

## **Formwork and trench lining systems**

Versatile range of products –  
easy to use and fully flexible

Well-developed solutions  
for more flexibility

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## Products by ISCHEBECK – Made in Germany

A family business for five generations, FRIEDR. ISCHEBECK GmbH can be counted amongst the leading manufacturers of formwork and trench shoring systems nationally and internationally. We develop and produce our products in Germany according to German and international standards.

This brochure gives you a good insight into our versatile range of formwork and trench shoring products. Many products and systems are modular and can be combined with each other – always focusing on a solution that's right for each building site.

**i** If you need more information, simply request the appropriate brochure. Or visit our website at [www.ischebeck.com](http://www.ischebeck.com).

The **formwork solutions** from ISCHEBECK are compatible, and the materials used, e.g. steel, aluminium and plastics, ensure that that solutions are durable and economic. The low weight of the individual components improves safety, reduces fatigue and saves crane time. Whether single prop or complex falsework, all the products in the formwork range are versatile and tailored to the requirements of building sites.

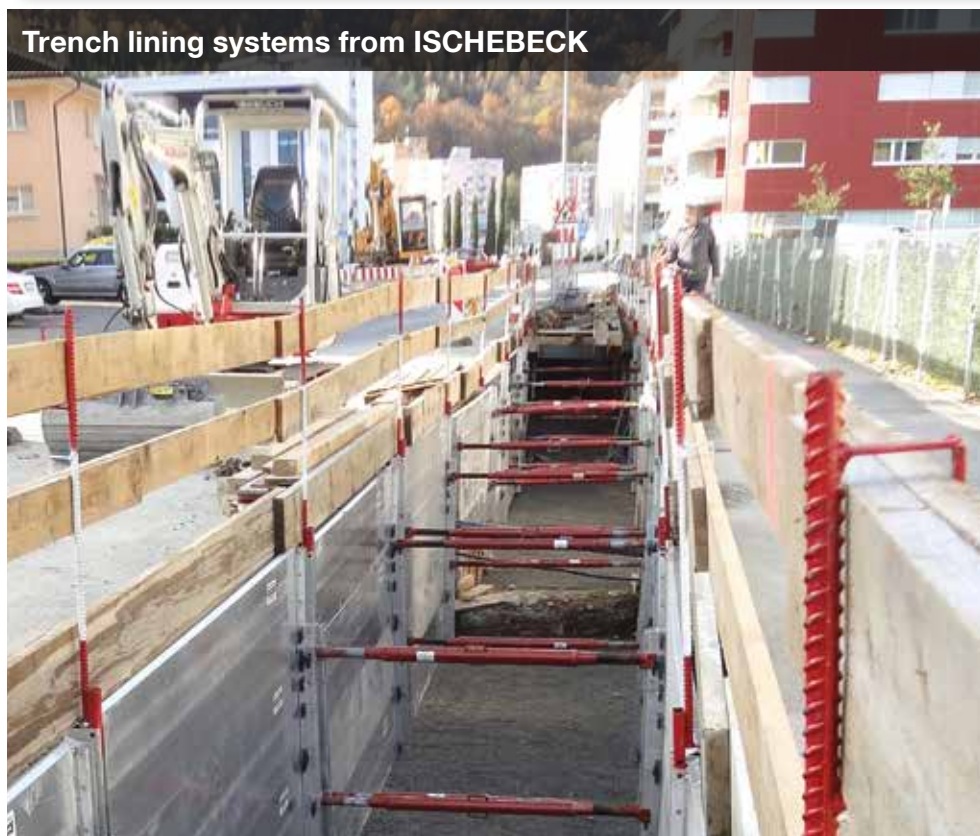
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**Formwork solutions from ISCHEBECK**

The ISCHEBECK **trench lining systems** in aluminium meets the requirements for fast progress on site, economic plant use and high safety levels. Litebox aluminium trench lining is the ideal system for trenches at inner-city locations. This modular aluminium system closes the gap between the frequently heavy and cumbersome steel systems and traditional trench timbering.

> go to page 20



**Trench lining systems from ISCHEBECK**

**Watch the video on light-weight aluminium trench lining**



**i** Watch the video on lightweight aluminium trench lining

# Steel props

Whether you need steel props or aluminium system supports, the ISCHEBECK range of props and legs covers the whole spectrum of on-site needs – from simple one-storey slabs to more complex multi-storey slabs. Verified typical calculations are available for all our props and legs, which makes selection quick and simple – no need for time-consuming calculations.

**i** Want to find out more? Simply request our “TITAN props” brochure.



**Steel props  
TITAN S and E35**

### Long-lasting and reliable

The established system in use for decades. ISCHEBECK steel props have been manufactured in the very best quality for more than 60 years. They guarantee full compliance with the stipulations of the current standard applicable, EN 1065 “Adjustable telescopic steel props”. Corrosion protection to EN 39 is achieved through a painted (S) or hot-dip galvanised (SZ) finish.

- Available in four lengths from 1.80 to 5.50 m
- Steel prop, painted or galvanized (only size 2 and 4)
- Protected internal thread
- National Technical Approval / Construction Technique Permit Z-8.311-998

### TITAN E35

- Steel prop, galvanized
- ranges from 2.05 m to 3.50 m
- According to EN 1065
- varified generic structural design



**TITAN HV Lite prop**

### System props with large range of adjustment

With the extension option, formwork for 75% of all storey heights can generally be covered with just one prop size. It is no longer necessary to change props on site. Fitting legs together to form a 4-leg tower with separate ledger frames increases the load-carrying capacity and range of applications.

Applications:

- Slab formwork
- Temporary propping
- Support to edge beams
- Table forms

- Permissible load up to 96 kN
- Available in two lengths from 1.75 to 4.25 m
- Extendable
- Ledger frame connection option
- Heights up to 6.10 m as support tower
- Steel screw jack, aluminium outer tube
- National Technical Approval / Construction Technique Permit Z-8.312-938
- Large range of adjustment, i.e. it is no longer necessary to change props on site.
- Low weight

**For towers too**



**TITAN Megashore aluminium legs**

### System leg for great heights

The TITAN adjustable aluminium leg is the basic element of TITAN aluminium Megashore falsework. Legs can carry to 128 kN. Combined with aluminium ledger frames, it is possible to construct large falsework units (typical calculations cover falsework up to 24.60 m high).

