REISSER SCHRAUBENTECHNIK®

PERFORMANCE

Industry

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WHO WE ARE

REISSER combines innovation and tradition.

100 years of experience has been amassed in the company's long history. However, experience alone is not enough as far as we are concerned. Instead, we are constantly focused on creating innovations that offer our customers real added value in their respective fields.

It all started in 1921 with an ironware shop established by the REISSER brothers in the town of Künzelsau, in Hohenlohe, Germany. Over the years, REISSER has become a cutting-edge company in the fastenings industry and now employs over 300 staff. Today, we produce connection elements made of the highest-quality materials at a 39,000-m^2 production site in Criesbach.

As a partner to specialist traders and retailers and a supplier for the wide range of requirements from the industry, we always have over 8000 different screws and connection elements available made of stainless steel, brass, steel and copper as well as special materials and alloys. What's more, we can work together with you as an expert partner to create custom solutions.

The company's own electroplating department complements its profile. This allows us to offer various coating options and innovative coating processes for special requirements and large quantities for fasteners and components from various industries.

Based in Germany – Because it's our home

Our employees are irreplaceable. The success of our company rests on the personal dedication of each individual, which is why we base ourselves in Germany, benefiting too from the high standards of education. We are happy to help keep these up with an above-average number of training places that we provide year after year, both in technical and commercial areas. Because added value comes through appreciation.

We are firmly rooted in Germany: we always have been and we always will be. This is how we can guarantee a high standard of safety, stability and quality.

Above all, however, we like to invest because it's our home country.

REISSER – "Made in Germany"

MEMBER OF THE WÜRTH GROUP

REISSER SCHRAUBENTECHNIK

OUR PRODUCTION:

- Production area: 16,900 m^2
- 400 tonnes of wire/month, around 55 million screws/month
- 181 employees working in production
- Raw material exclusively from European manufacturers
- Materials:

- Stainless steel A2/A4/A5/A8
- Bi-metal
- Steel in various grades and strengths
- Brass
- Aluminium

EDELSTAHL Rostfrei INOX STAINLESS STEEL

Machinery

- Presses for cold forming
- Thread rolling machines
- Welding systems for bimetal screws
- Welding systems for solar fasteners
- Washer inserting machines
- Inductive hardening systems
- Annealing systems
- Annealing furnace
- Pincer machines

WE MANUFACTURE QUALITY

- Qualified employees
- Continuous training and courses
- Extensive selection of test equipment
- Products with various types of technical approval, such as ETA approval
- Company certifications:
  Quality management system in accordance with DIN EN ISO 9001
  Energy management system in accordance with DIN EN ISO 50001
  Environmental management system in accordance with DIN EN ISO 14001

WHAT WE CAN DO

- Manufacture of screws and fasteners
- Use of all cold formable materials:
  Grade A2/A4/A5/A8 stainless steel, steel in various grades and strengths, special materials, bimetal, aluminium, brass and much more.
- A wide range of heat treatments, surface treatments and surface coatings,
- Tempering to 8.8/10.9, case hardening, inductive hardening, annealing
- Development of innovative products
- Development and execution according to your requirements
- Customer-specific solutions made of several components

REISSER ELECTROPLATING

The REISSER electroplating business unit is your partner when it comes to surface coating.

The perfect processing method is available for all volumes, from special requests through to large batches.
Thanks to forward-looking investments in state-of-the-art and innovative equipment as well as new finishing procedures, we are always at the cutting edge of technology. We have been refining surfaces since 1950, allowing us to draw on many years of experience.
As an independent business unit of REISSER-Schraubentechnik GmbH, we not only offer coating solutions for the fastening industry, but also for components from a wide variety of industries.

