



# ARMOUR

RATCHET TECHNOLOGY LTD

## “Side loading” Ratchet Tie Down

Sales Support Manual





Threading straps through ratchets is one of those things we all hate doing....but there's no other way! Right?

Barry Armour got so frustrated that he decided to solve this age old problem.

Result =>the World's First Side Loading Ratchet

Hailed as the biggest breakthrough in the transport industry in decades!



# How does it work?

- Unlike conventional ratchets, the Armour ratchet has a Side Gate which can be opened when the ratchet handle is fully disengaged.
- Once open, the strap is simply loaded into the middle of the spool.
- The Side Gate is then closed, the ratchet handle engaged again which automatically locks the Side Gate in place.
- The same process is followed for unloading

**QUICK & EASY WITH LESS FRUSTRATION!**



# USP – Unique Selling Points

- Simple to use
- Quickest & easiest to use ratchet available
- Lots of room around the handle
- Less frustration & smoother ratcheting function
- Saves time – only unwind as much strap as needed
- Strong – 50mm range Break strength of 5,000kg and 32mm range up to 2,000kg (equivalent of 37mm standard products!)
- Finger grip rubber handle
- Comes with a variety of hooks

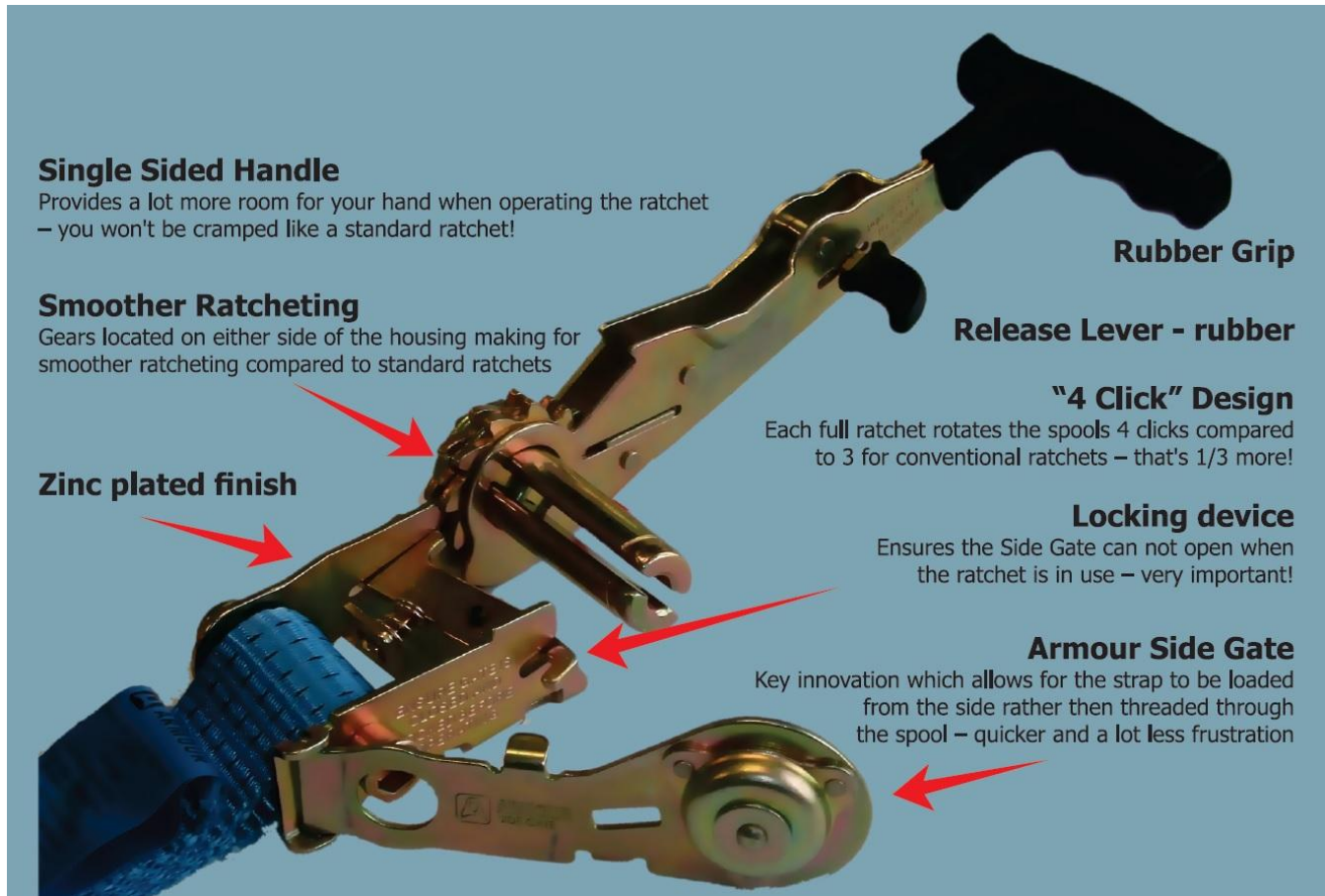


# USP – continued

- Some 32mm products have a “Loop” sewn into the strap for those hard to tie on to loads!
- Reduces strap handling and hence increases strap life
- Designed in New Zealand!
- Already being sold in two of the world’s largest DIY retail chains – The Home Depot & Lowes
- Patenting process underway in 56 countries worldwide
- Manufactured in accordance with AS/NZS 4380
- Lots of safety features – won’t open when in use if closed correctly



# Key Features



## Single Sided Handle

Provides a lot more room for your hand when operating the ratchet – you won't be cramped like a standard ratchet!

## Smoother Ratcheting

Gears located on either side of the housing making for smoother ratcheting compared to standard ratchets

## Zinc plated finish

## Rubber Grip

## Release Lever - rubber

## "4 Click" Design

Each full ratchet rotates the spools 4 clicks compared to 3 for conventional ratchets – that's 1/3 more!