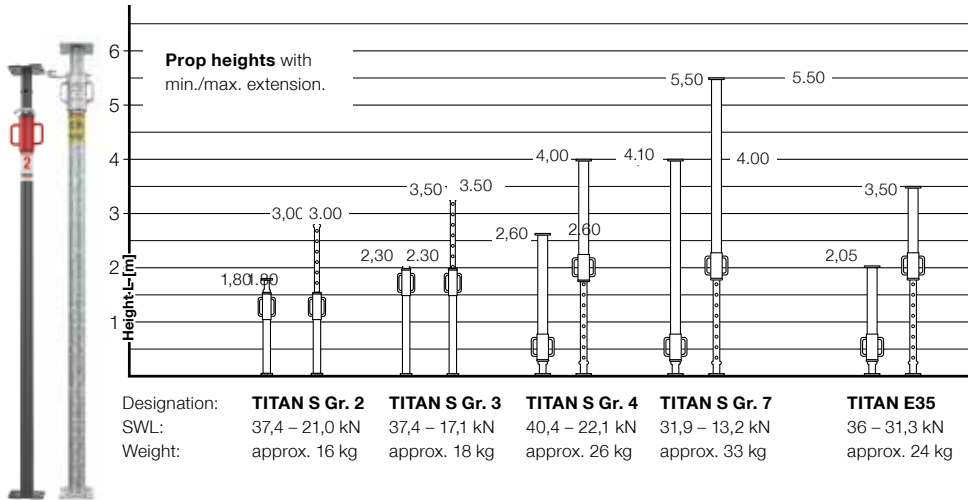
Applications:

- Slab formwork
- Temporary propping
- Support to edge beams
- Table forms, edge tables

- Permissible load up to 128 kN
- Available in three lengths from 1.70 to 5.50 m
- Extendable
- Ledger frame connection option
- Heights up to 24.60 m as support tower
- Screw jack and outer tube completely in aluminium
- Construction Technique Permit Z-8.312-868

**For falsework too**

The right support for every job



**TITAN SLS aluminium heavy-duty prop**

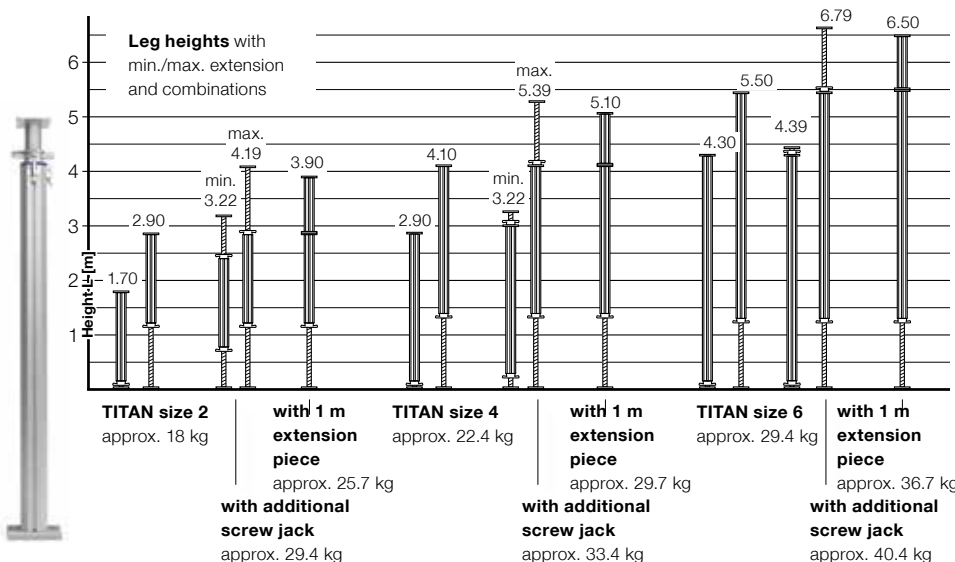
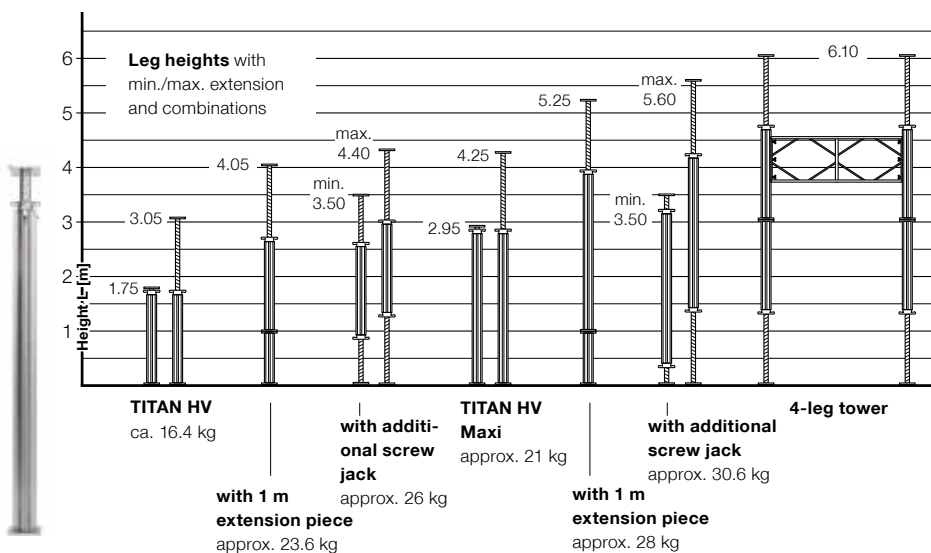


For refurbishment projects and work in existing buildings. Flexible height from 1.80 to 4.80 m.

- with hydraulic jack
- defined prestress of up to 250 kN
- can be monitored with pressure gauge

Consists of basic components of the TITAN aluminium Megashore system (TITAN aluminium screw jacks or aluminium extension piece with screw jack, support block, hydraulic jack).

**i** Want to find out more? See our "TITAN SLS aluminium heavy-duty prop" leaflet.



**Support tower or falsework, table form or mobile formwork?**

The TITAN aluminium Megashore system can be used for many applications.

**i** Want to find out more? Simply request our "TITAN aluminium Megashore system" brochure.



# Slab formwork systems

In contrast to conventional flexible formwork systems, the TITAN HV system utilises main beams (V) and secondary beams (H) are fixed in the same plane. This is possible because there are support ledges on the main beams and drop-heads, and the incoming secondary beams are simply hooked onto these.

- The uneconomical overlapping of beams – typical with conventional formwork – is absent from the TITAN HV system.
- The beams form an interlocking grid that is stable in itself – even without any sheeting.
- The low number of components simplifies logistics and avoids unnecessary searches for parts on the building site.