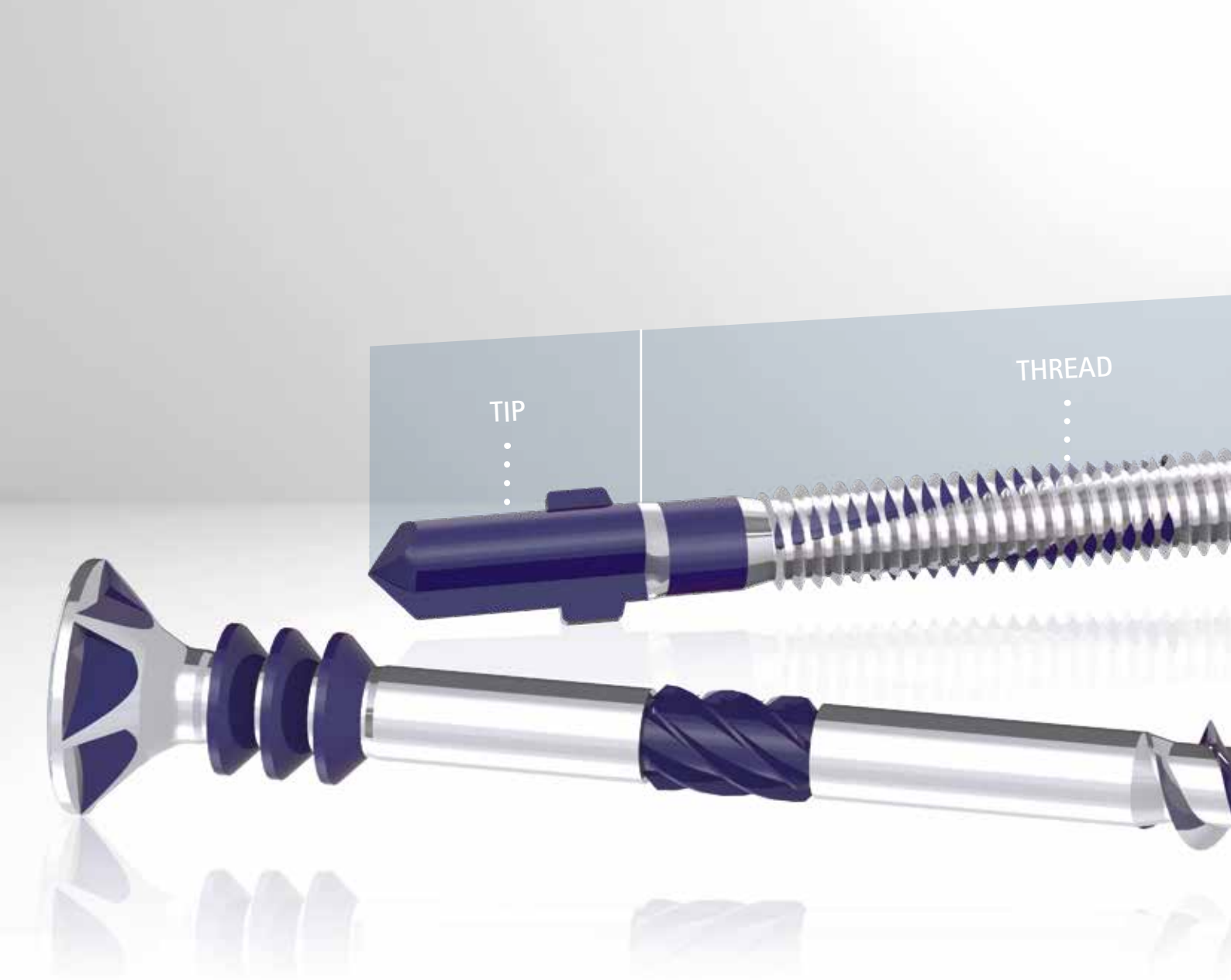
SERVICE

Finishing is not the only thing of high importance for us – our partnership with the customer is also an expression of our company philosophy.
From us, you can expect comprehensive service and support for all coating requirements and logistics topics.
At the same time, we also deal with individual requirements quickly and flexibly.

PROCESSES

- Electropolishing – frame/drum (F/D)
- Pickling and passivation (F/D)
- Painting (F)
- Chemical nickel-plating (F/D)
- Zinc plating (F/D)
- RUSPERT® (D)
- Zinc flake coating (D)

F/D =frame/drum



WHAT'S INVOLVED?

