



## **TITAN Universal Soldier**

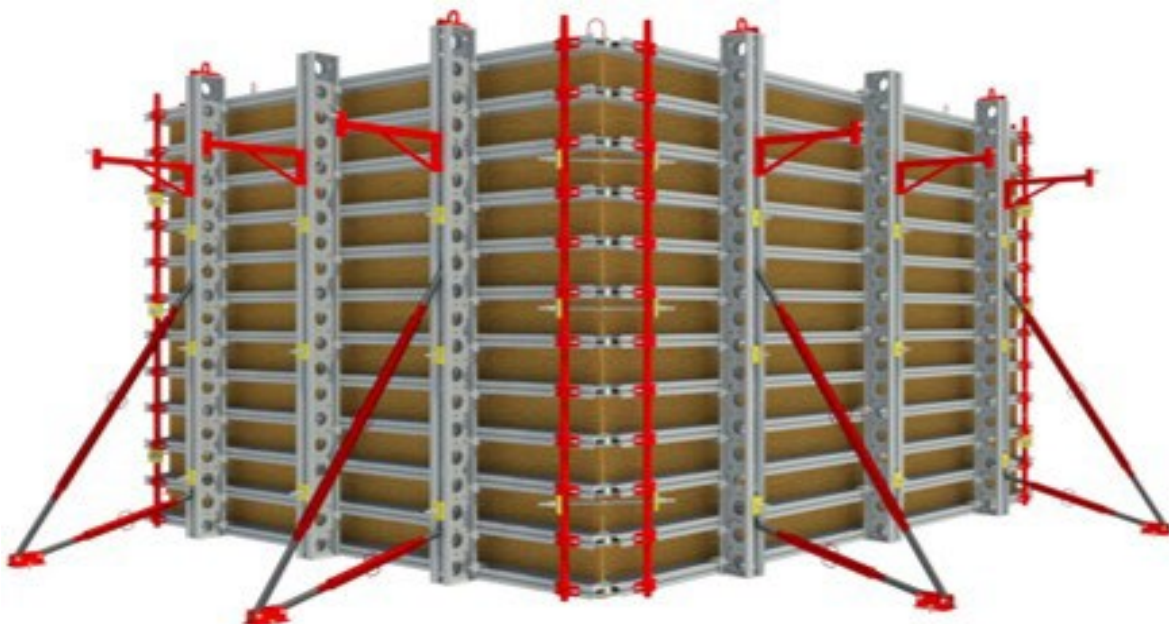
- Versatile in application
- Strong & robust
- Universally compatible

# TITAN Universal Soldier

The TITAN Universal Soldier is a multi-purpose primary member, compatible with most formwork, falsework and scaffolding systems on the market. Strong and robust, with a range of accessories, Universal Soldiers are the TITANs of propping in the temporary works and civil engineering industries.

## Features and benefits

- Flexible and compatible, TITAN Soldiers universally fit ancillaries from other systems
- 50mm gap between webs, to directly fit RSKs and most push pull props
- High strength to weight ratio
- Compatible with a range of Ischebeck TITAN systems
- Used as heavy-duty props supporting high wall formwork
- Strong joint between soldiers
- Galvanised soldiers and ancillaries for longer life
- Robust end plate
- Section size of 225mm by 176mm
- Can be supplied pre-assembled
- Supported by unrivalled Ischebeck TITAN design and technical service



Available in a range of lengths, from 90mm to 3.6m, TITAN Universal Soldiers possess an impressive strength to weight ratio. Soldiers can easily be bolted together to make longer lengths and are adaptable to the most challenging of projects. The modular nature of the system, its flexibility and market leading service from Ischebeck TITAN makes the Universal Soldier the ultimate primary beam.