## Locking device

Ensures the Side Gate can not open when the ratchet is in use – very important!

## Armour Side Gate

Key innovation which allows for the strap to be loaded from the side rather than threaded through the spool – quicker and a lot less frustration



# Benefits of the Armour Side Loading Ratchet



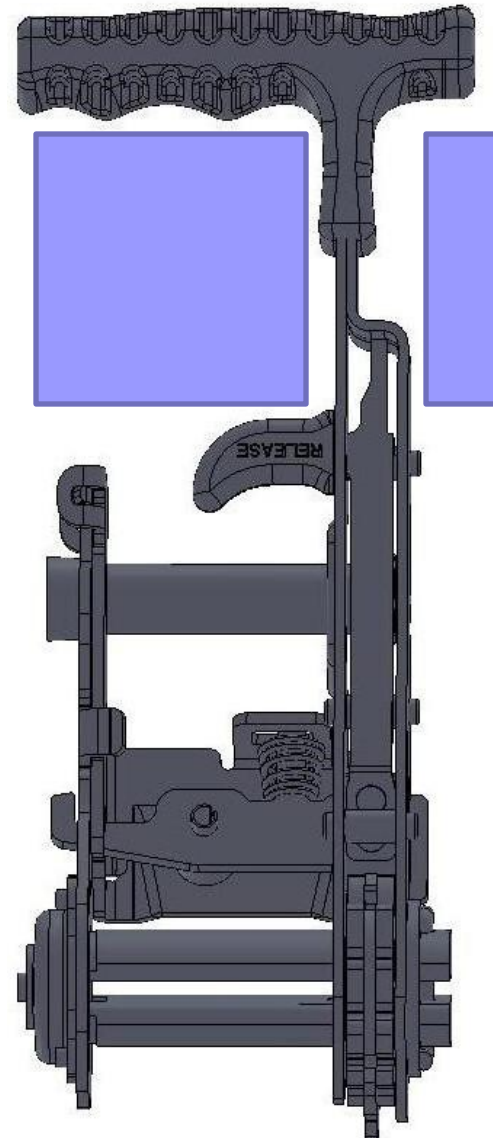
# Easy to Use!





# Lots of Room!

Single arm creates more room for the operator – especially those truckies with big hands!





# Time saving

Under half the time to load and unload compared to conventional ratchets (based on antidotal feedback from field trials)

- Labour savings
- Fuel savings (if vehicle is left running)
- Quicker turnaround – potentially more trips
- Less frustration!





# Reduces Strap Handling

- Because you only have to unwind enough strap to cover the load you are securing, that means less of the hassle of having to unwind and roll up surplus strap.
- For loads of the same size, the length of strap can be kept constant by fixing the surplus strapping and rolling up the other end of the strap when not in use.



# Enhanced Strap Life



- The ends of straps tend to fray with use making them difficult to thread through traditional ratchets.
- Straps frayed to the point where they can not be threaded through a ratchet, need to be either repaired or replaced – problems overcome with the Kiwi ratchet.
- Because the strap does not have to be fully unwound, there is less chance of the strap being dragged through mud or water – further enhancing the lifespan of a strap





# Health & Safety

Gone are the days of walking backwards whilst unloading a ratchet, and hence the risk of injury through tripping or being hit

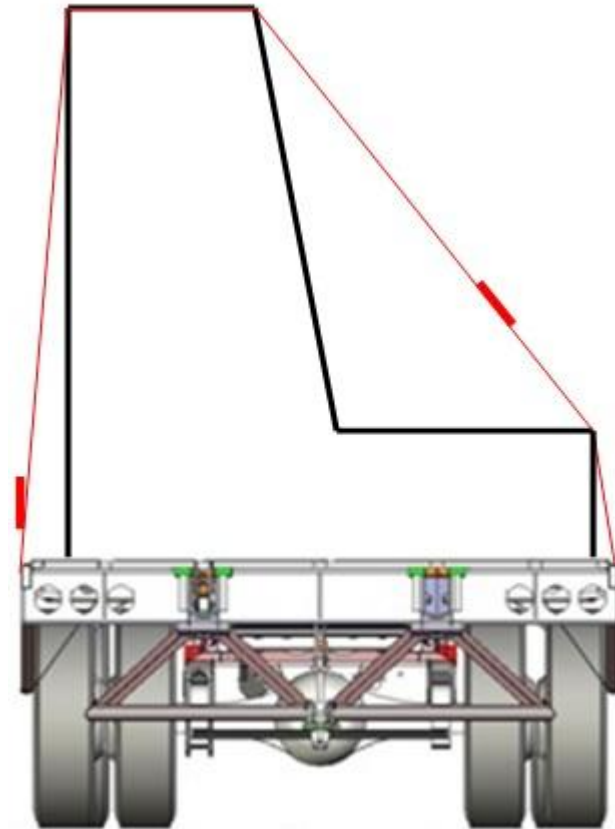
## **Use in confined space**

The Armour Ratchet is ideal for use in small confined areas.