Economy
- Screwing without pre-drilling
- Quick screw tightening – saving time when screwing
- Process reliability

Innovation
- No stress in the component
- No chips
- Edge fittings
- "Pulling-together effect"

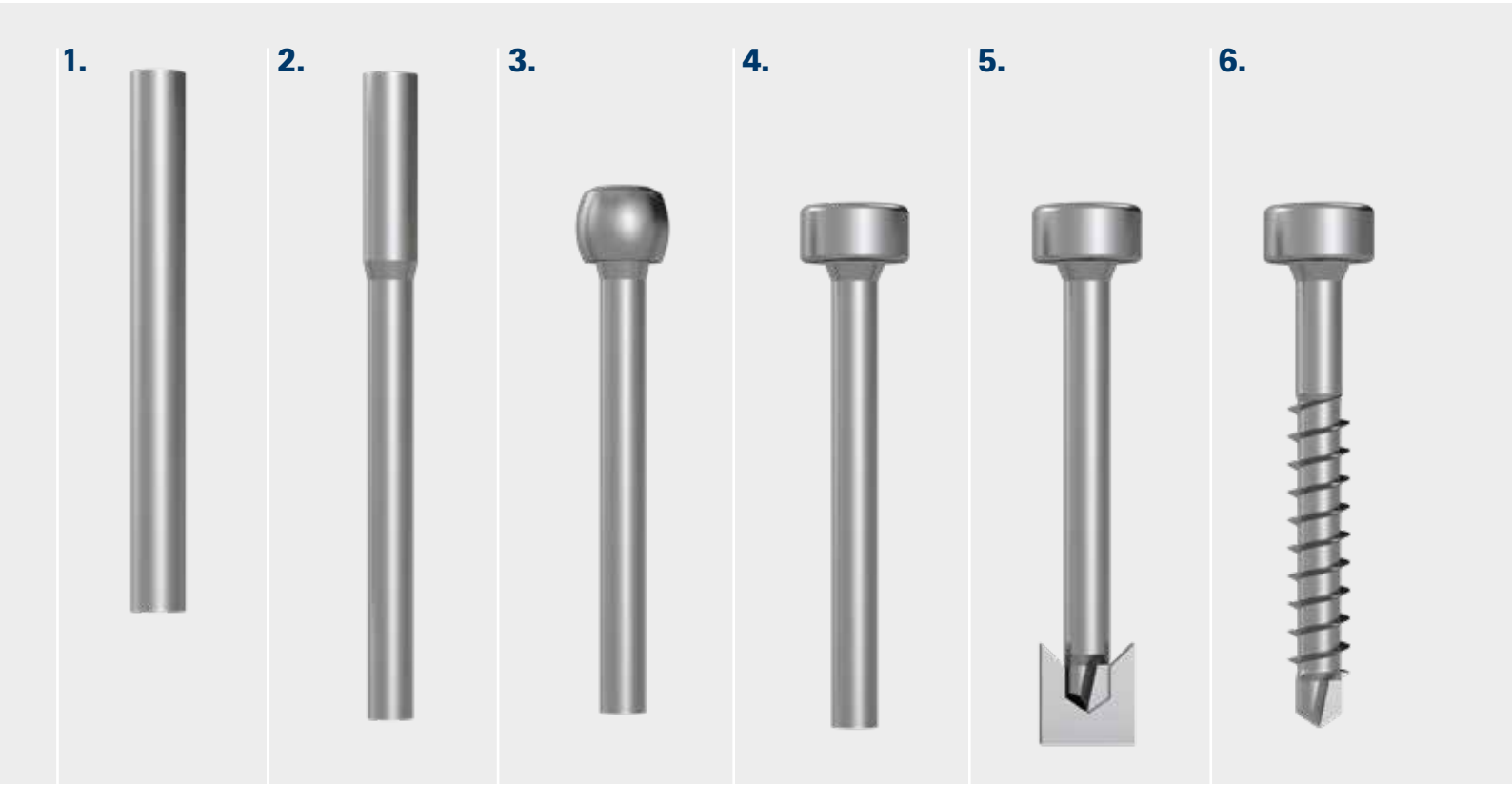
Function
- Easy to screw in
- Optimal assembly even in difficult screwing situations
- Technical parameters (extraction values/screw-in behaviour/pull-through values)
- Connection of a wide range of materials

