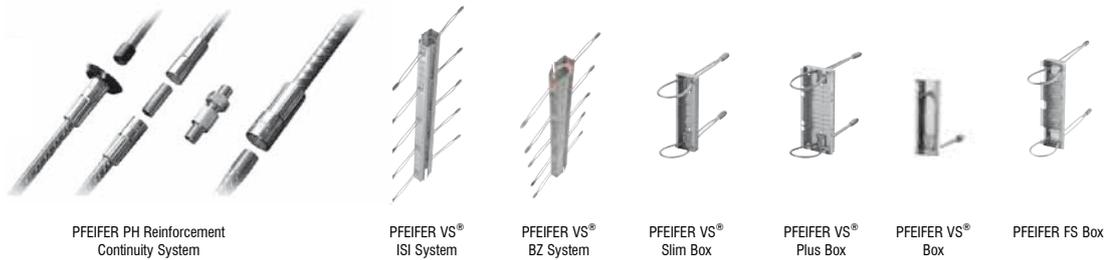
PFEIFER Steel Bearing

PFEIFER Staircase Bearing

PFEIFER Sandwich Anchor

PFEIFER Delta Anchor

Reinforcement Systems



PFEIFER PH Reinforcement Continuity System

PFEIFER VS® ISI System

PFEIFER VS® BZ System

PFEIFER VS® Slim Box

PFEIFER VS® Plus Box

PFEIFER VS® Box

PFEIFER FS Box



↑
Lifting Anchor Systems

└
Fixing Systems

└
Connection Systems

└
Reinforcement Systems

50 years of **innovation** – **constant** good quality



No company has been mass producing threaded sockets for the precast industry for so long and with so much experience. In the manufacturing of the products, the utmost importance always has been and still is attached to quality and safety in the interests of the user. Right from the development, great attention is paid to ensuring that only ideally suited and correspondingly tested raw materials are used. The material quality is also ensured in series production through exact specifications for selected raw material suppliers combined with our own factory checks.

For PFEIFER threaded anchors, for example, we use only special tubes according to our own technical terms of delivery that meets all requirements for the subsequent product

with regard to both the steel alloying and the dimensional tolerances. Defined manufacturing processes using ideally tuned mechanical equipment ensure constant high quality on this basis. Suitable tests are carried out at each stage of the manufacturing to ensure additional process reliability. In the production of threaded sockets, for example, machines with an automatic thread checker are used to ensure that every socket produced has the intended thread. In hot forming processes, too, as in the manufacture of the PFEIFER WK Anchor, the equipment is designed such that the swaging process can only be initiated precisely at the defined temperature, since the temperature of the heated material has an enormous effect on the quality of the anchor.



PFEIFER

Lifting Anchor Systems



Thread System
Super Anchor System
SAS Manhole Lifting System
BS Anchor System
WK Anchor System
Custom Lifting Anchors



Product description

The well-known PFEIFER Thread Systems, which have been successful for many years, consist of lifting anchors, lifting devices and a comprehensive range of accessories. It is the oldest of the industrially manufactured, market-leading lifting anchor systems for precast concrete construction still in use today. It thus stands for universal and cost-effective use in the highly safe lifting and transport of precast concrete elements of all kinds. The PFEIFER Thread System is a perfectly co-ordinated product range that has been tried and tested and continuously developed over many years. Apart from its cost-effectiveness, it conforms to the VDI/BV-BS 6205 directive following a further thorough revision. As confirmation of conformity to the Machinery Directive 2006/42/EC in conjunction with VDI/BV-BS 6205, the CE mark is attached to all PFEIFER Lifting Anchor Systems. In addition to safety, the system is characterised by particular durability. The reason for this is the selection of top quality materials plus industrial, secured manufacturing processes.

+ Advantages

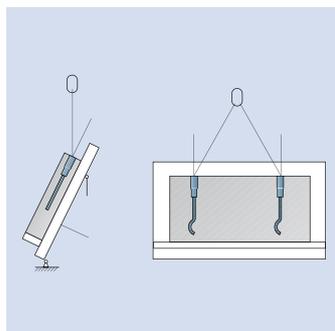
- high degree of safety and economy
- already safely used more than 45 million times
- robust PFEIFER round threads for safe application
- original PFEIFER colour coding for handling without mix-ups
- understandable instructions for installation and use
- extensive range of products that perfectly meet the highest requirements for the transport of thin-walled precast elements
- CE marking
- long service life
- over 50 years of experience
- safety consciousness

Product range

- Threaded anchors for front-sided installation
- Threaded anchors for top-sided installation
- Threaded anchors for installation in linear structural elements
- Specialised applications
- Lifting devices for threaded anchors
- Accessories

§ Directives

- design and production of all thread system components and installation instructions in compliance with the EC Machinery Directive 2006/42/EC
- all products conform to VDI/BV-BS 6205 and are thus CE-compliant
- safe work equipment as defined in health & safety legislation according to BetrSichV (Operational Safety Ordinance)



Further product recommendations:
 PFEIFER VS® System,
 PFEIFER DB Anchor



Product description

The PFEIFER Super Anchor System is a specially qualified variant of the Thread System of the proven PFEIFER lifting anchor concept. The Super Lifter, the Super Anchor and suitable formwork accessories belong together today as a self-contained, closed system for safe load attachment. Thanks to anchorage with a low gap effect, this specially optimised and safe lifting anchor system is ideally suited for the lifting and movement of very thin-walled, but heavy precast concrete elements. This is the case in particular when transporting large prefabricated modules. The development of a special Z-thread rules out mistakes or unforeseen incorrect use with M or Rd thread systems, because screwing-in is impossible. A load range from 0 to 220 kN is covered by only three anchor sizes, which additionally simplifies scheduling and lowers inventory costs in the precast plant.