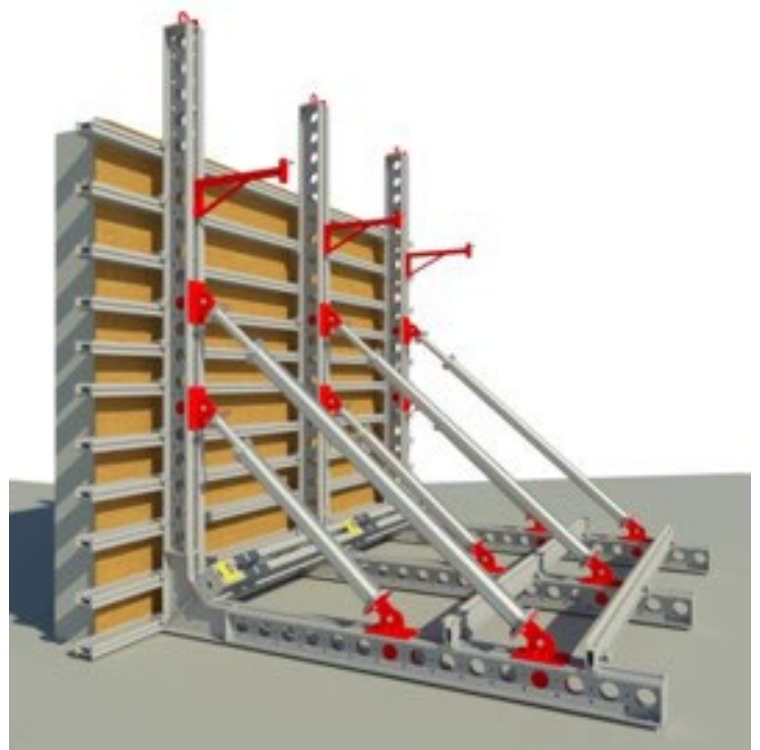




The TITAN Universal Soldier, when used in conjunction with other standard TITAN components, can be used for many applications, including double or single sided wall formwork. It can also be utilized as a primary beam for our TITAN Support System, a needle for our Screen Saver system or simply to span an opening in a slab.