## TITAN HV slab formwork

### A System grid size ensures quick erection.

Secondary beam H hooked onto main beam V

### B Beams as close as possible to opening/penetration

Main beam V hooked onto main beam V

(change of direction of span)

(A) Secondary beams (H) are simply hooked onto main beams (V) to cover a whole area very quickly.

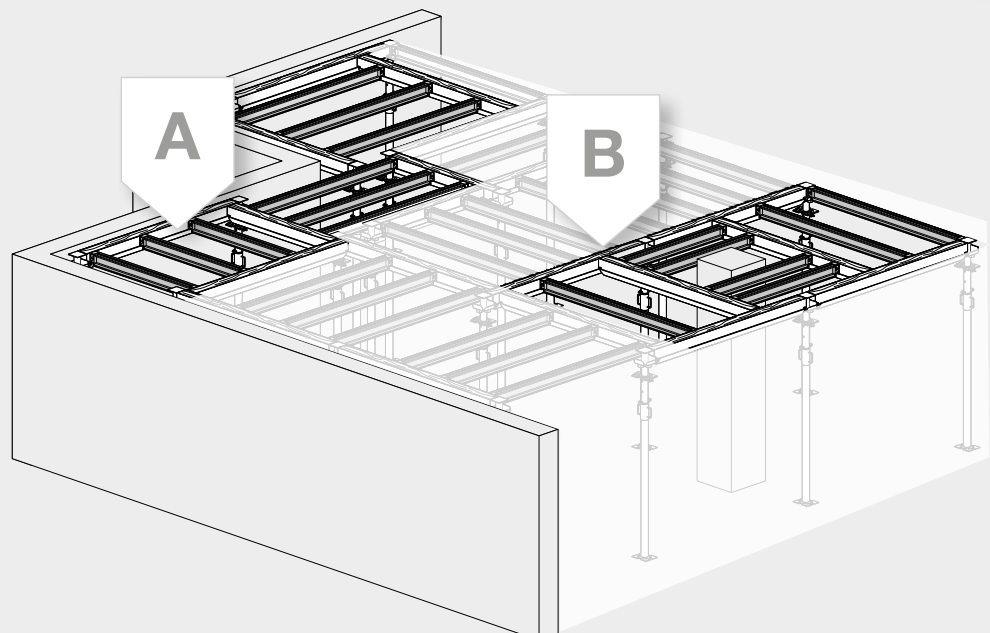
(B) By changing the direction of span (main beams simply hooked onto other main beams), the grid of beams can be varied to suit any plan shape. Formwork around openings, columns, wall piers, make-up areas, curved walls, etc. is easily built with system components.

**Verified typical calculations**



### Main beam V and secondary beam H

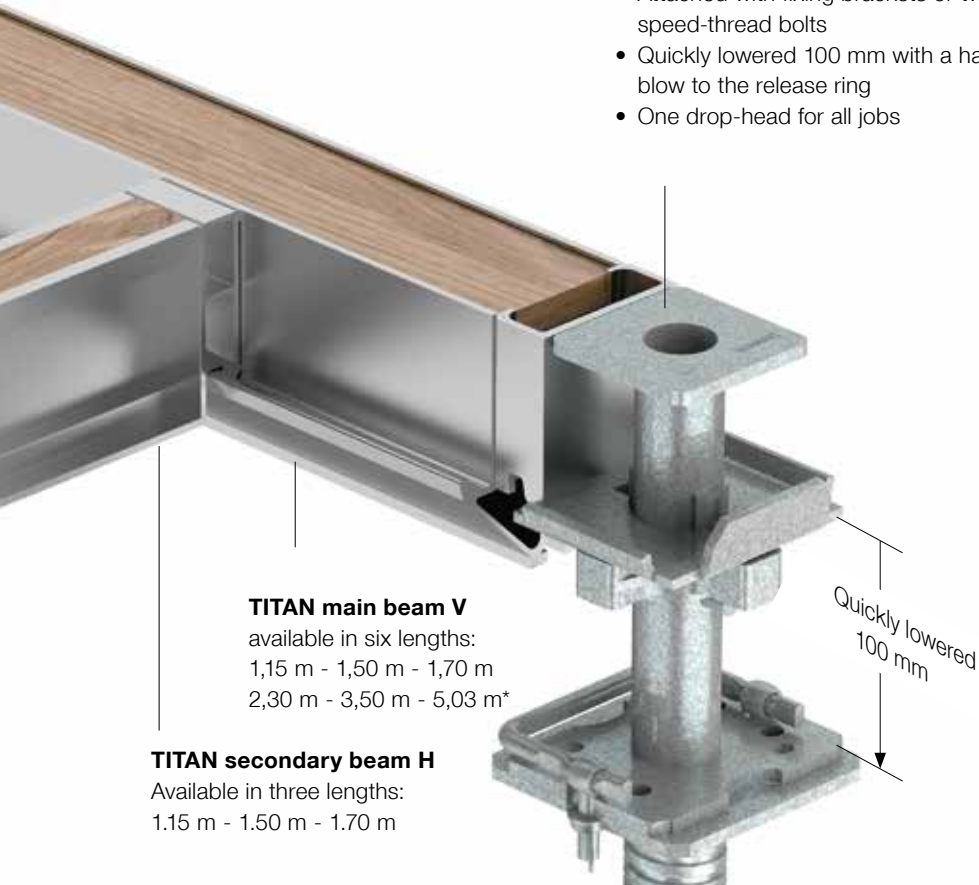
All beams have an integral nailing batten and multi-purpose slot. Colour coding eases assembly.



**i** Want to find out more? Simply request our "TITAN HV slab formwork" brochure.

**TITAN HV drop-head**

- Fits all standard props
- Attached with fixing brackets or two speed-thread bolts
- Quickly lowered 100 mm with a hammer-blow to the release ring
- One drop-head for all jobs

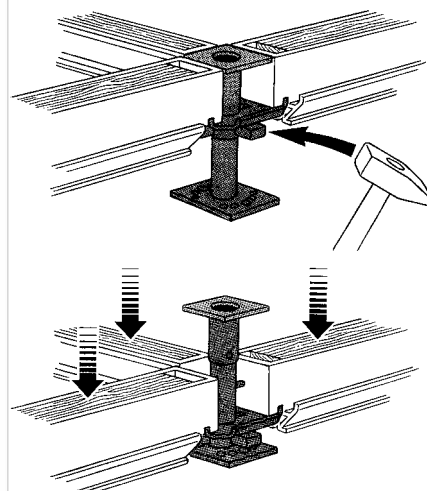


**TITAN main beam V**  
available in six lengths:  
1,15 m - 1,50 m - 1,70 m  
2,30 m - 3,50 m - 5,03 m\*

**TITAN secondary beam H**  
Available in three lengths:  
1.15 m - 1.50 m - 1.70 m

The drop-head is **quickly lowered** to enable (early) striking without having to remove any props.