# Tensioning Tied Loads

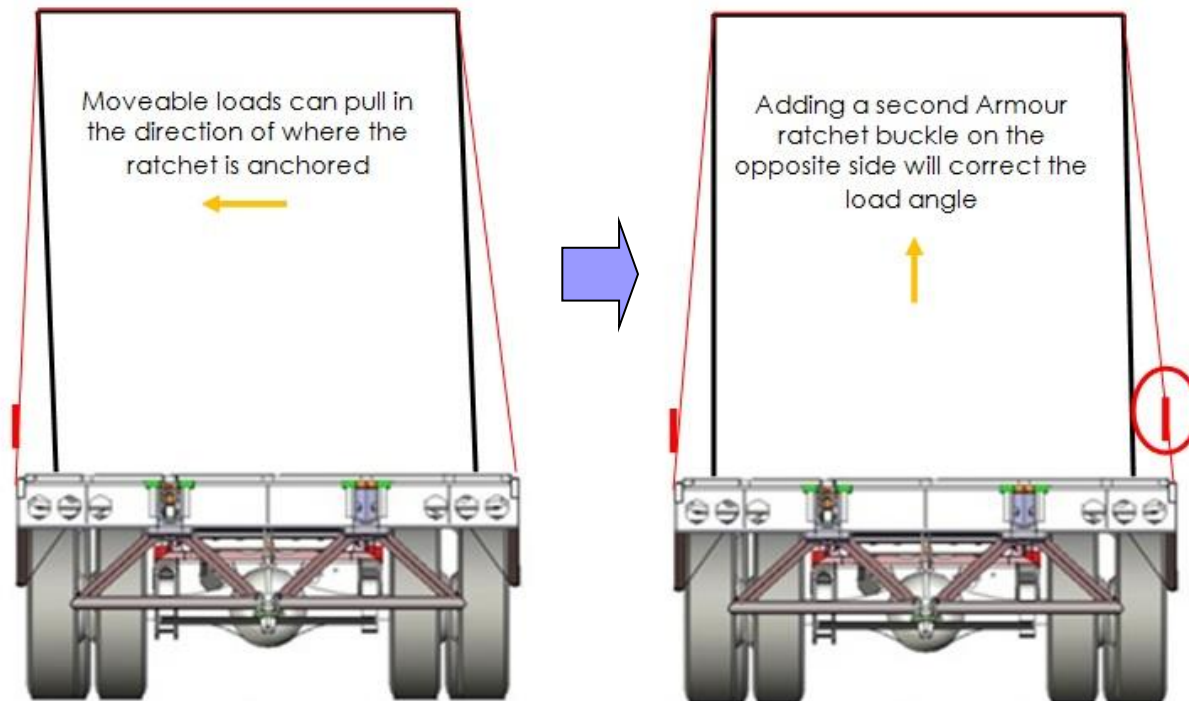
It can also be used to tension difficult loads where a second ratchet buckle may be needed





# Tensioning Tied Loads

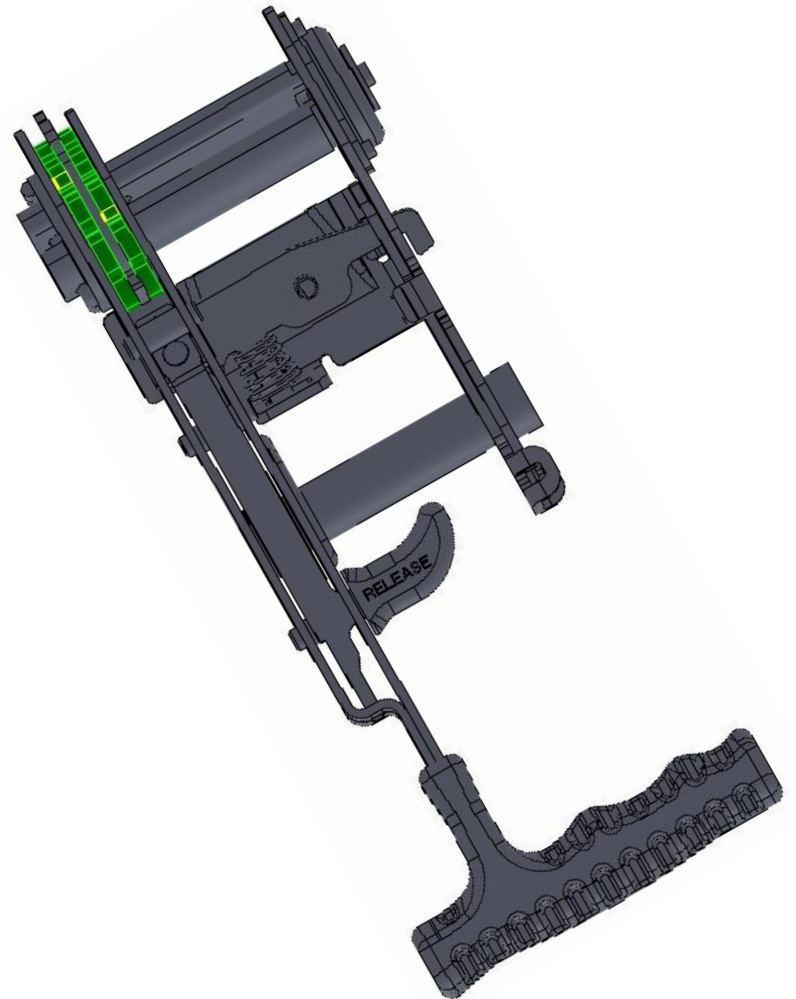
This is possible as the buckle can simply be fitted onto an existing strap and then ratcheted to tension





# Smoother Ratcheting

Because both gears are now located on one side of the ratchet, it means the Armour ratchet has a smooth ratcheting function compared to most conventional ratchets







# What the Research Says!

Research undertaken in the USA showed a staggering **70+% conversion** to the new Armour Side Loading ratchet – even if it cost more!

 **the Armour Ratchet will take market share from conventional ratchets!**

However with its unique benefits it will also assist in growing the market (ie new users of ratchets who previously would not use conventional ratchets)

# Operating Instruction

## – Short form



### 1 Open Gate

- A** Pull the "RELEASE" lever to unlock the ratchet handle and
- B** Open the ratchet handle until it is fully extended
- C** Open the Side Gate



### 2 Insert Strap

- A** Insert the strap (Polyester Webbing) in sideways into the centre of the spool



### 3 Close Gate

- A** Close the Side Gate, then pull the "Release" lever and handle back towards the upright position to lock the Side Gate