Differentiation from competition
- Traceability
- Appearance
- Stability
- Durability
- Recognition value
- User-friendliness

OUR ADDITIONAL BENEFITS

- Designed in-house
- Technical support beginning with the planning phase
- In-house product development
- 100% control in automated and manual process possible at the customer's request
- Packaging and logistics according to customer requirements
- Stocking of minimum inventory levels of customer-specific items in consultation with the customer.
- Packaging
- Private labelling
- Procurement of special or drawing parts as a complete supplier
- Additive production options/3D printing (SLM process)

HOW IS A SCREW MADE?



Example:
Cylinder head chipboard screw with TX drive and drill tip

1. Wire section (starting material)

2. Extrusion-moulded/reduced section (division of section into head and shank)

3. Pre-compressed blank (forming the wire into a ball shape)

4. Press-blank (moulding of head shape and inner drive)

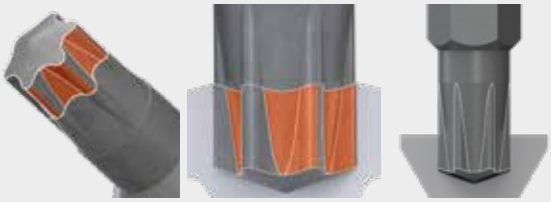
5. Pinched bolt (forming of the drill tip by pinching)

6. Finished screw (thread rolling and shearing of pinched slug)

DRIVES

SIT® drive

- A tight, precise fit due to the tapered shape
- Can be screwed with conventional TX bit



The SIT® drive combines the strengths of a cross recess (conical core) with those of a TX drive (large force contact surfaces). Thanks to the special shape with the conical core, the tool is centred precisely in the screw with the SIT® drive.
The screw can also be placed onto the bit and screwed in easily with no need to hold it. At the same time, the six large force contact surfaces guarantee maximum, even force transmission and prevent the bit or tool from overturning or slipping.

*Licensed by Adolf Würth GmbH & Co. KG

TX/hexalobular head

- No cam-out effect
- Transmission of high torques

Pozidriv® cross recess

- Reduced cam-out effect due to parallel contact blades
- Not suitable for automatic screw connections

TX®-ttap®

- No cam-out effect
- Prevents wobbling of the screwing tool

Hexagon

- Transmission of high torques
- Robust
- Can be painted over
- Widely available
- Resistant to dirt

TX-Tamper-Proof/security TX

- Modification of the TX drive
- Internal pin makes undesired access difficult

Hexagon with pressed-on washer/flange

- Increased contact surface
- No damage to the component by the screw-in tool

Combination TX slot

- Combines the benefits of a TX drive with a slot
- Use of different screwing tools possible

Hexagon socket

- Widely available
- Good force transfer

Phillips® recessed head

- Suitable for automatic screw connections
- Use e.g. in dry walling (screw-in limiter)

Combination hexagon and cross recess

- Combination of external and internal contact
- Versatile use of screwing tools

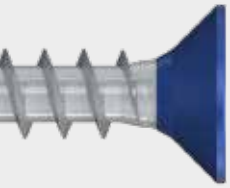
Combination cross recess and slot

- Combination of PZ and slot
- Use of different screwing tools possible

LocTec®

- For screw fittings with security considerations
- The flange geometry only allows the screw to be screwed in
- The screw can then no longer be unscrewed

HEAD VARIANTS

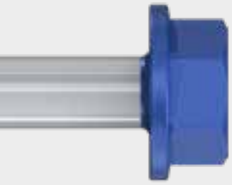


Countersunk head
- For even countersinking

Raised countersunk head
- As a design element
- Deeper internal drives possible

Pan head
- Visually appealing
- Large internal drives

Hexagon head
- High force transfer
- Resistant to dirt
- Robust
- Can be painted over
- Widely available



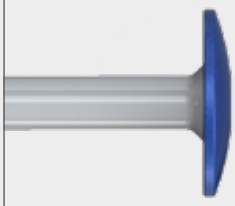
Hexagon head with pressed-on washer/flange
- Enlarged press/contact surface