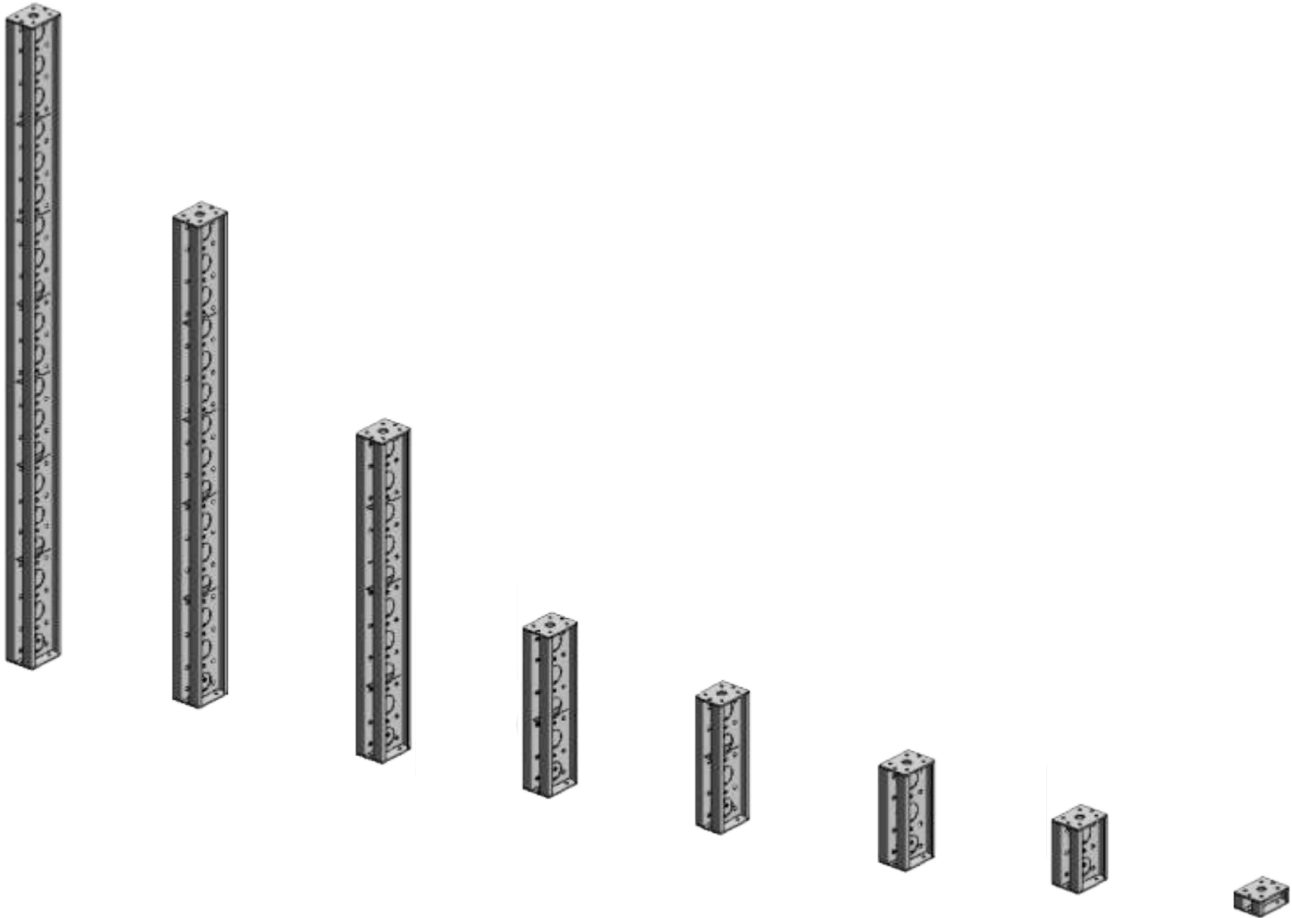
## Applications

- Traditional wall shutters-double and single sided
- Screen Saver needles
- Light weight, modular single sided wall solution (shown)
- Arches
- Falsework access gantries
- Underslung access & gantries
- Overslung access & gantries
- Facade retentions
- Travelling shutter gantries



# Components

## TITAN Universal Soldier Beams



Description	Code	Weight
0.9m TITAN Universal Soldier	240009	7.3kg
0.36m TITAN Universal Soldier	240036	11.9kg
0.54m TITAN Universal Soldier	240054	15.5kg
0.72m TITAN Universal Soldier	240072	18.7kg
0.90m TITAN Universal Soldier	240090	22.0kg
1.8m TITAN Universal Soldier	240180	38.8kg
2.7m TITAN Universal Soldier	240270	55.4kg
3.6m TITAN Universal Soldier	240360	72.7kg

# Components

## Joint Stiffener

Used to improve the bending capacity of a joint in a Universal Soldier beam / strut.

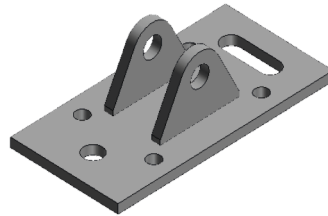
Code	Weight
242005	1.4kg



## Prop Foot Assembly

Used to connect a push pull prop to a suitable wall or base at any angle.

Code	Weight
242014	4.9kg



## Adjustable Jack Prop

Used in pairs (left- green, right- red) to provide an adjustable push pull prop arrangement.

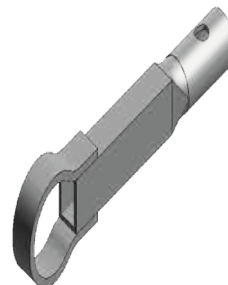
Item	Code	Weight
Green	242002	13.2kg
Red	242003	13.kg



## Prop Ring End & Tube Pin Assembly

Allows fitment of the Adjustable Prop Jacks into the Universal Soldier. Fixed using the Tube Pin.

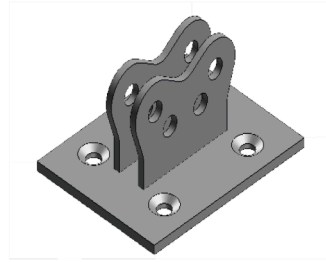
Item	Code	Weight
Prop Ring End	242010	3.1kg
Tube Pin	242009	1.5kg



## Coronation Pivot

Allows two Soldiers to be fixed at right angles to each other and allows 30° of rotation.