- Release ring for quick lowering – also in corners
- No special tools needed – a few blows with a hammer are sufficient
- Beams and panels can be unhooked and used for the next concrete pour



The quick lowering feature results in significant savings:

- all formwork beams are released
- approx. 2/3 of the formwork panels are released
- up to 50% of the props and drop-heads are released

**The perfect complement: HV panels**



The **HV panel** consists of a lightweight aluminium frame with integral sheeting. It is hooked between the main beams and therefore permits the erection and striking of formwork from below, satisfying regulations. HV panels can be combined with all other system components. Make-up panels are constructed from 21 mm sheeting.



\*Custom lengths on request

## Slab formwork systems

For both in situ and precast concrete. The **TITAN Alu-Flex slab formwork system** with its few components is the fast and flexible choice when employing conventional formwork for large areas and irregular geometries.

The low number of components and low weight guarantee fast, effective work on site.

**i** Want to find out more? Simply request our “TITAN Alu-Flex slab formwork” brochure.

### Deckenschalungssystem Alu-Flex TITAN



The components:

- ① The tried-and-tested supports: steel props or aluminium legs
- ② Aluminium formwork beams: lightweight, robust, strong
- ③ Universal tripod: foldable – suitable for all props.



#### 4-Way Head

- Concentric load transfer
- Can be turned through 90° to accommodate two aluminium formwork beams



#### Positioner 38/50

- Simply fixed in the multi-purpose slot
- Available in two sizes for steel props or aluminium legs



#### Universal tripod

- Secure stand for all customary steel props
- Folds for space-saving transport and storage



#### Spring Clip

Secondary beams can be connected to primary beams with spring clips.



**TITAN aluminium formwork beams**

The **TITAN aluminium formwork beams** are essential to the ISCHEBECK modular system and can be used in many ways. Whether used as main or cross-beams for conventional slab formwork or as additions to traditional scaffolds, the features of these aluminium formwork beams are always impressive:

- High-strength aluminium
- High load-carrying capacity for a low self-weight
- Robust and unaffected by the weather
- Lengths to suit the needs of contractors

**i** Want to find out more? Simply request our “TITAN aluminium formwork beams” brochure.



**TITAN 120**

Available in two lengths for flexible formwork solutions.

- 2.50 and 3.75 m
- Timber nailing batten
- Multi-purpose slot
- perm. M = 3.3 kNm
- perm. Q = 17 kN
- 2.9 kg/m



**TITAN 160 H**

For higher loads.

- Available in nine lengths from 2.75 to 11.90 m
- High shear force capacity
- Timber nailing batten
- Multi-purpose slot
- perm. M = 10.7 kNm
- perm. Q = 52 kN
- 6.5 kg/m



**TITAN 200**

The alternative to the H20 beam.

- Same depth as H20 beam
- Available in three lengths from 2.50 to 4.90 m
- perm. M = 10.2 kNm
- perm. Q and A = 30 kN
- 5.3 kg/m



**TITAN aluminium formwork beams**

- Higher safe working loads
- Lower space requirements
- Lighter

# Erection of precast concrete floor slabs

Using just a few components, the ISCHEBECK range of props and legs and **TITAN aluminium formwork beams** provide optimum support for precast concrete floors. The systems can be adapted to suit all requirements, e.g. height, slab depth, beam spacings and prop loads.

**i** Want to find out more? Simply request our brochure on systems for supporting precast concrete elements.

## TITAN S option



The proven prop solution for housing and smaller commercial projects.

- TITAN S steel props are available in four lengths (single props up to 5.50 m)
- e.g. with TITAN 120 or TITAN 200 aluminium formwork beams

## TITAN HV option



For formwork with fewer props.

**Savings of up to 35% compared with H20 beams.**

- TITAN HV Lite legs are available in two lengths (single legs up to 4.25 m)
- e.g. with TITAN 200 or TITAN 160H aluminium formwork beams

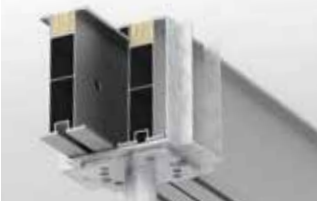
## TITAN 160H 4-way head



## TITAN 120 4-way head



## TITAN 200 4-way head



The **4-way heads** can accommodate one or two formwork beams and transfer the loads concentrically.



Quickly and easily fixed in the multi-purpose slot using the **spring clip**.

- at tops of props
- at primary and secondary beams

## TITAN HV tower option



For carrying loads at great heights.

- TITAN HV Lite leg – easily extended
- for towers up to 6.10 m high
- e.g. with TITAN 200 or TITAN 160H aluminium formwork beams

ISCHEBECK can supply **TITAN U-HV beam clamps** and **TITAN UZ beam side frames** to meet the formwork requirements of any downstand beams. Fast, flexible solutions for the formwork to T-beams, edge beams and changes in soffit level.

Both systems consist of just a few components. The materials used, aluminium and galvanised steel, are sturdy and durable.

- Low weight
  - Simple adjustment of depth and width
  - Just a few system components
  - Quickly and easily assembled
  - Can be combined with the formwork systems of other suppliers
- i** Want to find out more? Simply request our “TITAN beam formwork” brochure.