Forged head
- As a design element

Bugle head
- Good centring in the component

Wafer head
- Large contact surface with low head height

Cap head
- Can be adjusted for decorative and cover caps



Half round head
- Large contact surface with low head height
- As a design element

Stepped head
- Raised wood fibres are separated by the lower step and remaining material is covered by the upper disc
- Clean fitting appearance

Cylinder head
- Large head height allows for large internal drives
- Widely used in mechanical engineering

SPECIAL HEAD VARIANTS

Knurled head

- As a manual adjustment screw
- Adapted to your application

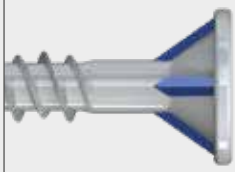
Claw head

- Perfect grip for coating in plastic
- Adapted to your application

ADDITIONAL HEAD VARIANT OPTIONS

Milling ribs

- Self-countersinking of head in wood



Locking ribs

- Self-countersinking in wood
- Edge covers material cut through countersinking

Locking serration

- Prevents undesired loosening of the screw
- High processing reliability, as overturning is difficult

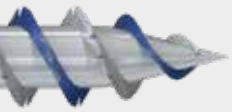
Milling pockets

- Facilitate flush countersinking whileat the same time being suitable for fittings

Helical teeth

- High process reliability against overturning, as the screw-in torque greatly increases when the head hits the component
- Prevents undesired loosening of the screw
- Chips produced are transported to the outside by the inclined arrangement of the teeth

THREAD TYPES

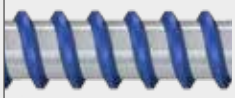


Double thread

- Twice as fast*
- Higher stability*

Further development of the chipboard screw thread with two interlocking threads

**compared to conventional chipboard screws*

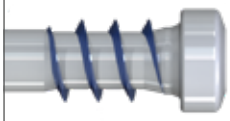


Special thread

- Special thread geometry according to customer's wishes/requirements
- Thread geometries for mounting ina wide variety of materials
- Functional adaptations via thread pitch and core diameter are possible

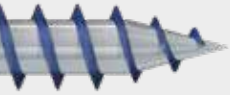
Wood screw thread

- Proven over decades
- Field of application: Solid wood, anchors



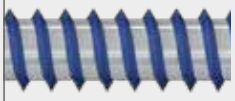
Supporting thread

- Secure hold in wood
- No creaking of components
- The tensile load is mainly absorbedin the supporting thread, thus small head diameters are possible



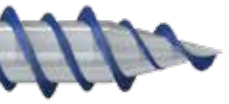
Chipboard screw thread

- Sharp and aggressive thread
- Diminished/reduced gap effect
- Versatile use in wood, composite materials, laminated panels etc.



Self-tapping screw thread

- Proven connection of thin components

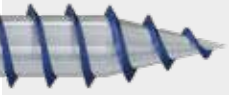


Hi-Lo thread

- Improved extraction values in both wood and thin sheet metal
- Faster screw-in time

Thread-rolling grooves

- Improved shape of the counter thread



Hardwood thread

- Reinforced core diameter, resulting in increased breaking torque
- Specially designed for use in hardwoods (e.g. bangkirai, teak)

Thin sheet metal thread

(single and double thread)

- High pull-out forces
- Double thread guarantee fast screw-in speeds

Coarse thread

- High thread pitch guarantees high screw-in speed and diminished/reduced gap effect
- Especially for softer wood types
- Easy screwing in and at the same time high pull-out forces in unstable material, e.g. for sand casting moulds