### 4 Ratchet

- A** Tension strap back on itself
- B** Start ratcheting

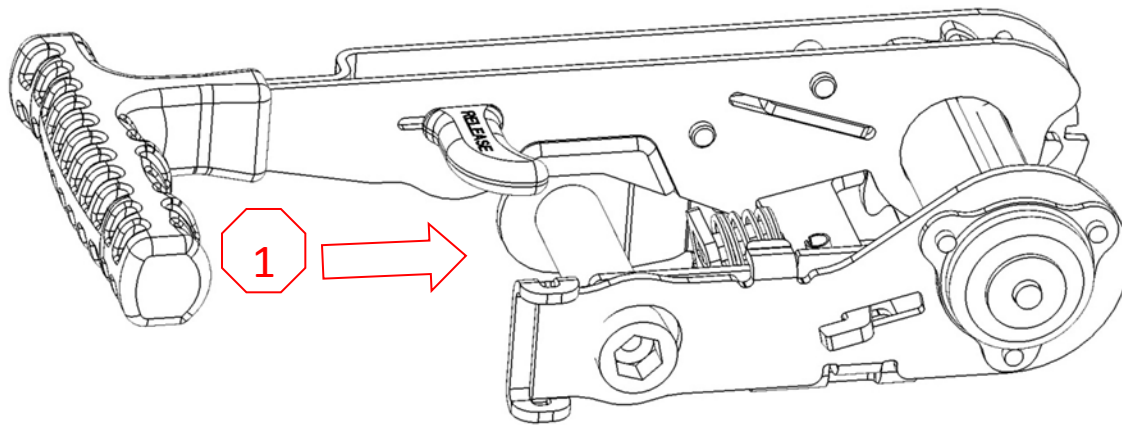


# Operating Instruction

## – Detail

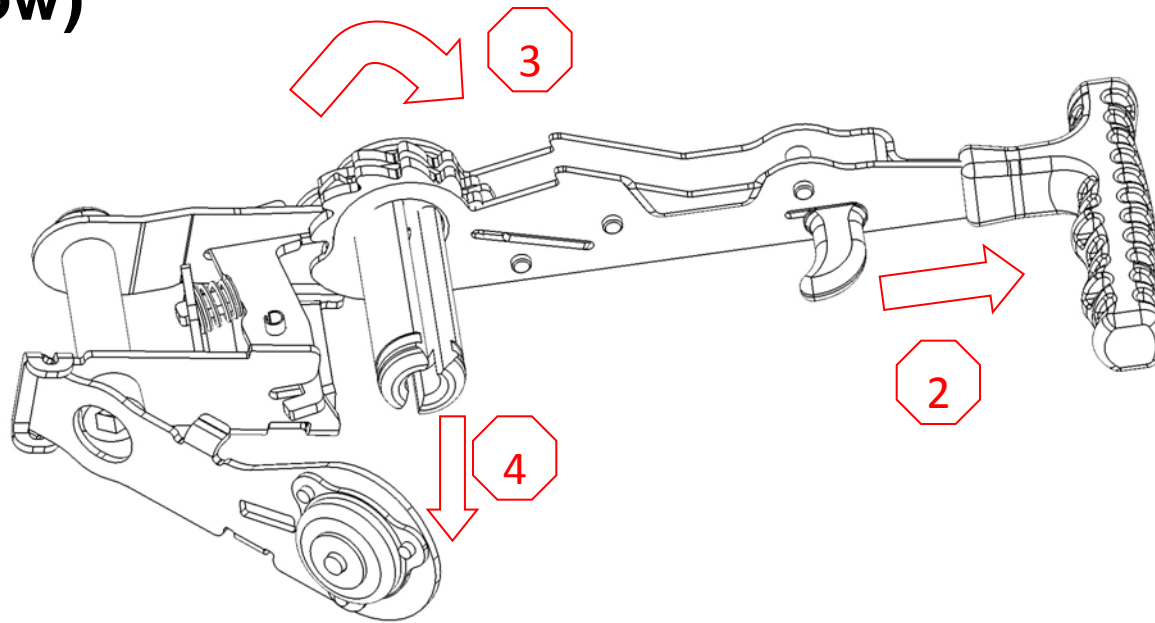


**A. Pull the “Release” trigger to unlock the ratchet handle**



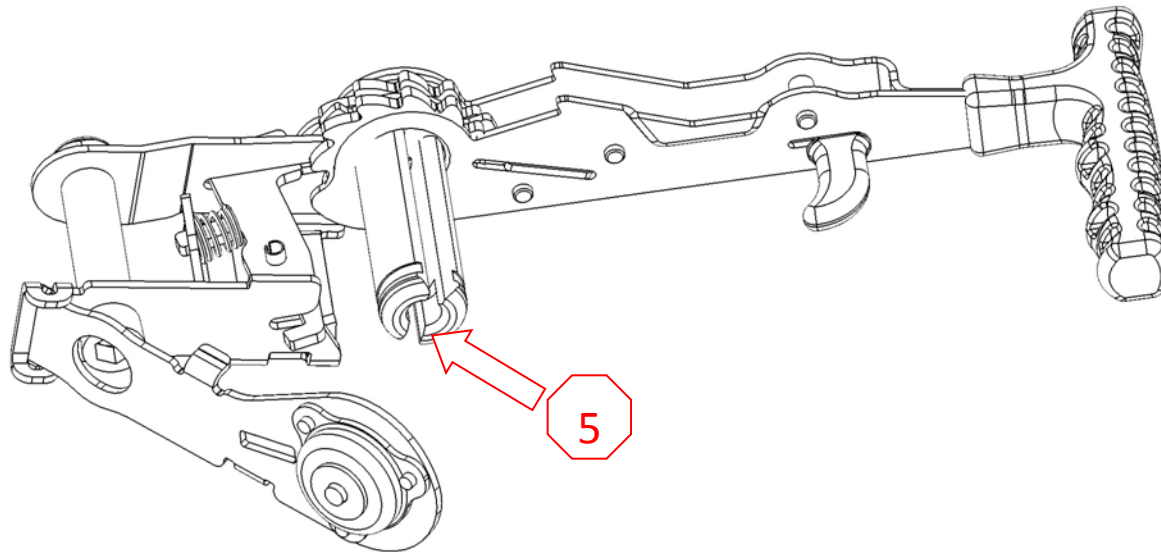


**B. To Open the Armour Side Gate, Pull the “Release” trigger and fully open the ratchet handle (until it is fully extended as seen below)**