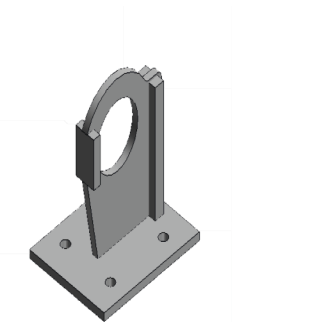
Code	Weight
242004	4.5kg



## Corner Pivot

Allows two Soldiers to be fixed at right angles to each other and allows a degree of rotation

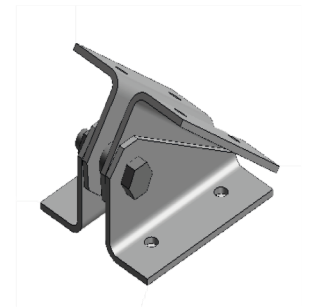
Code	Weight
242016	7.3kg



## Pivot Cleat

Used to fix Soldiers at different angles and provides a hinge connection.

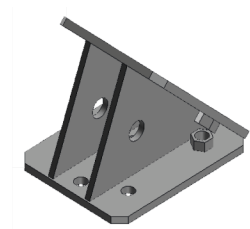
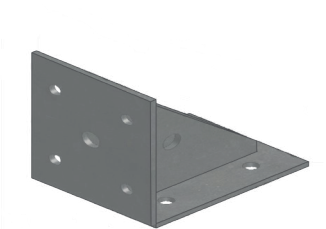
Code	Weight
242007	8.1kg



## 45 Degree and 90 Degree Corner

Used to connect Soldiers at 45° angles or 90° right angles.

Item	Code	Weight
45°	242018	7.8kg
90°	242008	8.5kg

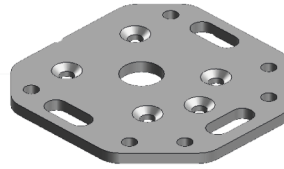


# Components

## Anchor Plate

Used to fix Soldiers down to concrete bases or walls.

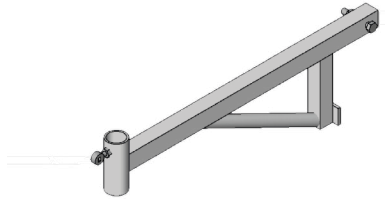
Code	Weight
242001	7.0kg



## Access Bracket – Tube Socket

A three-board access platform that can be fixed to a Universal Soldier and used with a scaffold tube type handrail.

Code	Weight
242021	7.8kg



## Access Bracket – EPS Socket

A three board access platform that can be fixed to a Universal Soldier and used with an EPS type handrail post.

Code	Weight
242015	8.5kg



## Carronade Adjustable Jack

Used to plumb and level formwork and can be used in both horizontal & vertical applications.

Code	Weight
242017	4.3kg



## Spreader Beam Plate

Used to create a lifting beam, ensuring that the lifting plates carry a vertical load only and lifting shutters up to 8.6T.

Code	Weight
242012	9.2kg

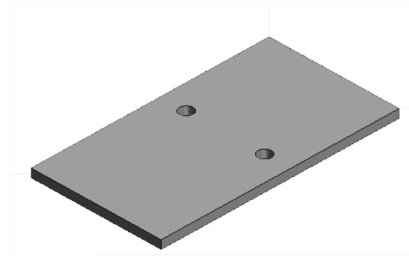




## Support Plate

Used at the base of a Soldier to support formwork during lifting operations.

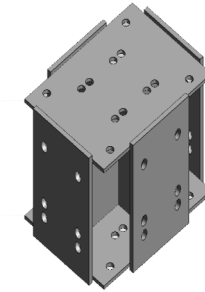
Code	Weight
242013	5.3kg



## 6 Way Connector

Connector fixed to each soldier using 4 no M16 x 50 grade 8.8 bolts, nyloc nuts and washers.