Metric thread

- Standard thread

For wood

For light metal/ aluminium/ pressure die casting

For plastic

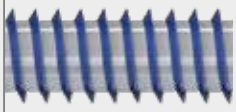
For steel

Additional building materials

THREAD TYPES

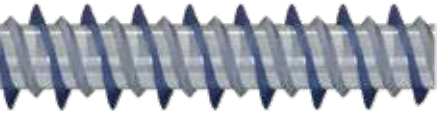
Metric fine thread

- High degree of self-locking



Die-cast thread DRG

- Direct screwing in light metals and fibre-reinforced plastics

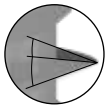


Plastic thread REKU

Specially designed for direct screwing in thermoplastic plastics

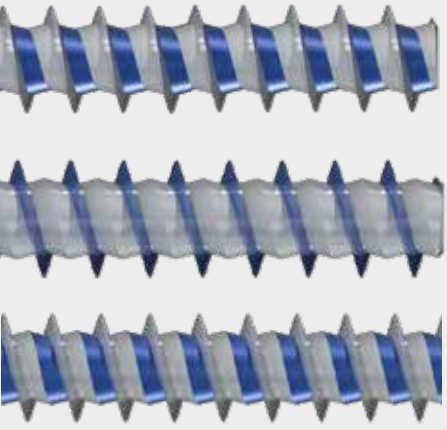
- High extraction torque
- High over-turning torque
- Low screw-in torque

  → **due to asymmetrical thread 25°/5° flank angle**

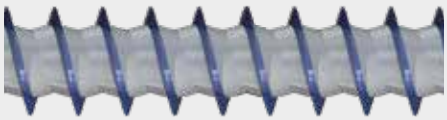


- High stability during the screwing process (process reliability)

  → **due to guide thread between the thread flanges**



We also manufacture other common types of thread for direct plastic screwing in a wide variety of variants.



For wood

For light metal/ aluminium/ pressure die casting

For plastic

For steel

Additional building materials

REISSER SCHRAUBENTECHNIK

THREAD TYPES

Sheet metal screw thread with thread-rolling grooves

- Proven connection of thin components
- Improved shape of the counter thread

Drilling screw thread

- Fine thread with grooves, designed for high thread-rolling performance
- For thick materials

Thread under head (single or double thread)

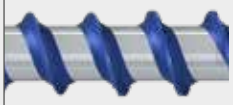
- In combination with sealing washer guarantees complete sealing

Connecting thread

- Provides additional mounting option
- No further drill holes are necessary due to replacing existing screws

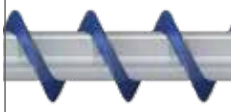
Metric thread with interruptions

- Interruptions allow subsequent shortening to the required size and guarantee a clean start to the thread every time
- Ideal for applications where screw length is subject to significant change



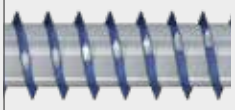
Concrete screw thread

- For direct screwing in pre-drilled concrete, the use of an anchor is not necessary



Aerated concrete screw thread

- Anchor-less mounting in aerated concrete block



Window frame anchor

- Self-screwing in pre-drilled masonry/concrete/ brick
- The use of anchors is no longer necessary

Anchor screw thread

- Specially adapted to your anchors

Nail thread

- Assembly is performed by knocking in, disassembly by unscrewing

For wood

For light metal/aluminium/ pressure die casting

For plastic

For steel

Additional building materials

THREAD TYPES, ADDITIONAL OPTIONS

End mill

- Reduces the screw-in resistance
- Reduces stress in the material
- Expansion of the screw channel in the component to be fastened
- Reaming of drill hole in plate materials to allow expansion

Reaming-wings

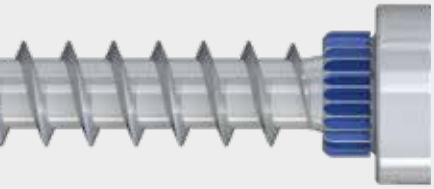
- Expansion of the hole when screwing in, thereby avoiding stress between the screw shaft and the drill hole reveal

Grooving/rolling in

- e.g. to hold support rings

Rolling up

- e.g. as screw-in limit



Rolling up

- e.g. as twist lock in the component

For wood

For light metal/aluminium/ pressure die casting

For plastic

For steel

Additional building materials

TIPS

Patented DRIBO® drill segment

- Drilling and screwing in one work step
- The special arrangement of the patented DRIBO® drilling segment engages the screw immediately
- Reduced wedge effect prevents crack formation - effortless connection including in frame and bar area

Drill tip with long drill start

- Passing through cavities within the component (delayed start of screwing so that the component is not destroyed)