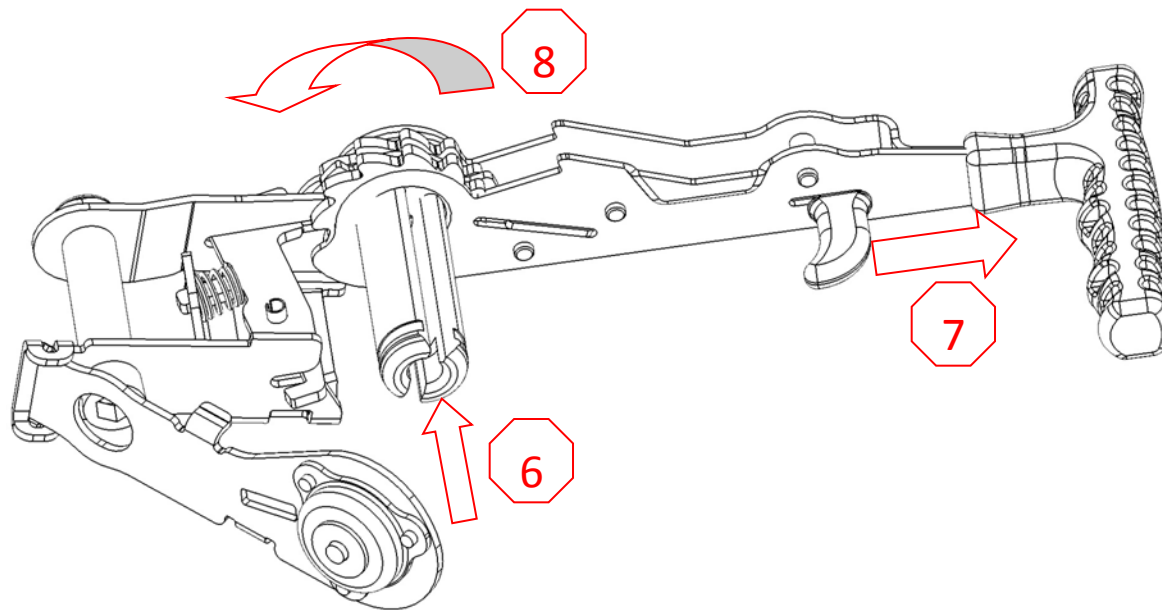


**C. Insert the strap (webbing) in sideways into the centre of the spool**



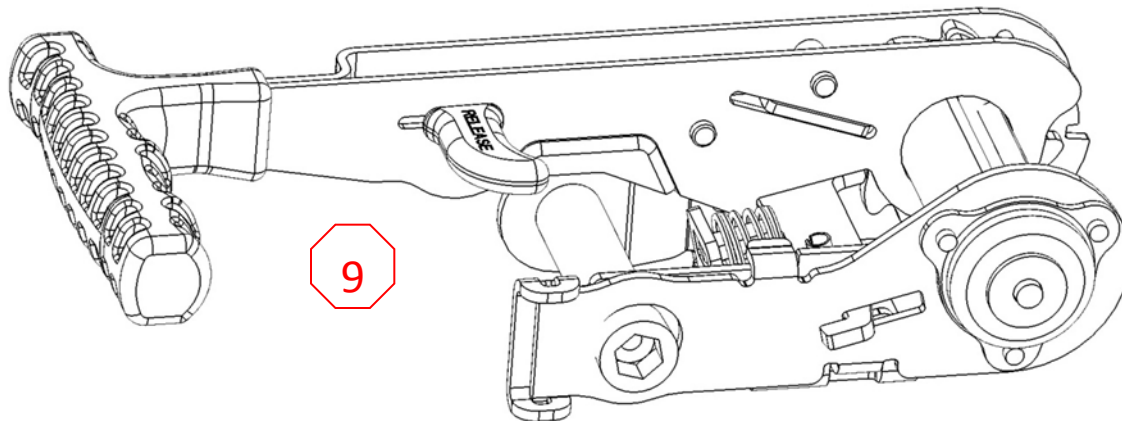


**D. Close the Side Gate, Pull the “Release” level and handle back towards the upright position to lock the Side Gate**





- E. Pull the loose end of the strap through the spool so to tension the anchored strap end used to secure the load. **This is important to help prevent the ratchet pulling to one side.**
- F. Use the handle to ratchet until such time as there is enough tension on the anchored end of the strap so that the load is fully secure.
- G. Pull the “Release” trigger to lock the ratchet handle in the closed position