+ Advantages

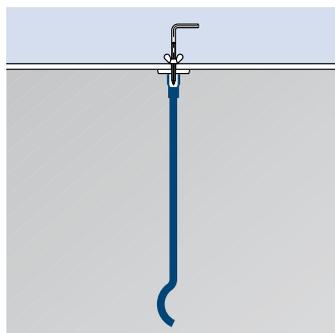
- smaller socket diameters facilitate installation of the anchors in very thin structural elements and threading into narrow reinforcement cages
- optimal anchorage with low gap effect through the use of the millionfold-proven waves
- significantly increased carrying capacity through the use of high-strength, ductile steel
- up to 45% lower wall thicknesses with comparable load stages
- use of a particularly insensitive special thread rules out mistakes and ensures a long and secure service life of the PFEIFER Super Lifters

Product range

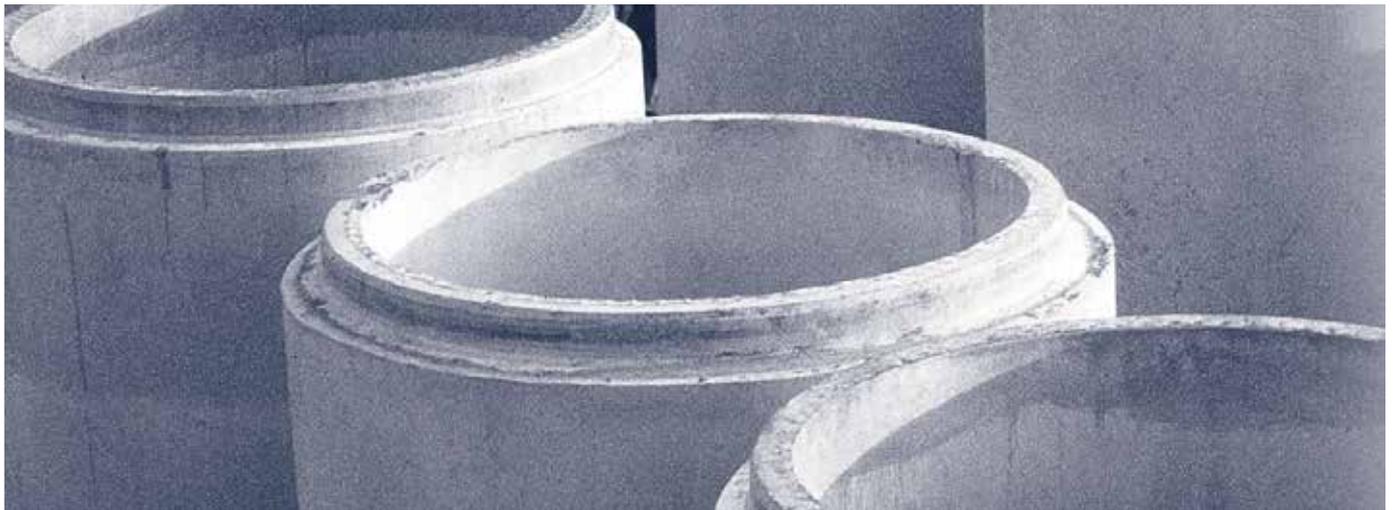
- Super Anchor for installation in thin structural elements
- Super Lifter
- Accessories

§ Directives

- design and production of all Super Anchor System components and installation instructions according to the EC Machinery Directive
- all products conform to VDI/BV-BS 6205 and are thus CE-compliant
- safe work equipment as defined in health & safety legislation according to BetrSichV (Operational Safety Ordinance)



Further product recommendations:
PFEIFER Thread Systems,
PFEIFER WK Systems



Product description

The PFEIFER SAS System demonstrates the versatility of the PFEIFER lifting anchors. Proven PFEIFER lifting anchors in combination with a specially developed lifting loop form the basis of the SAS System, which is used for the lifting and movement of pipes and manhole elements. Like all PFEIFER Systems, safety is the utmost priority here and takes the form of a self-contained system developed in compliance with the VDI/BV-BS 6205 directive. The anchors consist of special-grade precision steel tubes with anchor bolt or anchor plate, while the lifting device consists of a flat material and high-strength screws, combined with a flexible steel wire rope.

+ Advantages

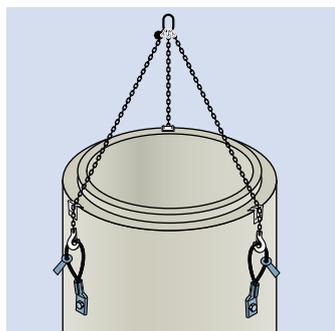
- efficient and flexible transport of manholes
- attachment bolt cannot be lost
- optimum range of products for all practically relevant applications
- original PFEIFER colour coding for handling without mix-ups

Product range

- SAS Lifting Anchor for Manholes
- SAS Lifting Device
- Accessories

§ Directives

- design and production of all SAS Manhole Lifting System components and installation instructions in compliance with the EC Machinery Directive
- all products conform to VDI/BV-BS 6205 and are thus CE-compliant
- safe work equipment as defined in health & safety legislation according to BetrSichV (Operational Safety Ordinance)



Further product recommendations:
 PFEIFER WK System,
 PFEIFER Thread System



Product description

The PFEIFER BS Anchors are the ideal lifting anchors if heavy structural elements have to be transported inexpensively. Special heavy-duty anchors have already been realised with load-bearing capacities of up to 180 t. The BS Anchors consist of an oval-bent, high-strength quality steel rope, which is swaged with a special ferrule – with the experience of a rope making dynasty stretching back 436 years.

It is suitable for solid, compact structural elements as well as slender prestressed beams. The transport of bridge elements and raker beams for sports stadia is thus no problem. The additional use of a lifting and turning device can be dispensed with, since attachment is made directly to the suspension gear hook or shackle. The part of the PFEIFER BS Anchor that protrudes above the surface can be cut off directly after use. Associated system components with an optional recessed installation are the BS Hook and the BS Moulding Insert.