Code	Weight
242019	7.3kg



## Lifting Plate

Used in pairs to crane lift soldier shutters (Safety Factor=3.85).

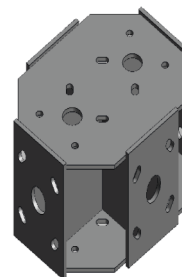
Code	Weight
242006	3.3kg



## 6 Way Double Connector

Connector fixed to each Soldier using 4 no M16 x 50 grade 8.8 bolts, nyloc nuts and washers.

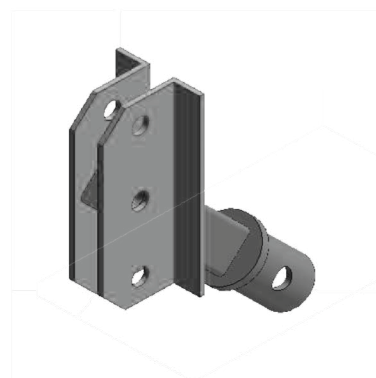
Code	Weight
242020	40.1kg



## Prop Connector 100kN

Connects prop to Universal Soldier.

Code	Weight
242022	7kg



# Accessory Components

## TITAN T150 Beam

Length (m)	Weight (kg)	Code
1.2	6.77	211200
1.8	10.13	211800
2.4	13.51	212400
2.7	15.20	212700
3.0	16.88	213000
3.6	20.27	213600
4.2	23.65	214200
4.8	27.02	214800
5.4	30.40	215400
6.0	33.78	216000
6.4	36.03	216400
7.2	40.54	217200



## TITAN T225Beam

Length (m)	Weight (kg)	Code
1.2	10.64	221200
1.8	15.97	221800
2.4	21.29	222400
2.7	23.95	222700
3.0	26.61	22300
3.6	31.93	223600
4.2	37.25	224200
4.8	42.58	224800
5.4	47.90	225400
6.0	53.22	226000
6.4	56.77	226400
7.2	63.89	227200



# Technical Data

Properties	
Area (Nett)	19.64cm <sup>2</sup>
El xx	4020 kNm <sup>2</sup>
Mcx*	40 kNm <sup>2</sup>
Shear	88 kN
Mean Self Weight for Analysis**	0.235 kN/m run**
Safe Working Loads (SWL's)	
Max Joint Moment (4 x M16 Bolts)	12 kNm
Max Joint Moment (6 x M16 Bolts)	18 kNm
Max Joint Moment (4 x M16 Bolts and Stiffeners)	20 kNm
Max Joint Tension (4 x M16 Bolts)	100 kN
Max Joint Tension (6 x M16 Bolts)	140 kN
Max Joint Tension (4 x M16 Bolts and Stiffeners)	150 kN

\* Bending Moment may reduce due to Lateral Torsional Buckling - refer to 'Lateral Torsional Buckling' section 2.4

\*\* Varies depending upon makeup and length



## **FRIEDR. ISCHEBECK GMBH**

Founded in Germany over 130 years ago, Ischebeck is one of the world's principal manufacturers of formwork and falsework systems. Renowned internationally for its Titan Support system, the group has a long standing tradition of innovation and engineering excellence. Product quality is a hallmark of the group and the company's manufacturing facilities are amongst the most advanced of their type.

## **Ischebeck Titan Limited**

Ischebeck Titan is a leading supplier of formwork, falsework, safety systems and ground engineering solutions. The company operates from headquarters centrally located in the heart of the U.K and has a team of product specialists ready to assist you with your concrete construction project.

## **Product Availability**

Substantial stocks of equipment are available ex-stock from the company's strategically located 4-acre distribution site with most items available nationwide on a 48 hour delivery.

Product are available for both hire and outright purchase.

## **Technical support**

Backed by the resources of one of the most respected names in the industry, Ischebeck Titan offers a comprehensive range of support services.

The company's Technical Services Division can provide a full drawing and structural analysis service using the latest computerised software.

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