TurboDribo for thin sheet metal on wooden substructures

- Thin sheet metal tip penetrates the sheet metal surface without chipping (up to 0.8 mm thick)
- DRIBO® drilling segment takes stress from the wood substructure

Reduced drill tip

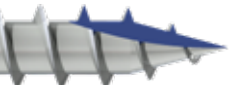
- Small pilot hole diameter guarantees high extraction values even in thin materials

SPI-tip

- Precise and immediate screw start
- Keeps the splitting effect in wood to a minimum

Extended drill bit tip

- Independent pre-drilling of thick materials
- Up to 12 mm drilling capacity



Notch tip/cutting notch/ self-clearing groove

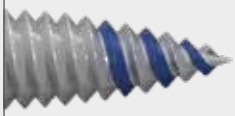
- Predrills
- Reduces splitting of material
- Reduces the screw-in torque

Wood screw tip

- For self-screwing in wooden substructures

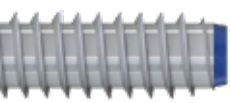
Pinched drill tip

- Pre-drills and reduces splitting of the material
- Small edge distances possible
- Prevents cracking



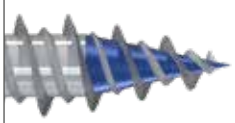
Thin sheet metal tip

- Chip-free penetration of thin sheet metal (up to 2 x 1 mm thick)
- Higher holding forces, more threads involved due to funnel formation



Point

- Easier placement
- Soft thread start



Needle tip

- Immediate screw start

For wood

For light metal/aluminium/ pressure die casting

For plastic

For steel

Additional building materials

TIPS

Overrolled drill tip

- Allows larger drill diameter in the starting phase of the screw
- The pilot hole diameter is reduced as drilling progresses due to the thread. As the component to be secured is predrilled larger than the substructure, higher extraction values result

Thin sheet metal tip with friction wings

- Drilling out of the component to be secured by the wings, preventing forced feed
- Wings designed to break off when hitting the substrate.

Wing-type drill bit

- Drilling out of the component to be secured by the wings, preventing forced feed
- The core hole is drilled into the substructure
- Wings designed to break off when hitting the material

Coarse thread tip

- Simple self-drilling in substrate

Search tip

- Makes locating holes easier

Pins

- Guarantees precise positioning in the screw dome

For wood

For light metal/aluminium/ pressure die casting

For plastic

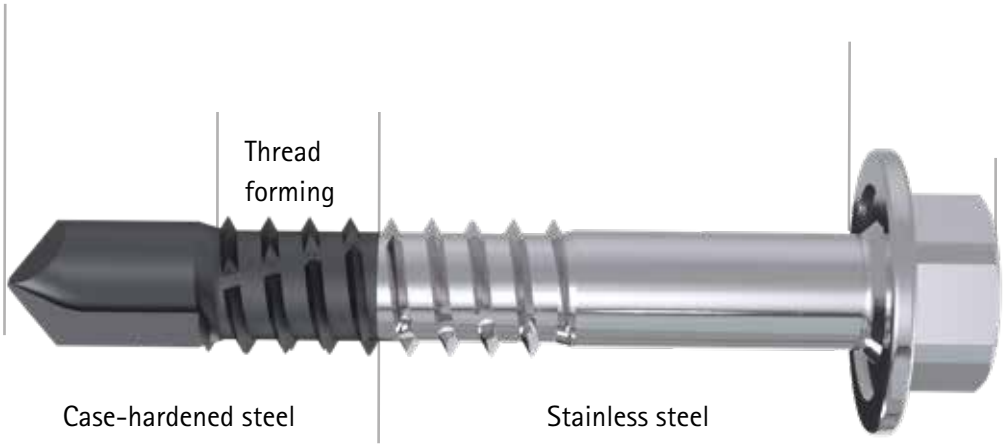
For steel

Additional building materials

BI-METAL DESIGN

Outdoors, working with stainless steel screws is prescribed in many areas. To guarantee their beneficial properties are preserved when it comes to fastenings in steel substructures too, we have developed a bi-metal drill screw. With our high-quality, patented welding process, the stainless steel screws are provided with a carbon steel drill tip.