+ Advantages

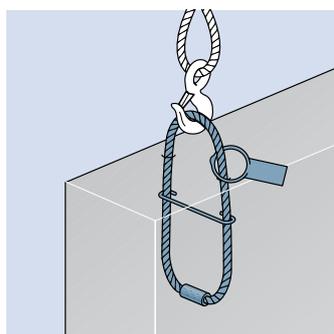
- standard heavy duty anchor
- direct attachment to the suspension hook, without expensive lifting devices
- inexpensive alternative for the transport of precast elements
- original PFEIFER colour coding for handling without mix-ups
- wide range of applications – already realised as a custom anchor up to 180 t

Product range

- BS Lifting Anchor up to 180 t
- BS Lifting Device
- Accessories

§ Directives

- design and production of all BS Anchor System components and installation instructions in compliance with the EC Machinery Directive
- all products conform to VDI/BV-BS 6205 and are thus CE-compliant
- safe work equipment as defined in health & safety legislation according to BetrSichV (Operational Safety Ordinance)



Further product recommendations:
 PFEIFER Thread Systems,
 PFEIFER WK Systems



Product description

The name PFEIFER WK Quicklift represents as such a system promise. The WK System is particularly suitable for lifting operations in which fast attachment is decisive. In addition to the PFEIFER WK Quicklift as the lifting device, the system also includes the two anchor types PFEIFER WK or DR Anchor and the WK Moulding Insert as an accessory. Special quenched and tempered steel, which is hot-forged, cast or welded and whose composition is specified and tested by PFEIFER especially for these products, guarantees top quality and a long lifetime in addition to maximum safety. The welding processes are controlled according to valid standards and are supervised by an expert welding engineer.

+ Advantages

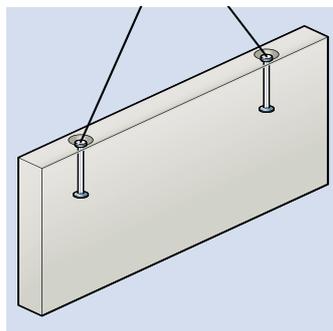
- wide range of applications
- fast, safe attachment with the PFEIFER Quicklift
- continuous product monitoring
- shorter anchor lengths of the WK Anchors, since existing reinforcements can also be used
- secure load application possible despite the shortness of the anchor
- DR Anchor – particularly suitable for the transport of pipes and slabs
- special variants for slender beams

Product range

- WK Lifting Anchor
- WK Lifting Device
- Accessories

§ Directives

- design and production of all WK Anchor System components and installation instructions in compliance with the EC Machinery Directive
- all products conform to VDI/BV-BS 6205 and are thus CE-compliant
- safe work equipment as defined in health & safety legislation according to BetrSichV (Operational Safety Ordinance)



Further product recommendations:
 PFEIFER Thread System,
 PFEIFER PH Reinforcement
 Continuity System



Product description

The search for solutions to numerous problems leads customers to the PFEIFER Custom Lifting Anchors, such as the PFEIFER Lifting Box, which was developed for the safe transport of manhole elements, and the PFEIFER Bent Loop for the lifting and transport of concrete floors and angled elements. And that's not all – the PFEIFER LB Anchor, which serves as a lifting anchor for storey-high wall panels made of lightweight aggregate concrete, and the PFEIFER Masonry Anchor, which is pushed through the hollow space of the stones and grouted after completion of the brick element, are also so-called custom lifting anchors.

+ Advantages

- the solutions to customer problems – the right anchor for every application
- economic alternatives for special applications
- experience in development and proven PFEIFER quality

🏭 Product range

- PFEIFER Lifting Box
- PFEIFER Bent Loop
- PFEIFER LB Anchor
- PFEIFER Masonry Anchor

§ Directives

- design and production of all custom anchor components and installation instructions in compliance with the EC Machinery Directive
- all products conform to VDI/BV-BS 6205 and are thus CE-compliant
- safe work equipment as defined in health & safety legislation according to BetrSichV (Operational Safety Ordinance)



Further product recommendations:
PFEIFER Thread Systems,
PFEIFER VS® Systems

PFEIFER innovations – unique in quality

In addition to lifting anchors, PFEIFER has also been producing products for permanent fastening to concrete structural elements for over 25 years. Based on the quality standards in the Lifting Anchor Systems segment, the products with building authority approval in this product segment have been developed in co-operation with research institutes to precisely meet the customer's needs. Both universities and the German Institute of Building Technology (DIBt) are involved in the development of application-compatible properties at an early stage. We carry out qualification tests extending as far as fatigue tests in our own field. Highly regarded experts assess the application properties in expert's reports. A whole group of specialised structural engineers then optimises the product for the

subsequent application. Right from the development, great attention is paid to ensuring that only ideally suited raw materials are used. The material quality is also ensured in series production through exact specifications for the steel manufacturers, combined with our own factory checks. Precision steel tubes made to our own specification is used for the production of the sockets for the DB Anchor, because only these tubes meet all the requirements for the subsequent product quality.

All of these factory monitoring measures in production are documented and archived accordingly. These documented factory production controls are regularly monitored by an external testing body.



PFEIFER

Fixing Systems



**DB Anchors
Socket Dowels / Polyamide Sockets
Fixing System for Push-Pull-Props
Attachment Points for Lift Construction**



Product description

The PFEIFER DB Anchors are fixed at the formwork prior to concreting and then poured formlocked. Once the concrete is hardened, any kind of fixing can be implemented by simply screwing in. The PFEIFER DB Anchors carry a European Technical Approval (ETA 11/0288). This document is valid throughout Europe and allows the anchors to be used in the entire European Economic Area for statically load-bearing fixings with building authority approval. Fixings are considered to have building authority relevance if their failure could lead to a danger to life and limb or to considerable economic damage. There is a choice of two PFEIFER DB Anchors: the DB Waved Anchor and the DB Foot-mounted Anchor for particularly thin elements. Both anchor variants are available in a galvanised version for dry interior areas and a stainless steel version for increased protection against corrosion.