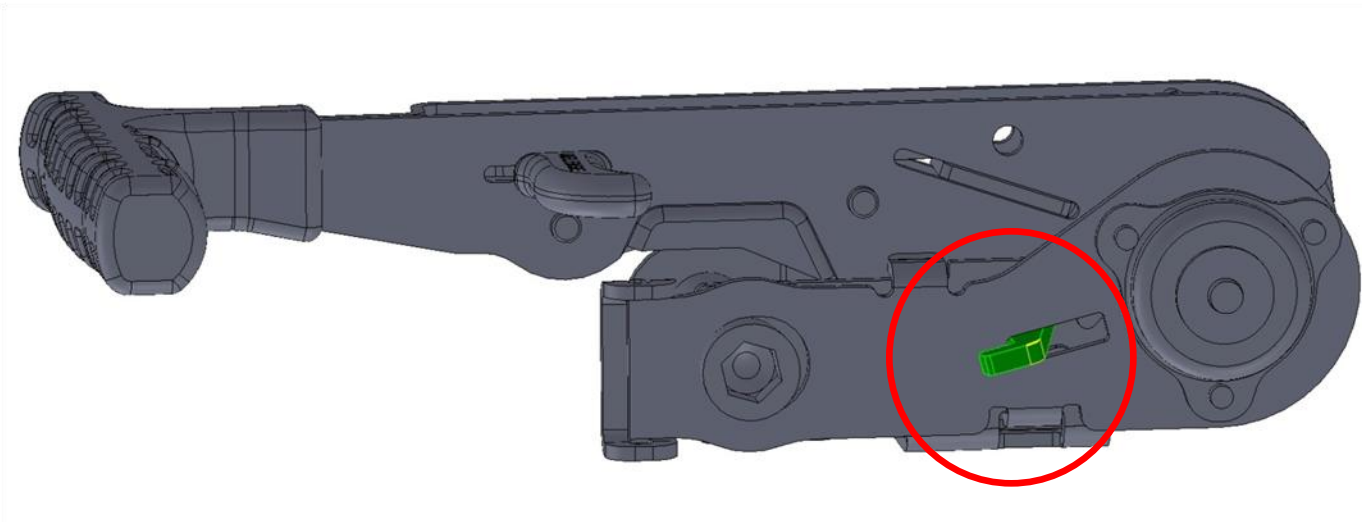




# Product Safety

A number of design features have been included to ensure the safety of the ratchet when in use. These include:

- ❖ Armour Side Gate Lock – keeps Gate closed when in use

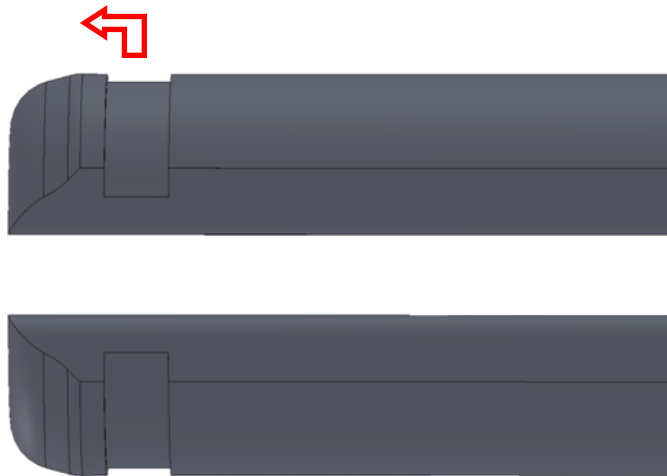






# Product Safety

## ❖ Grooves in the Spools



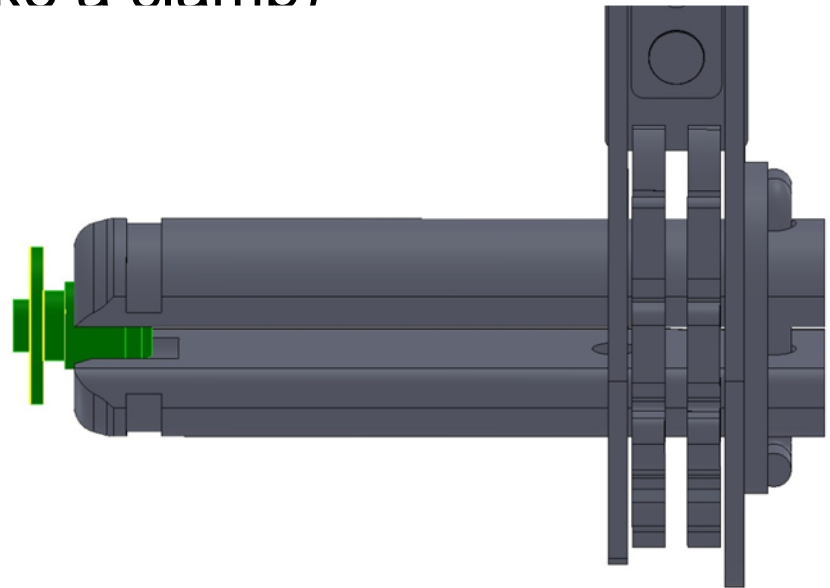
The Side Gate is housed in a “slot” so additional force is required to lift the Gate against the strap load to clear the slot before it can move horizontally and open



# Product Safety

- ❖ When under load, the pressure on the Spinning Spacer (attached to the Side Gate) in the centre of the spools further assisting with holding the Side Gate Closed (ie like a clamp)

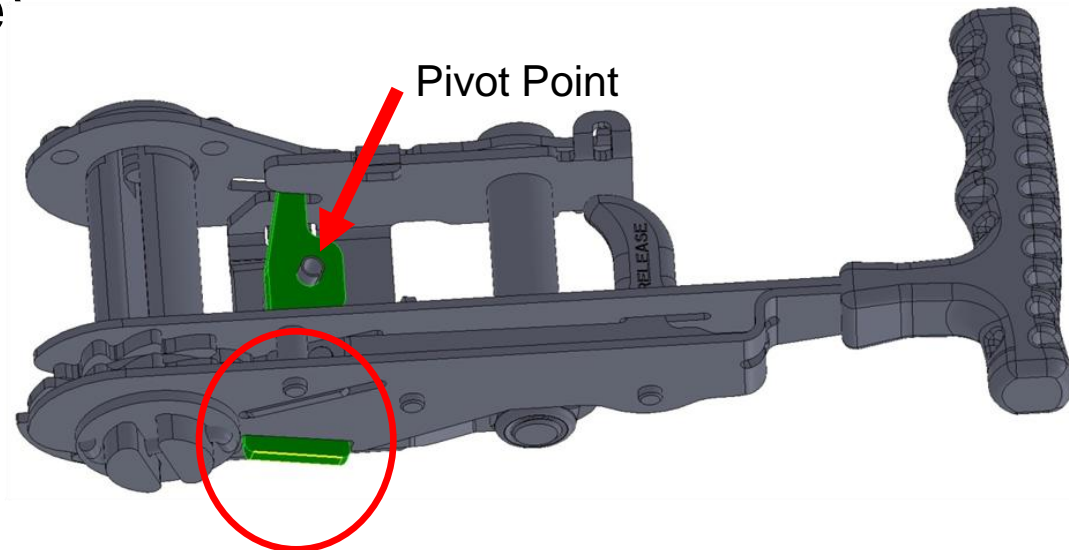
Spinning Spacer  
(with Side Gate  
removed for  
demonstration  
purposes only)