**TITAN U-HV beam clamp**

- Quickly preassembled on the ground
- Self-centring upon placing the sheeting in position
- Beam depths of 320–800 mm
- Effective beam widths up to 810 mm
- No additional cross-beams necessary – formwork beams and clamps can be supported on the same cross-beams.
- No ties through the beam



**TITAN UZ beam side frame**

- Suitable for use with TITAN 120, TITAN 160H and TITAN 200 aluminium formwork beams and also H20 timber joists
- Beam depths of 350–800 mm
- For wide beams
- Also suitable for supporting formwork along the edges of slabs

\* Thickness of sheeting neglected

# Erection of precast concrete walls

**Verified typical calculations**

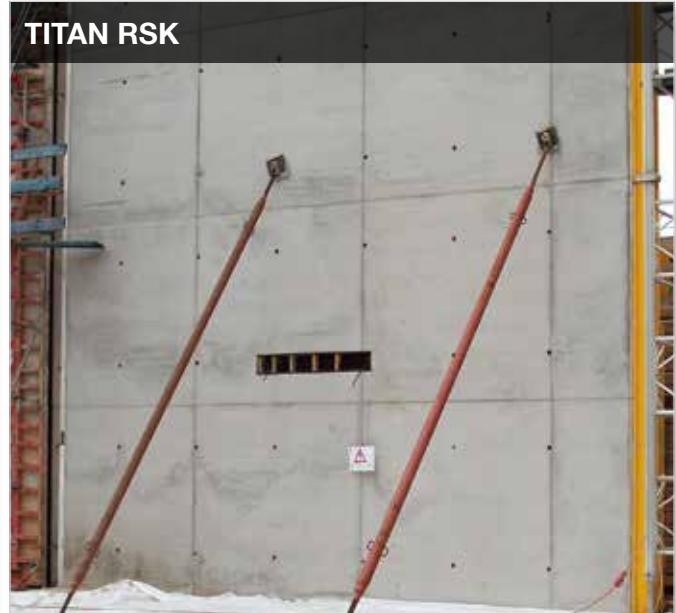
Whether made from steel or lightweight aluminium, the four products in the ISCHEBECK push-pull prop range are ideal for the quick alignment and secure support of precast concrete elements as well as wall and column formwork. In terms of the heights and angles possible, this versatile, coordinated range is flexible and economic.

All **TITAN push-pull props** are suitable for tension and compression loads. The adjustable end fittings enable the props to be set up at any angle.

**i** Want to find out more? Simply request our "TITAN push-pull props" brochure.



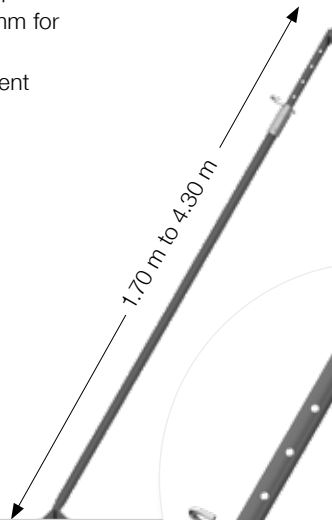
**TITAN RS**



**TITAN RSK**

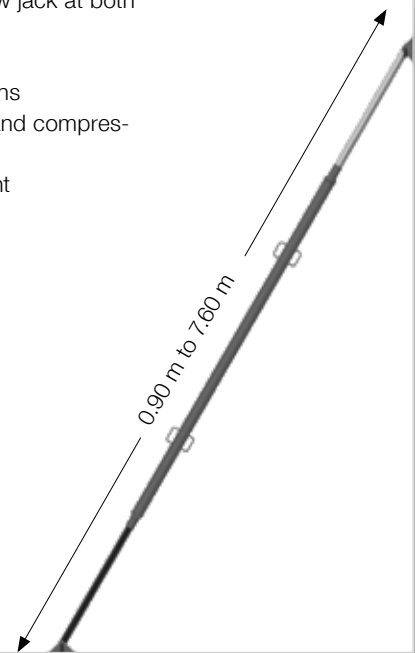
The tried-and-tested inclined prop with quick adjustment

- Available in three lengths
- Suitable for tension and compression
- Connecting pins every 100 mm for quick adjustment
- Collar for exact jack adjustment



Inclined prop with screw jack at both ends

- Available in five lengths
- Suitable for tension and compression
- Exact jack adjustment
- No play



**TITAN RS** and **TITAN RSK** inclined props have been proving their benefits on building sites of all kinds and sizes for many decades. And it's the details that are really convincing in terms of everyday needs and ease of use:

- Handles always within easy reach
- Connecting pins every 100 mm for quick adjustment (RS)
- Exact adjustment
  - with collar (RS)
  - with screw jacks both ends (RSK)





**TITAN BKS**

Modular system – flexible up to great heights

- Available in 12 lengths
- Suitable for tension and compression
- Screw jack and outer tube in steel
- Very high load-carrying capacity

2.30 m to 18.50 m



**TITAN BKS** is a modular system made from robust steel parts for carrying loads of up to 50 kN. The individual parts are quickly assembled to form push-pull props with different lengths.

- Two-start trapezoidal thread for quick adjustment



**TITAN Alu-BKS**

As single prop or tower – with aluminium components

- Single props available in three lengths
- Suitable for tension and compression
  - Modular system
  - Ledger frame connection for tower arrangements

4.13 to 8.56 m



**TITAN Alu-BKS** is a modular system made from lightweight aluminium parts for carrying loads of up to 36 kN.

- Individual props can be set up, taken down and transported without the need for a crane.
- Individual components are quickly assembled to form push-pull props in different sizes.
- Outer tube includes multi-purpose slot suitable for attaching ledger frames.

## TITAN formwork for openings

Formwork for doors and windows is frequently built on site from plywood and pieces of timber, and used just once. TITAN door and window forms represent an economic alternative for wall openings with recurring dimensions, e.g. lift shafts. The frame consists of lightweight, robust aluminium components, and these stable components guarantee accurate dimensions. The great advantages of this system

- For wall thicknesses from 200 to 300 mm
- Ideal for multiple uses
- Infinite adjustment of height and width
- Just a few system components

formwork are, the easy set up, the adjustment to the size of opening required and its reusability.

**i** Want to find out more? Simply request our brochures on TITAN door and window forms.

### TITAN aluminium door forms



#### Standard dimensions

- Door widths from (874) 882 to 2342 mm
- Door heights from 2000 to 4010 mm

We can supply preassembled units for standard door opening dimensions to DIN 18100.

- Widths from 655 to 855 mm
- Heights from 2030 to 2210 mm



### TITAN aluminium window forms



#### Standard dimensions

- Minimum size 865 x 1080 mm
- Maximum size 2340 x 2340 mm
- Can be used horizontally or vertically

Smaller and larger dimensions are available on request, or can be achieved, for example, by using two units side by side.



**TITAN S steel props** being used together with the **TITAN HV slab formwork system**. Some drop-heads have already been lowered.



**TITAN S steel props** being used together with **TITAN 120 aluminium formwork beams** to support a floor of precast elements + in situ topping over a basement.



## TITAN WK wall-mounted supports

**Bridge those gaps!**

Bridging over inaccessible areas (e.g. water or moving traffic) often involves cutting heavy steel beams to length and complicated dismantling afterwards. **TITAN WK wall-mounted supports** represent an easily installed alternative with a high loadbearing capacity for situations where elaborate and expensive temporary foundations might otherwise be necessary.