+ Advantages

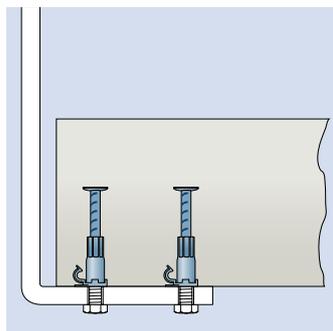
- Foot-mounted Anchor suitable for the thinnest elements
- high carrying capacities
- no complex drilling
- wide range of applications
- safe, economical, fast
- CE marking
- Software

Product range

- Foot-mounted Anchors for permanent fixing
- Waved Anchors for permanent fixing
- Accessories

§ Directives

- European Technical Approval ETA 11/0288
- Declaration of performance
- European Construction Products Regulation/Regulations for the Marketing of Construction Products (EU no. 305/2011)



Further product recommendations:
 PFEIFER VS® System,
 PFEIFER Thread System,
 PFEIFER Socket Dowels



Product description

PFEIFER supplies Socket Dowels and Polyamide Sockets for so-called constructive fixings. Constructive fixings on concrete elements are those that pose no threat to life and limb or to economic or public safety – i.e. they have no building authority relevance. These subordinate fixings can be carried out cost-effectively using PFEIFER Socket Dowels with various common thread sizes. PFEIFER Polyamide Sockets are particularly suitable for low-load fixings and are not susceptible to corrosion.

+ Advantages

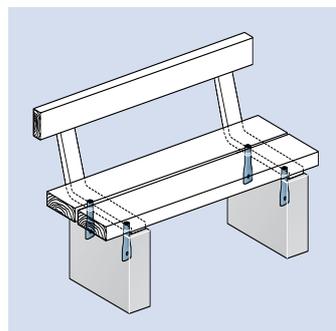
- wide range of products and applications
- Socket Dowel with cross hole and crimped end, also available with nailing plate for simple installation
- Polyamide Sockets for cost-effective fastening where corrosion protection requirements are high
- Nailing plates for simple fastening of socket dowels to wooden and plastic formwork
- Nail plugs for fixing polyamide sockets to wooden formwork
- Fixing screws for the fast, simple fixing of polyamide sockets

🏭 Product range

- Socket Dowels in various versions
- Polyamide Sockets
- Dywidag Assembly System
- Accessories

§ Directives

- Suitable only for fixings that require no approval



Further product recommendations:
PFEIFER Thread System,
PFEIFER VS® System,
PFEIFER DB Anchors



Product description

Easy and professional fastening of braces to double wall elements using the PFEIFER Fixing System for Push-Pull-Props MoFi! Particular attention must be paid to the reliable assembly of precast elements, always bearing the building process and the on-site safety of the workforce in mind. At least two braces, which are fastened not only to the ground, but also to the precast element, are used during the assembly of precast elements. Fixing points must verifiably and safely absorb wind loads during the entire assembly period. The PFEIFER Fixing System for Push-Pull-Props MoFi 16 was developed and designed for the professional fixing of braces to precast concrete walls and was the first system to be approved for this application with the given anchorage depths. The fixing of braces to the ground can be done using the PFEIFER Concrete Screw ConFi 14, which also carries building authority approval.

+ Advantages

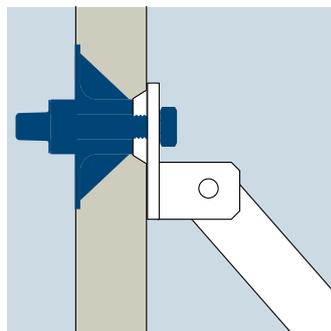
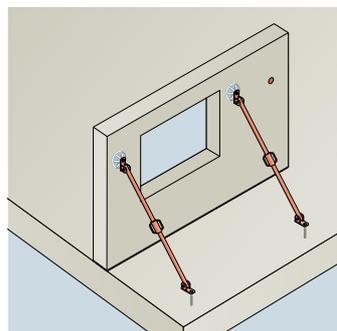
- simple and safe construction
- planning and legal safety due to approval
- cost-effective
- practice-orientated through simple use
- high carrying capacities
- flexibly usable

Product range

- MoFi 16 – Fixing for Push-Pull-Props
- ConFi 14 – Concrete Screw
- Accessories

§ Directives

- German Institute of Building Technology general technical approval no. Z-21.8-2040
- Safe work equipment as defined in health & safety legislation according to BetrSichV (Operational Safety Ordinance)



Further product recommendations:
 PFEIFER Thread System,
 PFEIFER VS® System,
 PFEIFER FS Box



Product description

The PFEIFER Lifting Loops are used for the temporary suspension of lift cabs or other objects during assembly and maintenance work. When constructing lifts the safety of the fitters is the top priority – and the quality of the attachment points is thus particularly important. PFEIFER products are manufactured using high-quality materials, manufactured and checked in Germany - and therefore particularly safe. The basis for the development of the lifting loops and for the proofs of the demanded safeties is the EC Machinery Directive 2006/42/EC (4) of the European Parliament and the Council of 17 May 2006.

+ Advantages

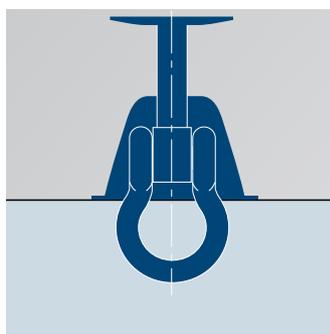
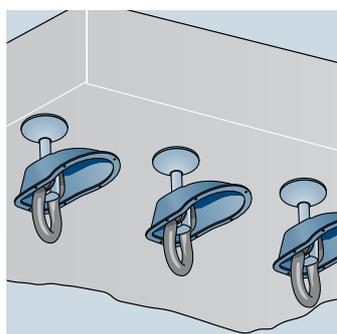
- PFEIFER LSF Lifting Loop for insertion in the formwork – before concreting
- PFEIFER LSV Lifting Loop for recessed installation – without perforating the formwork
- PFEIFER Load Eye for recessed installation – with particularly high load-bearing capacities
- PFEIFER LSG Lifting Loop for through-hole fitting – can be subsequently installed
- PFEIFER LSP Lifting Loop for anchor fitting – after concreting

