

# arachnipod

total edge management system



ARACHNIPOD  
Designed in Australia  
Licence No. 0603090  
Standards Australia



the world's most  
**versatile**  
modular total edge  
management system





The Arachnipod is an innovative design that captures multi-functional capabilities. Simplicity and robust engineering provide the world's most versatile modular total edge management system (TEMS)

Ferno are dedicated to design and innovation and as such recognised the need for one height safety edge management device that could easily adjust into multiple configurations, providing users with a safe, cost effective total edge management system.

The new innovative Arachnipod is based around the concept of an industrial tripod however this product is much more than just a tripod.

Components can be added or removed as required so that the Arachnipod complements existing structural or natural features.

The unique design of the patent-pending modular head means the Arachnipod can be constructed into many different configurations including a gin pole/monopole, bipod, tripod, quadpod, bridge system and handrail recovery monopole. Further to this for heavy loads an infinite number of additional legs can be fitted to increase the safe working load (SWL).

Its versatility makes it an ideal system for workers in industries such as:

- Rescue and emergency services
- Construction
- Military
- Utility services such as water power and telecommunications
- Mining
- Film industry
- Maintenance personnel

The Arachnipod has been drop test rated for a 280 kg rescue load. It has a tested head that has the capability of holding a high directional load as well as a belay system. The recommended rescue belay as tested with a 280 kg rescue load is the Traverse 540° Belay Device.

Ferno advocates that all lowering and hauling systems should be backed up by a belay or secondary system.

Configuration	Leg setting	SWL (kg) external anchor point	SWL (kg) load anchored to leg
Gin Pole at 2050 mm extension	F-6	280	N/A
Gin Pole at 3050 mm full extension	A1	150	N/A
A-Frame	A-1	280	220
Offset A-Frame	B-2	340	220
A-Frame with lazy leg	C-3	400	220
Tripod	A-1	400	220
Handrail Recovery Monopole	A-1	280	220
Bridge beam 2000 mm span	A1	280	220
Bridge beam 3000 mm span	A1	230	220
Bridge beam 4000 mm span	A1	175	220

### How it Works

The Arachnipod in its basic form is a tripod. It consists of three telescoping legs, each pivotally connected to an anodised head.

The head is produced from aluminium extrusion with cutouts down each side. These cutouts allow two or more heads to connect together with a Qik-link pin, similar to a hinge, which allow quick and simple addition or removal of legs or bridge to create different configurations.

Each head has a D-shackle for guying to stabilise it. The optional pulley leg has an in-built pulley, mounted on two stainless steel roller bearings.

The pulley is stainless steel and has two grooves - one to take up to 13 mm rope and the other to take up to 8 mm wire cable. Stainless steel detent pins prevent the rope or wire from coming out of the grooves.



## Configurations



### Gin Pole

The gin pole or monopole is ideal for use where there is not enough room (such as confined spaces) for an A-frame or tripod. The lazy leg converts to a gin pole by attaching the gin head to the leg assembly.

The gin pole is also used as a separate component of a complex high directional system or an additional attachment point in a high line system. The lazy leg and gin head come standard with the Rescue Plus and TEMS Kits or can be purchased separately.



### Handrail Recovery Monopole

A practice for raising a person or rescue stretcher over an edge is to use the handrail as the artificial high directional. The handrail may not be designed to take the load and it also adds a lot of friction to the haul.

By using the pulley leg, a simple system can be easily set up to be able to retrieve a rescue stretcher or person, over an edge and through the lower handrail gap. This effectively transfers the load through the leg sharing the load with the handrail. It is essential to assess the load bearing capacity of the handrail prior to using this method.



### A-Frame

A conventional or off set A-frame can be easily constructed by removing one of the tripod legs. The A-frame can be used in situations where a high directional is required for high lines, or in confined spaces where the area is not big enough to accommodate conventional systems such as the tripod.



### Sideways A-frame Using Pulley Head

This configuration is ideal for situations which require a high-directional, protruding past an edge such as cliffs, high-rise buildings and bridges. Using one standard head and one pulley head introduces an in-built high directional pulley for ease of use during rescue operations.

An optional rigging plate should be used to provide additional tie-off points for stabilising the frame.



#### A-frame with Lazy Leg and Reverse Head

By using the lazy leg, the quad plate and the reverse head, an A-frame can be braced against a solid object. The reverse head has a 16 mm (5/8 in) stainless steel D-shackle to attach live loads which position the load directly in the centre of the legs. The lazy leg can also act as a compression member during use. The lazy leg can be doubled up as a gin pole with the correct attachments.



#### Tripod

The tripod is a self-supporting device providing quick and easy access to confined space entry points such as manholes and voids. This system can also be used as a high directional frame.