**i** Want to find out more? Simply request our "TITAN wall-mounted supports" brochure.

### TITAN WK wall-mounted supports



**TITAN WK wall-mounted supports** with high loadbearing capacity:

- up to 240 kN (WK 2000, 150 kg)
- up to 100 kN (WK 1000, 27 kg)

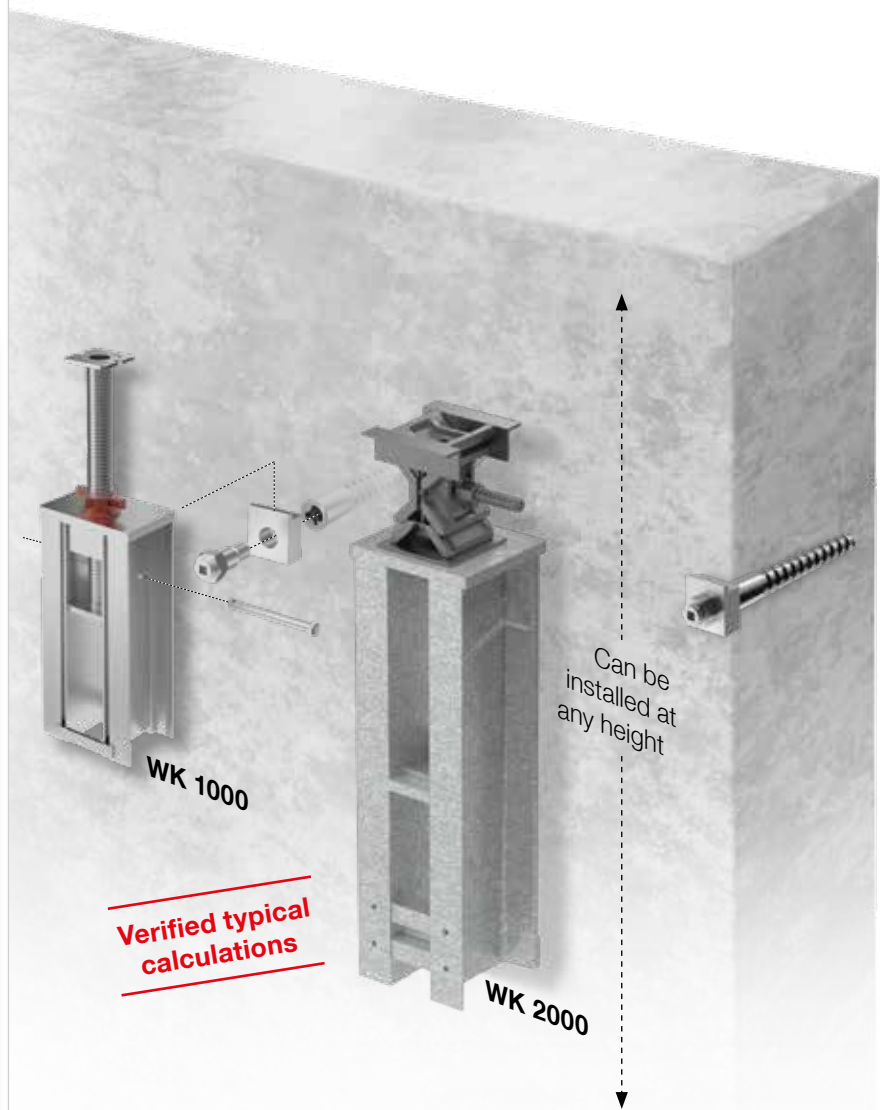
**National Technical Approval**

### TITAN anchor screw



For fixing the support blocks for wall-mounted supports using the cast-in, recoverable **TITAN anchor screw** made from quenched and tempered steel.

Can also be installed in a core-drilled hole after completing concreting.





**Aluminium beams with the load-carrying capacity of steel beams**



**TITAN aluminium bridging beams**

The powerful combination of tried-and-tested TITAN 225 aluminium formwork beams and beam couplers to form shear-resistant **TITAN aluminium bridging beams** is ideal for bridging over obstacles and access openings.

- Type 2, comparable with HEB 200:  
22.5 kg/m in comparison to 63 kg/m
- Type 3, comparable with HEB 240–280  
36 kg/m in comparison to 106 kg/m for an HEB 280
- Easily and quickly dismantled into lightweight separate components

**i** Want to find out more? Simply request our “TITAN aluminium bridging beams” brochure.



**Type 3      Type 2**

## Wedge jack



For carrying concentric and eccentric vertical and horizontal loads.

**i** Want to find out more? Simply request our “TITAN wedge jack” brochure.

## Universal beam clamp



Forged body with National Technical Approval for clamping capacity of 5–70 mm.

**i** Want to find out more? Simply request our “TITAN universal beam clamp” leaflet.

## Extender TITAN 225



For extending TITAN 225 aluminium formwork beams by up to 0.6 m.

- adjustment with centimetre accuracy
- with verified typical calculations
- without reducing the loadbearing capacity

# Edge protection systems

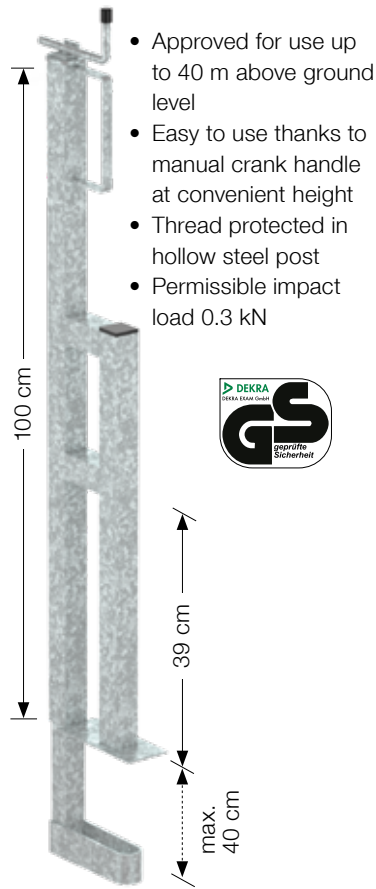
Whether you need guard rail posts or aluminium EPS screens, fencing off an open perimeter from which persons could fall, should never take longer than the work that needs to be done at the perimeter. It is the small number of parts and the ease of use that are the real plus points of ISCHEBECK edge protection systems. The systems are flexible in use and represent a major contribution to the safety of persons on building sites.