Product range

- LSF Lifting Loop
- LSV Lifting Loop
- LSG Lifting Loop
- LSP Lifting Loop
- Load Eye

§ Directives

- PFEIFER Lifting Loops: All lifting loops conform to the Machinery Directive
- Safe work equipment as defined in health & safety legislation according to BetrSichV (Operational Safety Ordinance)



Further product recommendations:
PFEIFER VS® System,
PFEIFER Thread System

Durability is the perfection of PFEIFER innovation

PFEIFER has been manufacturing products for the permanent connection of concrete structural elements – in particular precast elements – for around 20 years. These PFEIFER innovations have considerably facilitated work on the building site. The highest quality standards are indispensable for these products with building authority approval and, for PFEIFER, only natural.

Only suitable materials are used in this product range. PFEIFER quality is always ensured through the most precise specifications for the steel manufacturers coupled with our own factory checks.

For the manufacturing of the stainless steel PFEIFER Sandwich Anchors, for instance, only sheet metals in a special grade specially produced for the purpose are used, because only these fulfil all the later requirements. In particular in the Connection Systems segment, PFEIFER places a network of advisors at its customers' service – free of charge. This network consists of several structural engineers, who advise planning and engineering offices throughout Germany on the installation of PFEIFER components.

For the cost-effective use of the Connection Systems products, PFEIFER additionally offers you a free Software Suite, which can be downloaded at www.pfeifer.de.



PFEIFER

Connection Systems



**PS-A Steel Bearing
VarioSonic Staircase Bearing
Concrete Earthing System BEB
Sandwich Anchor System
Delta Anchor System
Column Shoe System
Wall Shoe System**



Product description

PFEIFER Steel Bearings facilitate the assembly of TT slabs, supporting beams or trough plates, thus shortening construction times. They take up all dead weight loads during the element assembly. Together with the inserted reinforcements and the cast-in-situ concrete layer, the total loads in the final state are safely conducted into the supporting beams. The structure can be planned, dimensioned, manufactured and installed more easily without bearing ledge beams. Complex supporting measures during the assembly are unnecessary. Lower installation heights and clean bottom views of the ceilings have a positive effect on the entire building. PFEIFER Steel Bearings are manufactured from high-quality materials on automatic production machines with the highest repeatability according to German and European standards and within the framework of a certified quality management system.

+ Advantages

- secure bearing on simple rectangular joists
- direct bearing with low load eccentricity
- Bearing ledges and dowels for securing the position are no longer required
- saving of construction costs and time by delegating the detailed planning in advance
- Prefabrication of the precast elements under controlled conditions
- Software

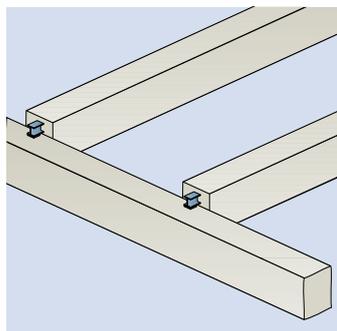
🏭 Product range

- Bearings in four sizes

§ Directives

- German Institute of Building Technology general technical approval no. Z-15.6-287

Connection Systems



Further product recommendations:
 PFEIFER Column Shoe Systems,
 PFEIFER VS® System



Product description

The PFEIFER VarioSonic SL Intermediate Staircase Bearing is intended for use as an intermediate support for absorbing and transmitting the vertical effects from the pull-out torque and dead weight of angled or spiral stairs in the stairwell wall.

In contrast, the PFEIFER VarioSonic SLE Staircase Bearing is used with straight or angled staircases in order to support the end points on the floor or landing. Specification of the floor structure at a later time is no problem with the PFEIFER SL Staircase Bearing, since the stairs can be adjusted to the correct level at any time.

A change in the staircase structure is also possible even after many years. Thanks to the outstanding, above-average noise protection values of the VarioSonic Staircase Bearings, the optimum sound decoupling of the stairwells from the living areas is guaranteed.

+ Advantages

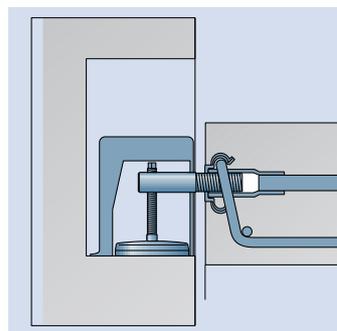
- exemplary footsteps sound isolation
- stairs under load are height-adjustable – usable without crane and braces
- saving of construction costs and time by delegating the detailed planning in advance
- shortened crane times thanks to adjustability
- the sticking-on of neoprene bearings on site can be avoided
- load stages of all common stair dimensions are covered

🏭 Product range

- Intermediate Staircase Bearings
- Staircase End Bearings

§ Directives

- Type test according to DIN 1992-1-1
- Noise protection appraisal
- Fire protection appraisal
- Declaration of performance



Further product recommendations:

PFEIFER Column Shoe Systems,
PFEIFER VS® System



Product description

The PFEIFER BEB Concrete Earthing Bridges are used in traffic engineering and have been specially developed for the earthing of concrete elements near to high-voltage electrical systems.

The PFEIFER BEB range consists of a modular system with variable end fixings and connection elements. This extensive product range also allows the user to make use of a multitude of possible combinations, thus affording great flexibility when laying out the earthing.

Apart from sockets made of precision steel tubing, we also offer welding tongues and cable lugs, which are used as end fixings, as well as various connection options. All products carry German Federal Railway Authority approval as well as permits from DB Netz AG (German Railways) and the ÖBB (Austrian Federal Railways).