Combined, this product allows a drastic reduction in assembly time of up to 50%. Drilling, thread cutting, securing and sealing occur in a single step (with additional sealing washer). Moreover, tool costs are reduced.



In a high-quality
welding process, a
carbon steel drill tip is applied to
the stainless steel screw.

Pre-drilling is no longer necessary.

EDELSTAHL® Rostfrei STAINLESS STEEL

Approval Z 14.1-4, General Foreword, Section 3.1.1
Unless otherwise indicated on the relevant instructions sheet of the approval, connection elements that are completely or partially exposed to weather or a similar moisture load must be made of non-rusting material.

APPLICATION EXAMPLES

Skateboard ramps

Fastenings for cover layers

REQUIREMENTS:

- Head lettering
- Flush countersinking
- Reduced splitting effect in the wood

SCREWS USED:

- Customised version of the DRIBO® chipboard screw - > Elephant screw

Photovoltaic roof and solar parks

Aluminium and steel substructures

REQUIREMENTS:

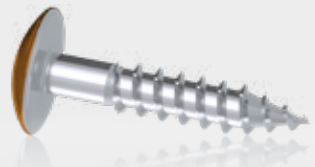
- Outdoors, susceptibility to weather
- Bi-metal self-drilling screw (stainless steel screw with steel drill tip)

SCREWS USED:

- Self-drilling screw RP-K3-X-6.3 x 20
- Self-drilling screw RP-K-6.3 x 20
- Thin sheet metal screw "chip-free" RP-T2-6.0 x 25

Residential/industrial construction

Resysta façade panels: Alternative material to wood



REQUIREMENTS:

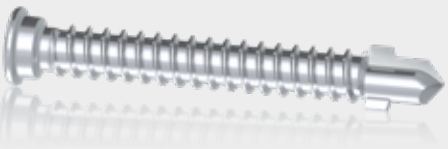
- Appearance
- Options: Series painting, special painting, minimum quantities, choic of 25,000 colours, from matte to gloss

SCREWS USED:

- Head-painted façade panel screws FPS-4.8; FPS-5.5; stainless steel A2+A4

Decking construction

To connect panel materials directly to aluminium or steel substructures



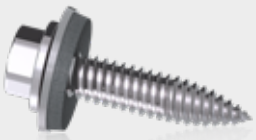
REQUIREMENTS:

- Resistant to rust and acid
- Also suitable for wood containing large amounts of tannic acid and thermally treated woods
- Screwing without pre-drilling
- For aluminium and steel substructures
- Permanently in stock

REISSER SCHRAUBENTECHNIK

Industrial lightweight construction

Standing seam roofing



REQUIREMENTS:

- Chip-free processing
- Rapid processing
- The ability to withstand heavy loads

SCREWS USED:

- Thin sheet metal screw RP-T2-6.0 x 38
- Self-drilling screw ' RP-K-5.5 x 25

COMMERCIAL CONSTRUCTION

Chip-free fastening of trapezoidal and sandwich profiles on wood substructures

REQUIREMENTS:

- No pre-drilling
- Chip-free fastening
- Protection of the sheet metal surface from scratches and dirt
- No cleaning

SCREWS USED:

- Self-drilling screw RP-TD-6.0
- Self-drilling screw RP-TD-P-6.0

Stainless steel A8 1.4529

Wood/wood fittings

REQUIREMENTS:

- Particularly resistant to highly corrosive media such as phosphoric, sulphuric and hydrochloric acid. High resistance to pitting and stress corrosion
- For fasteners with high demands on corrosion resistance (indoor swimming pool and salt-water baths, tunnel construction, chemical industry)
- ETA approval

SCREWS USED:

- RETINOX plus HCR 1.4529

VHF

Fastening substructures for façade elements in new and existing constructions

REQUIREMENTS:

- Minimal heat loss due to A4
- Easy to work with
- Flexible and versatile
- Fire safety compliant
- Approved for construction (Q4/2021)
- Tension and compression approval for anchors in substrate

SCREWS USED:

- RDS-CA
- RDS-CW

Industry services: As at: 07/2021

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