- Complies with EN 13374 class A
- Tested by the German employers' liability insurance association
- Reliable protection

**i** Want to find out more? Simply request our "TITAN edge protection systems" brochure.

**Complies with EN 13374 class A**

## TITAN H guard rail post



## TITAN HS guard rail post



## TITAN Aluminium EPS



- Only two components = quick and easy to set up
- Lightweight = 5.5 kg/m edge protection (16.5 kg/screen)
- Approved for use up to 100 m above ground level
- Aluminium frame (Ø48 mm) is compatible with standard scaffold tube couplers
- EPS floor bracket for edges, corners and make-up sections



Storage – stacking – transport. The **TITAN “Barelle”** storage rack ensures well-organised stocks. You know at a glance what materials you have at your disposal. Vital for supplying building sites. But just as helpful for stocktaking. The TITAN “Barelle” storage rack also makes transport more economic. Simple loading/unloading with crane or forklift. Two storage racks fit side by side on any normal heavy goods vehicle.

**i** Want to find out more? Simply request our logistics and storage brochure.

ISCHEBECK can supply craneable, stackable **Mesh Transport Box TITAN** for transporting and storing small parts. Fitted with eyes for four-leg crane slings.



**Mesh Transport Box TITAN** (1240 x 835 x 990 mm), folding front side, for stacking max. 5 high

- Weight 72 kg
- Loading capacity max. 1500 kg
- Vertical load 6000 kg
- Volume 0.75 m<sup>3</sup>



TITAN “Barelle”

Fitted with eyes for crane slings.

Dimensions (external)	1586 x 1024 x 801 mm
(clear internal)	1426 x 864 x 641 mm
Weight	37 kg
Permissible load	max. 1500 kg
Vertical load	6000 kg

“Barelles” can be stacked max. 5 high



“Barelle” storage rack with central divider for small parts



Fixed and swivel castors ensure simple transport.



# Trench shoring systems

**Litebox** aluminium trench lining is the ideal trench shoring system for trenches at inner-city locations. This modular aluminium system closes the gap between the frequently heavy and cumbersome steel systems and manual trench timbering.

All customary trench widths and depths (max. 6 m) and degrees of difficulty (crossing services, friable soils, cramped conditions) are easy to handle with the few parts of this system – and no need for heavy plant either. The many appli-

cations include laying cables and gas and water pipes in open trenches, jacking and working pits for installing pipes and cables underground, installing and repairing service connections to buildings, inspection work, horticultural and landscaping works, etc.



**i** Video on lightweight aluminium trench lining now available

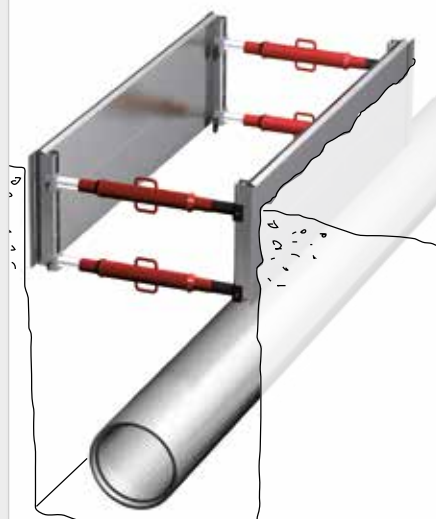
**i** Want to find out more? Simply request our “Litebox aluminium trench lining” brochure.



**Litebox aluminium trench edge support**

- Partial shoring** – for securing max. 1.75 m deep trenches
- Prevents the top edges of the trench from collapsing
  - Suitable for stiff and cohesive soils as well as rocky ground
  - Can be installed by two persons without plant

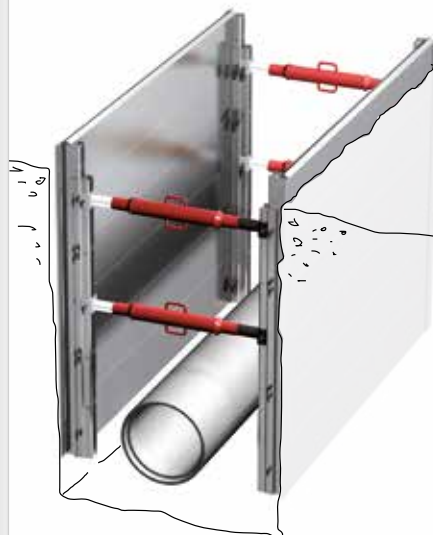
Trench depths 1.75 m  
Trench widths 0.60 – 2.18 m  
max. pipe clearance height 0.75 m



**Litebox aluminium trench lining**

- Full shoring** – fast and safe, for max. 3 m deep trenches
- Sides fully supported
  - For soils that are stable for short periods

Standard shoring depths 1.50 – 3.00 m (max. 6.00 m possible)  
Trench widths 0.68 – 2.26 m  
max. pipe clearance height 0.75 m



**Litebox aluminium manhole shoring system**

- Aluminium manhole shoring** – fast and safe, for max. 3 m deep shafts
- Sides fully supported
  - For soils that are stable for short periods
  - Jacking and working pits (max. pipe clearance height 1.00 m)
  - Suitable for end-face shoring

Standard shoring depths max. 3.00 m (max. 6.00 m possible)  
Trench widths 1.11 – 3.20 m



### Litebox struts Gi-A



The trench struts for lightweight aluminium trench lining, including two standard connecting pins

	Trench widths
Gi-A 60-81:	60 - 112 cm*
Gi-A 80-121:	80 - 152 cm*
Gi-A 129-218:	129 - 249 cm*
* depends on system used	

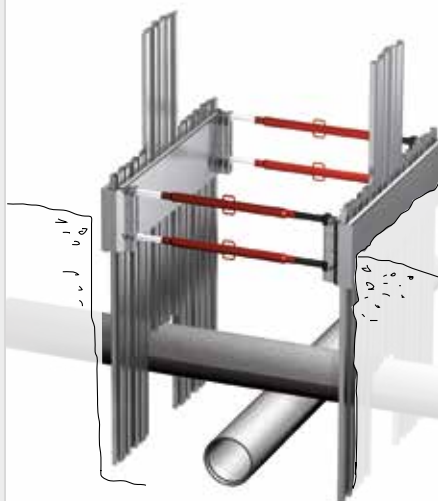
### Optional components for Litebox aluminium trench lining

To meet challenges such as crossing services, but also to deal with slopes to satisfy code requirements or to prevent collapse, ISCHEBECK offers modular system solutions that can be easily combined with products of the lightweight aluminium trench lining range.