+ Advantages

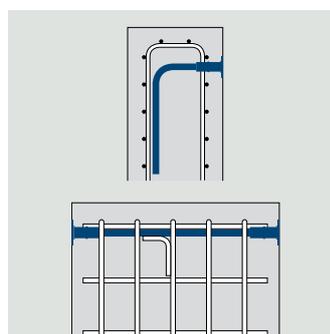
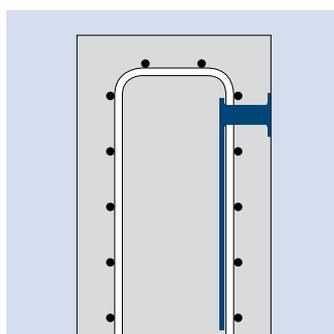
- practice-oriented product range
- flexible types, which are adaptable on the building site
- extendable by simple welding
- legally secure in use thanks to approvals/permits

🏭 Product range

- Threaded Socket with flat steel
- Threaded Socket with reinforcing steel
- Threaded Socket with copper cable and welding tongue
- Threaded Socket with copper cable and cable lug
- Cable Lug with copper cable
- Cable Lug with steel rope

§ Directives

- Approved by the Federal Railways Office and the DB Netz AG



Further product recommendations:
 PFEIFER WK Systems,
 PFEIFER PH Reinforcement
 Continuity Systems



Product description

The PFEIFER Sandwich Anchor System is intended for the connection of facing layer to load bearing layer through the insulating layer. It consists of bearing anchors, the PFEIFER Cylinder Anchor or the PFEIFER Flat Anchor, as well as anchor pins. Thanks to its flat shape, the PFEIFER Flat Anchor can be installed in the insulation with no great effort in combination with retaining anchors and connector pins. Thanks to its rotationally symmetrical shape, the PFEIFER Cylinder Anchor is ideal for use where the element is to be rotated. All anchors are made of high-quality stainless steel. In addition to the type test, the system carries approval from the German Institute of Building Technology.

+ Advantages

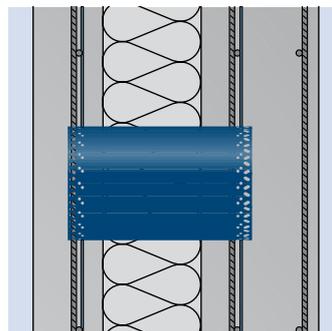
- insulating layers up to 25 cm can be realised
- fast and simple installation of the anchors and the insulation
- dimensioning alone via the dead weight of the facing layer; loads due to wind pressure, wind suction and temperature are already accounted for in the type static calculation
- extensive and rounded-off product range
- dimensioning software

Product range

- Cylinder Anchors
- Flat Anchors
- Anchor Pins
- Clip-on Pins
- Clip-on Stirrups

§ Directives

- German Institute of Building Technology general technical approval no. Z-21.8-2005
- Type test TP 14-012



Further product recommendations:

PFEIFER Thread Systems,
PFEIFER VS® Systems



Product description

The PFEIFER Delta Anchor System was developed for the connection of the facing layer and load-bearing layer in sandwich elements. The Delta Anchor is generally used in pairs as a vertical bearing anchor in different axes. As a retaining anchor, the PFEIFER Delta Anchor prevents the horizontal shifting of the facing layer with respect to the load-bearing layer. In determining the design resistances a large variety of loads were taken into account, such as dead weight, wind pressure and wind suction, temperature drops in the facing layer and also temperature differences between load bearing layer and facing layer. The system consists of the PFEIFER Delta Anchor, the bearing anchor made of high quality stainless steel and the PFEIFER Anchor Pins.

+ Advantages

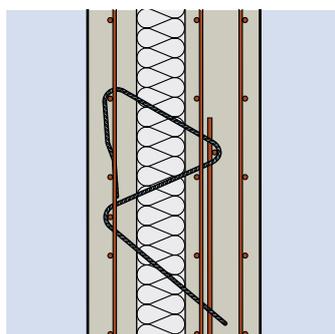
- dimensioning only via the dead weight of the facing layer – wind and temperature already incorporated into the type static calculation
- no additional proofs of the connector pins necessary due to prespecified grid
- insulating layer thickness up to 25 cm
- high-quality stainless steel
- safety with regard to building laws prevents the closure of the building site
- dimensioning software

🏭 Product range

- Delta Anchors
- Anchor Pins
- Clip-on Pins
- Clip-on Stirrups

§ Directives

- Type test
- Approval



Further product recommendations:
 PFEIFER Column Shoe Systems,
 PFEIFER VS® Systems



Product description

The type-approved PCC Column Shoes are intended for the rigid connection of precast concrete columns to the foundations. They are part of the PFEIFER Column Shoe System and are used in combination with PFEIFER Foundation Anchors. The advantages lie in the simple, load-bearing bolted connection of concrete elements and thus a considerably faster assembly. Additional supports can be dispensed with.

In addition, thanks to the instantaneous load-bearing capacity, no drying times of grouts or the like need to be taken into account. Simpler precast element geometries thanks to minimised base plate geometries are a positive side effect and increase their cost-effectiveness even more. Technical proofs exist in the form of approvals and type tests.

+ Advantages

- secure, quick and simple connection of concrete elements by bolting together
- fast delivery through the use of standardised components
- type-approved column shoes for the load-bearing, rigid connection of precast columns to the foundations – no diagonal bracings during the assembly period
- extensive, flexible range of anchors for every application

🏭 Product range

- PCC Column Shoe
- PGS Foundation Anchors type L, type G, PEK, PDK
- PVB/PGV Connecting Bolts
- Accessories

§ Directives

PCC Column Shoe System

- Type test Declaration of Performance

PGS Foundation Anchor type L, L4 and B

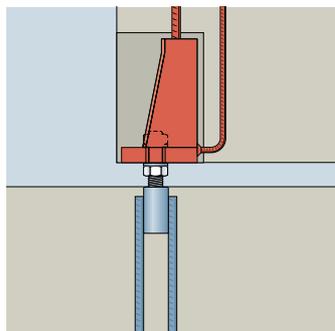
- Type test Declaration of Performance

PGS Foundation Anchor type G

- German Institute of Building Technology general technical approval no. Z-30.6-15