# Product Safety

- ❖ Side Gate Pressure - if there is lateral pressure on the Side Gate from either the strap not having been wound onto the spools evenly and/or the strap has not been positioned correctly onto the load being secured (ie angled), then (see next slide`





# Product Safety

..continued

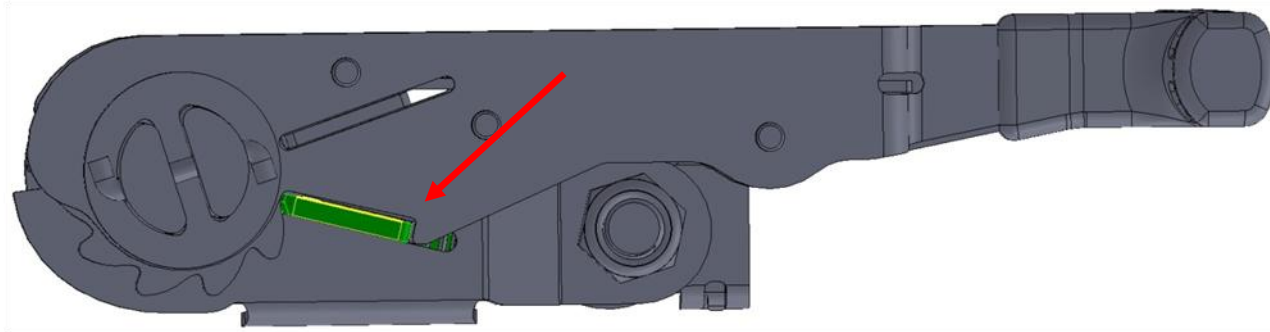
- the ratchet is designed so that this pressure is transferred onto the locking end of the pawl,
- due to the location of the pivot point this makes it difficult for the other end of the pawl to freely move in and out of the gears.
- this in turn puts pressure on the handle to the point where it becomes too difficult for the operator to complete ratcheting

At this point the responsibility (duty of care) lies with the Operator to cease ratcheting and correct the situation, and thus prevent the potential of the lateral pressure loaded onto the Side Gate heightening the risk from an accident if a foreign object hits the Side Gate.



# Product Safety

- ❖ **Handle Locking – similar to conventional ratchets**



**Slick Design!**





# Product Range

NZ/Aus Standard	32mm Range						50mm Range			Winder	Load Anchors
ARTL Product Code	ART06	ART07	ART08	ART09	ART10	ART12	ART13	ART01	ART01	ART02	ART14
B/S	2000	2000	2000	600	1000	1200	5000	5000	5000		5000
Length	6	6	6	4	5	5	6	9	9		
Hook	JJs	JJ & loop	S Hook	S Hook	S Hook	S & loop	JJ & Keeper	JJ & Keeper	JJ & Keeper		
Units	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Twin
Packaging	Box	Box	Box	Box	Box	Box	Box	Box	Bulk	Hang bag	Box



# Additional Ratchet Details

**Brand – “Armour” – part of the Armour Group of companies named after the founder/inventor**

**Lashing Capacity (LC) – half the break strength**

**Hardware finish – zinc plated**

**Webbing Colour – blue**

**Sew in labels – 2 with printing in blue**





# Innovative Strap Winder

- Patent application filed
- Nothing like it on the market
- Makes winding up of straps & cords quick and easy



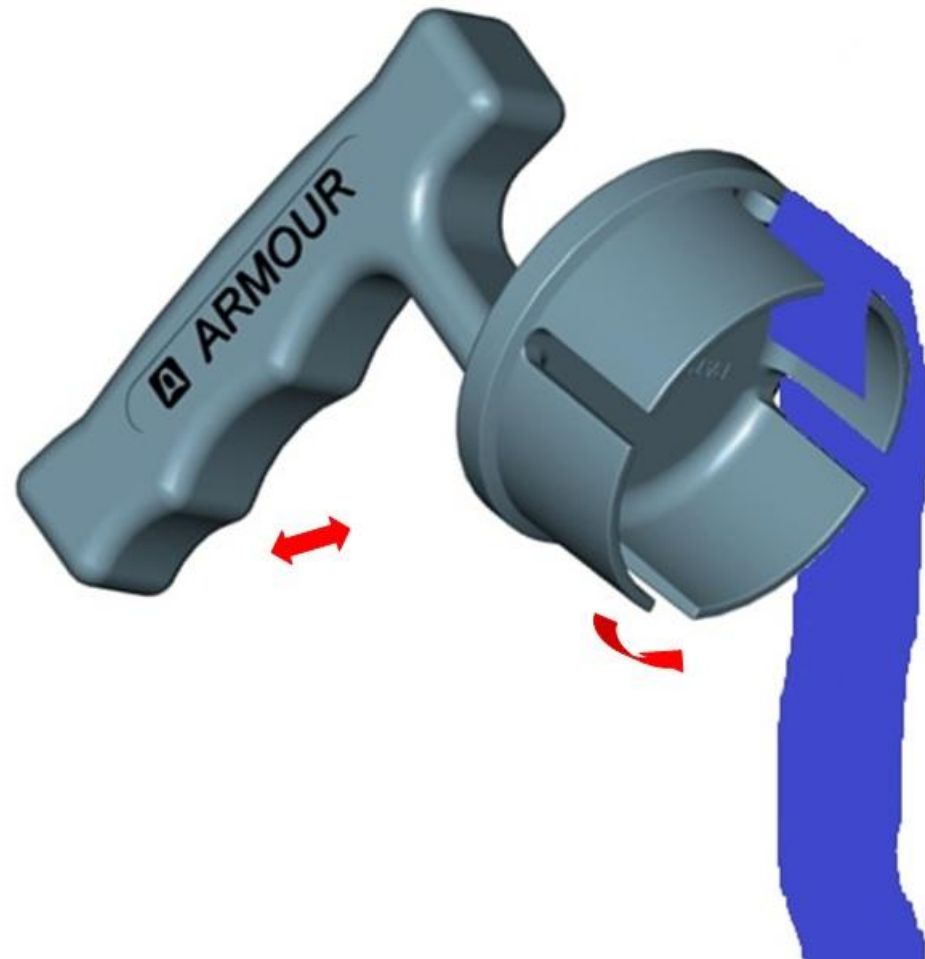


# Easy To Use

Simply insert the end of the strap into one of the four slots, and rotate the handle to wind.