A unique feature of the Arachnipod is that it 'flat packs' for convenient storage, yet is quick and easy to set up. The system can be used with either a winch retrieval system or a mechanical advantage system or both.



#### Tripod as High Directional System

This system can also be used as a high directional frame to support remote mechanical advantage hauling systems. Tripod heads should be guyed with the D-shackles to remote anchor points for additional stabilisation.



#### Bridge System

This is a feature unique to the Arachnipod. The bridge is used for spanning larger openings or voids where a regular tripod, A-frame or quadpod would not be able to, such as trenches, large holes, mines and lift shafts.

It comes as a complete item with trolley, trolley guide rope and heads ready to attach two legs on each end. There is also a tie bar on one end for use with an English Reeve system. However, a remote brake mechanical advantage system can also be attached directly to the trolley.

Standard lengths are 2 m (6 ft 7 in), 3 m (9 ft 10 in) and 4 m (13 ft 1 in). The bridge is available separately. If you have a standard tripod an additional leg should be purchased to accommodate the bridge system or if you purchase a TEMS Kit the additional leg comes standard.

## Arachnipod Kits

The modular design of the Arachnipod offers customers with limited budgets an economical option to purchase a basic unit and upgrade components at a later date to make a more advanced system. Minimal space is needed to store an Arachnipod as it flat packs for simple and convenient storage. There are five kits available for purchase ranging from the basic tripod through to a total edge management system (TEMS). The table below will help you decide which kit is best for you.



Flat packs for simple storage

Product Contents	Arachnipod Kits				
	Arachnipod Industrial	Industrial Plus	Arachnipod Rescue	Rescue Plus	Arachnipod TEMS
Basic tripod (without pulley)	1				
Tripod (with pulley head)		1	1	1	1
Leg restraint rope and rope grab	1	1	1	1	2
Arachnipod bag			1	1	1
Rigging plate			1		
Spike feet			3		
Lazy leg kit (with a reverse head and bag)				1	1
Full accessory kit (details below)				1	1
Additional leg					1
2 m Arachnipod bridge kit*					1
2 m bridge bag*					1

\* Bridge Kit also available in 3 m or 4 m lengths.



Industrial Plus with optional bag



Bridge kit



Lazy leg kit



Accessory kit

Full accessory kit contents	Qty
Accessory bag	1
Spike feet	4
Gin head	1
Soft ground shoes	4
Hold down stakes	4
M12 Tru-bolts	8
M12 masonry drill bit	2
Spare Qik-link head pins	2
Spare detent pins	2
Spare leg pin with detent pin	1
Steps	2
Equipment bracket	1
Rigging plate	1
Quad plate	1

Lazy Leg Kit	Qty
Lazy Leg	1
Reverse Head	1
Lazy Leg Bag	1

Note: Gin head available as optional extra

Winch kits - 8mm cable	Qty
10 m winch and mount	1
20 m winch and mount	1



## Accessories



Standard foot



Hold-down stake



Spike foot



Soft ground shoe

### Feet

Standard feet are supplied on all Arachnipods and are secured with stainless steel detent pins for easy removal to switch foot style. Standard feet are formed aluminium profiles with an integrally moulded soft polyurethane tread for grip. The sides of the feet have holes for attaching tether lines to tie the legs together or to anchor points. The

base of each foot has holes to secure the system into the ground. The accessory kit contains Tru-bolts to secure the feet into hard ground such as concrete or hold-down stakes to fasten them into soft ground. By removing the foot detent pin, the standard foot can be removed revealing the adapter socket which accepts the optional spike feet.

Spike feet can be used alone for terrain such as cliff tops and rocky ground, or with the soft ground discs when using sand or supple ground. The soft ground discs clip over the spike foot, allowing the spike to dig in the ground, but the large surface area of the disc prevents the whole leg from sinking into the ground.



Gin head



Reverse head



Rigging plate



Quad plate



Equipment bracket

### Equipment Bracket

The equipment bracket can be used for rope descenders, belay devices, hauling systems and for tying off rope.



Step in use

### Step

Steps are used to access the head when the legs are extended, to allow operators to untangle ropes or attach additional hardware such as carabiners, pulleys and rope. This prevents the need to lower the height of the system.

They attach to any of the holes on the lower or middle leg tubes with one pin (secured to the step with a stainless steel lanyard). They can fasten to either the inside or the outside of the legs. Ferno advocate that when using this function the operators should ensure safety by using an adjustable multi-purpose lanyard.



Arachnipod leg with step and alpha-numeric labelling

### Alpha-numeric Labels

Getting the legs of your Arachnipod at the same height is simple as each leg has an alpha-numeric label on the groove of the leg. All you need to do is adjust each leg to the same number or letter combination.