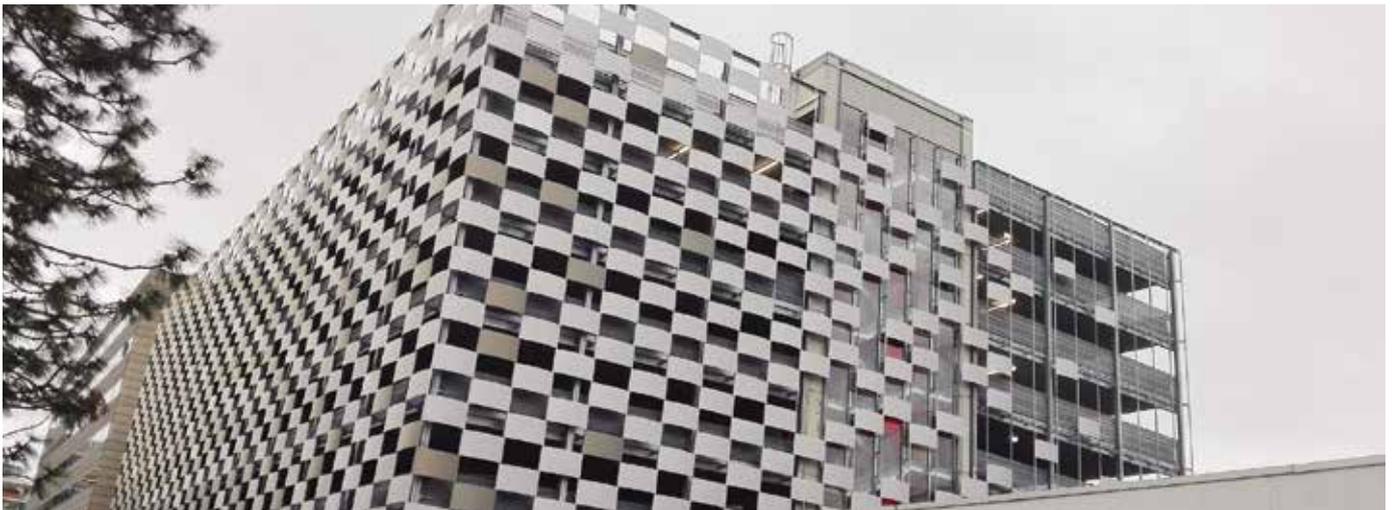
PEK Foundation Anchor

- German Institute of Construction Technology general technical approval



Further product recommendations:

PFEIFER Steel Bearing,
PFEIFER PH Reinforcement
Continuity System



Product description

The type-approved PFEIFER Wall Shoe serves as a connecting element inside bracing wall constructions. Both the tensile forces acting perpendicularly to the joint and the transverse forces in the longitudinal axis of the joint can be absorbed and transmitted. This solution offers the advantage of the fast, simple and safe connection of precast concrete elements by simply bolting them together. The type-approved PGS Foundation Anchors are intended for anchoring tensile and compressive forces in the foundations. These foundation anchors using the familiar PFEIFER Threaded Socket technology are much more advantageous for the building process than protruding threaded bolts. The PFEIFER PAP Connecting Bolts are used for the load-bearing connection of the PFEIFER Wall Shoes to the PFEIFER Foundation Anchors.

+ Advantages

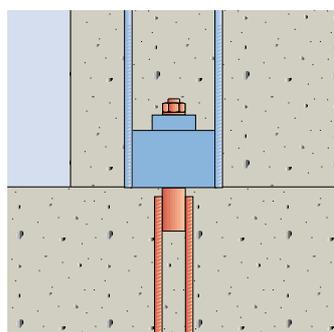
- complete system for the transmission of tensile and shear forces
- for wall thicknesses from 160 mm
- high standard of safety through industrial prefabrication of the connecting elements
- shorter construction times and thus lower costs

🏭 Product range

- PWS Wall Shoe
- PGS Foundation Anchor
- PAP Connecting Bolt
- Accessories

§ Directives

- Type test
- Declaration of performance



Further product recommendations:
 PFEIFER Column Shoe System,
 PFEIFER VS® Systems

Notices



Innovation – a pact with the future



PFEIFER has specialised in the manufacturing of products for the reinforcement of concrete elements for over 25 years. The highest quality standards are indispensable for these products with building authority approval. PFEIFER began with the development of the PH Reinforcement Continuity System. As a ropery, the company followed in the mid-1990s with the VS[®] Cable Systems for load-bearing reinforcement connections.

For the threaded sockets of the PH system, use is made only of special tube cross-sections and tube grades that are capable of bearing the corresponding static loads while at the same time coping with dynamic effects. The male bars are hot

swaged first and only then is a thread cut; this ensures that there is no reduction in the cross-section. Loop systems, on the other hand, are only safe to use when rope and ferrules of the highest grade are matched to each other.

Defined manufacturing processes using ideally tuned industrial series production equipment ensure constant high product quality. Suitable tests are carried out at each stage of the manufacturing to ensure additional process reliability.

Factory production controls and appropriate testing facilities are matters of course here and are themselves subject to regular testing. Continuous supplements ensure that monitoring and testing are always at the cutting edge.



PFEIFER

Reinforcement Systems



VS[®] System
FS System
PH Reinforcement Continuity System



Product description

The VS[®] ISI System^{3D} offers a completely new dimension of VS[®] wire rope loop connections. The VS[®] ISI System^{3D} combines all the advantages of existing wire rope loop systems in a single product and offers the ideal solution for all connections of walls to one another or of walls to columns. Minimal use of grout, symmetrical layout of the loops and maximum assembly tolerances offer undreamt-of increases in efficiency and implementation safety – and all of this with building authority approval. Free software can be downloaded online for the simplest possible dimensioning. The product range is rounded off by the approved box systems and a wide range of products for structural applications. A great many projects around the world have been implemented very successfully with PFEIFER VS[®] Systems.