**System solution for crossing services**

#### GIGANT aluminium strongframe system

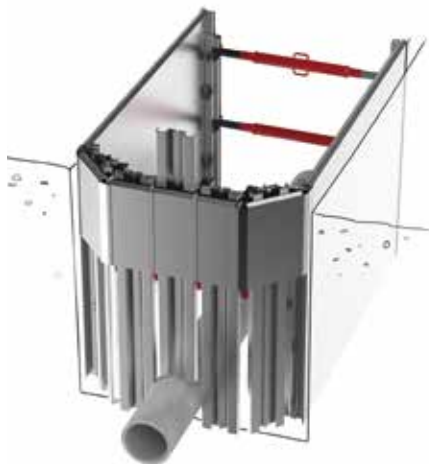
Full shoring with flexible and adjustable aluminium trench sheets – for max. 3 m deep trenches, also in friable, unstable soils.



**System solution for protection against collapse to DIN 4124**

#### GIGANT aluminium trench end shoring

- Modular system solution easily adapted to different trench widths
- Can be combined with our lightweight aluminium trench lining and aluminium strongframe products
- Suitable for the complete extension range of Litebox struts Gi-A
- Adapts to the edge of the trench, no unnecessary excavation required



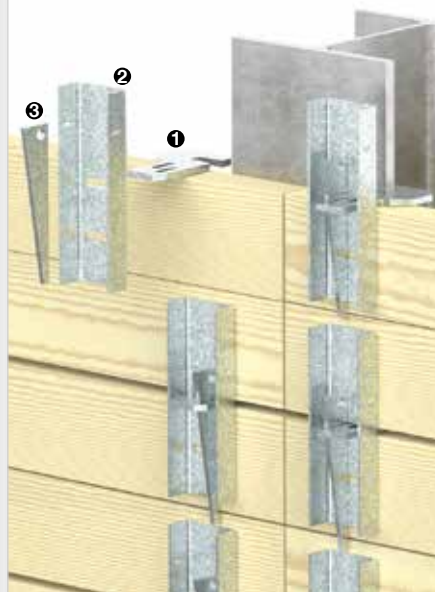
### Timber wedge clamp wall



The **timber wedge clamp wall** with timber planks clamped to the front of each soldier pile is ideal for deep trenches and excavations on inner-city sites. The system consists of just three parts:

① wedge plate, ② U-plate and ③ wedge. The timber wedge clamp saves time and materials and is the cost-effective alternative to traditional soldier pile walls.

**i** Want to find out more? Simply request the brochure on excavation shoring with timber wedge clamp walls.



## Trench shoring systems

**The right trench strut  
for every trench shoring situation.**

All our superstruts are marked with the civil engineering employers' liability insurance association symbol according to DIN 4124. That means:

- No problems during acceptance inspections
- Quality assured by an external organisation, the North Rhine-Westphalia Materials Testing Laboratory

**i** Want to find out more? Simply request our "TITAN superstruts" brochure.

### TITAN 60 Trench Brace

**Permissible load: 70-100 kN**



**TBG 3 - TI 60**

Available in four lengths:

- |              |           |           |
|--------------|-----------|-----------|
| • 90-150 cm  | Ti 60/150 | 100-99 kN |
| • 140-200 cm | Ti 60/200 | 100-93 kN |
| • 190-250 cm | Ti 60/250 | 95-84 kN  |
| • 240-300 cm | Ti 60/300 | 85-72 kN  |

Large strut spacings simplify excavation and pipelaying in wide, deep trenches (main discharge pipes, outfall sewers, dyke drains, etc.). The **TITAN 60 trench brace** is suitable for the vertical trench sheets used as shoring in such excavations. Bracket for 14 x 16 cm timber framing.

- Length infinitely adjustable over 60 cm
- Just one Ø60 mm screw jack fits all sizes
- Quick-action thread (1 cm per turn)
- Needs only half the effort when releasing the strut
- Screw jack and outer tube are interchangeable but cannot come apart in use

### Medium duty strut TITAN 48

**Permissible load: 38-63 kN**



**TBG 3 - TI 48**

Available in three lengths:

- |              |           |          |
|--------------|-----------|----------|
| • 70-117 cm  | Ti 48/120 | 63-48 kN |
| • 90-150 cm  | Ti 48/150 | 61-45 kN |
| • 120-210 cm | Ti 48/210 | 60-38 kN |

The **Medium duty strut TITAN 48** is used for the most common trench widths (1.0–1.5 m). Bracket for 14 x 16 cm timber framing.

- Length infinitely adjustable
- Easy to use for high loads
- Screw jack and outer tube are interchangeable but cannot come apart in use

### Light Duty Struts » TERRA «

**Permissible load: 22-38 kN**



**TBG 3 - terra**

• Available in five lengths

- |              |             |          |
|--------------|-------------|----------|
| • 50-80 cm   | terra Gr.1  | 38-30 kN |
| • 60-90 cm   | terra Gr.1a | 36-29 kN |
| • 80-110 cm  | terra Gr.2  | 34-29 kN |
| • 110-140 cm | terra Gr.3  | 29-23 kN |
| • 140-170 cm | terra Gr.4  | 26-22 kN |

The **Light duty strut terra** is suitable for narrow trenches with horizontal timbering (e.g. service connections to buildings, manual excavation for repairs). With clawed end plate and nailing hole.

- Length infinitely adjustable over 30 cm
- Tubular steel screw jack, Ø32 mm, is 40% lighter than a solid screw jack for the same load
- Hardened thread is not easily damaged and is unaffected by dirt
- Screw jack and outer tube are interchangeable but cannot come apart in use

**Litebox aluminium trench lining** for full shoring down to depths of 6 m. Shoring layout drawings with corresponding hole positions can be supplied on request.



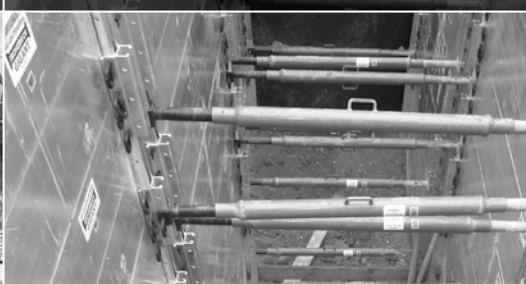


The photos reproduced in this brochure represent momentary snapshots of work on building sites. It is therefore possible that certain facts and circumstances do not fully correspond to the technical (safety) requirements.

**Falsework and Formwork systems**



**Trench lining systems**



**Geotechnical solutions**



Certified Management-System to DIN EN ISO 9001:2015 **DVS** ZERT



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