+ Advantages

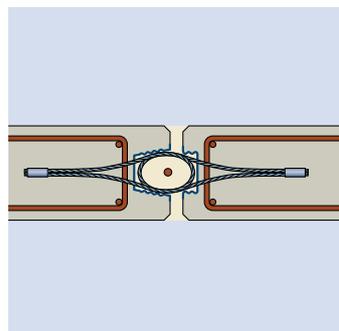
- maximum load-bearing capacities even with thin walls
- optimum profile for optimum connection
- symmetrical box and rail profiles – non-directional installation
- practice-orientated grouting system
- minimum consumption of mortar
- symmetrical arrangement of the loops in the VS[®] ISI System^{3D} offers undreamt-of increases in efficiency and implementation safety
- dimensioning software

🏭 Product range

- Box and rail systems for load-bearing connections
- Box and rail systems for constructive connections
- VS[®] FDS Joint Pressure Formwork

§ Directives

- German Institute of Construction Technology general technical approval
- VS[®] ISI System^{3D}: **Z-21.8-1929**
- VS[®] BZ System^{3D}: **Z-21.8-1792**
- VS[®] Slim Box: **Z-21.8-1875**
- VS[®] Plus Box: **Z-21.8-1893**



Further product recommendations:
 PFEIFER PH Reinforcement Continuity System,
 PFEIFER Column Shoe System



Product description

The PFEIFER FS System was intended and developed primarily for the connection of precast/cast-in-situ concrete elements to semi-precast elements, so-called double walls. However, other connections with cast-in-situ concrete sections can be simply and flexibly realised. Design resistances for shear and tensile forces are available for the most diverse concrete strengths and wall thicknesses. The distances between the boxes can be flexibly planned to suit the precise requirements; the box is therefore neither an interfering factor nor does it pose a risk of accident during the assembly. With its sturdy design, the PFEIFER FS Box combines the well-known advantages of the PFEIFER VS® system with the requirements for in-situ concrete construction.

+ Advantages

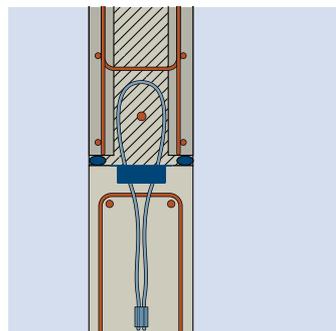
- unique solution for the joining of double walls to precast elements
- no subversive elements in the assembly
- no danger of injury through protruding reinforcing steel bars
- no need to cut long metal profiles to length any more
- distortion of the loop no longer possible – loop rebounds immediately into the required position

Product range

- FS Box for load-bearing connections

§ Directives

- German Institute of Building Technology general technical approval no. Z-21.8-1981



Further product recommendations:
 PFEIFER VS® System
 PFEIFER PH Reinforcement Continuity System,



Product description

The PFEIFER PH System encompasses female and male bars for the most diverse reinforcement layout requirements and offers a customer-orientated solution for permanent connections and continuations of reinforcements. A connection that is 100 % resistant to tensile and compressive forces can be realised by simply screwing together male and female bars. Virtually all reinforcement connection variants can be manufactured by the use of versatile auxiliary products within the system. Due to the use of standard lengths, planning changes at short notice are not a problem when using the PH System. All products from the PFEIFER PH System carry building authority approvals for both static and dynamic loads and are monitored by factory production controls and external supervision. Checks on the building site or the sending of samples for the testing of building materials can thus be dispensed with.

+ Advantages

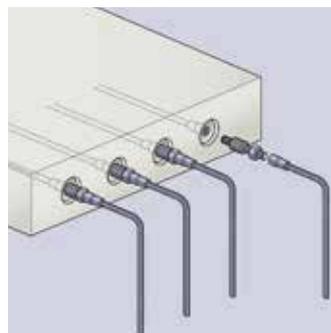
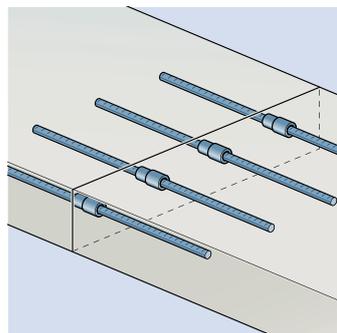
- flexible planning, fast construction
- overlap joint is easy to execute using standard stock lengths
- load-bearing connection of female and male bars with the continuity reinforcement by means of overlap joint
- transmission of the full bar force without reduction
- joints are possible without longitudinal offset in one section
- simple implementation of time-staggered concreting phases
- reduction connections for reducing the diameter in a joint or in end anchorages are additionally available

🏭 Product range

- Female Bars
- Male Bars
- Assorted threaded connection bolts
- Assorted sleeves

§ Directives

- German Institute of Building Technology general technical approval no. Z-1.5-226



Further product recommendations:
PFEIFER VS® System,
PFEIFER Column Shoe System

We support our customers directly on site with first-class products and comprehensive service. With its products, PFEIFER Connecting and Lifting Systems considers itself to be a leading supplier of technically sophisticated components for

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Lifting Anchor Systems
Thread System



Lifting Anchor Systems
BS Anchor System



Lifting Anchor Systems
WK Anchor System



Fixing Systems
DB Anchor 682
for Permanent Fixing



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HK Assembly Anchor System



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Column Shoe System
Wall Shoe System



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Stell Bearing
Staircase Bearing VarioSonic



Connection Systems
Sandwich Anchor System
Delta Anchor System



Connection Systems
Concrete Earthing System BEB



Reinforcement Systems
VS®-Wire Rope Loop System



Reinforcement Systems
PH Reinforcement Continuity System



Cable Tension Members
Tension Rod System



Attachment Materials
(Wire Ropes, Chains, Textiles)



Lashing Systems



Grabs for Reinforcing Steel
Balancing Spreader Beams

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