Use one hand to guide the strap whilst winding, to ensure a nice neat roll once completed.

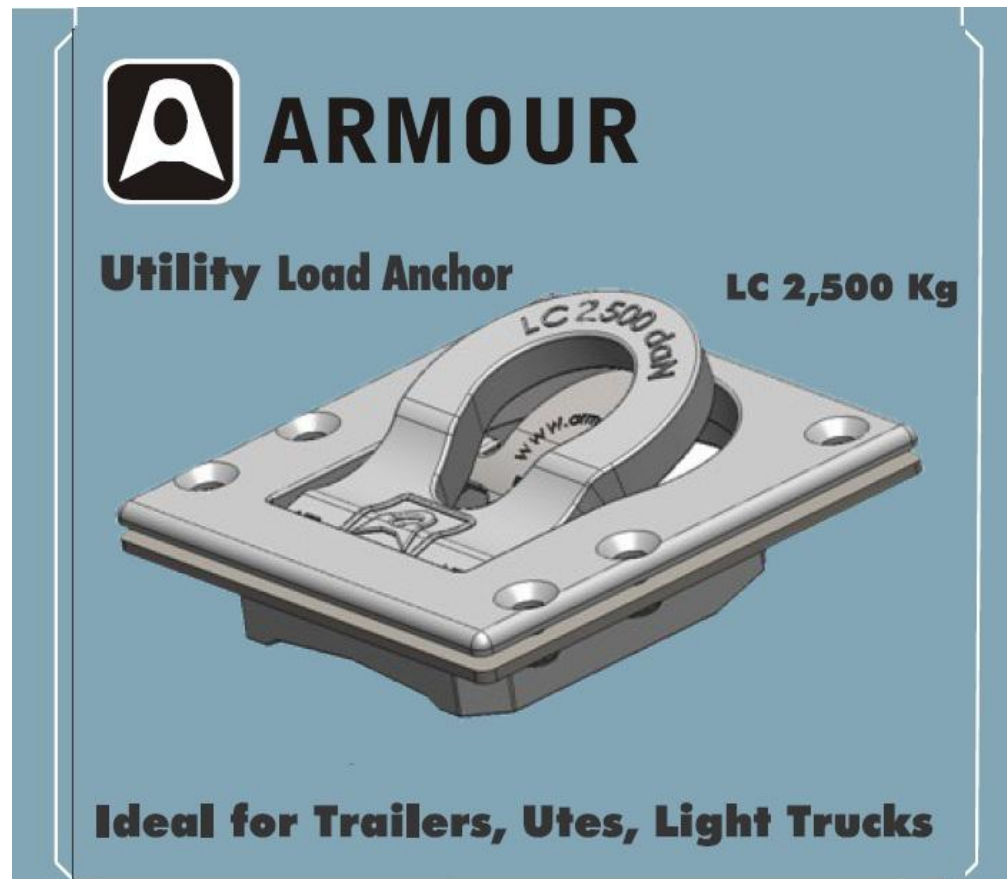
Then simply slide the strap off the winder and tie off





# Armour Load Anchors

- Great anchor points for utes, trucks, and trailers
- Nothing like it on the market
- Makes winding up of straps & cords quick and easy





# Armour Load Anchors

- Flush Mounted
- Self Cleaning
- Easy to Install
- Easy to Use
- Won't freeze
- Certified
- Safety





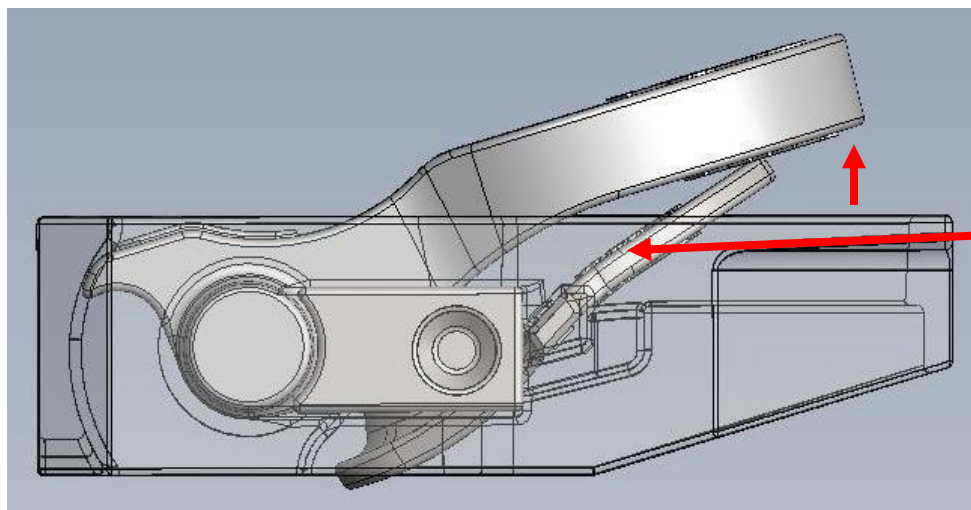
# Easy to Install



Secured with six threaded screws attached to a backing plate (which is used as the template to cut the hole in the deck)



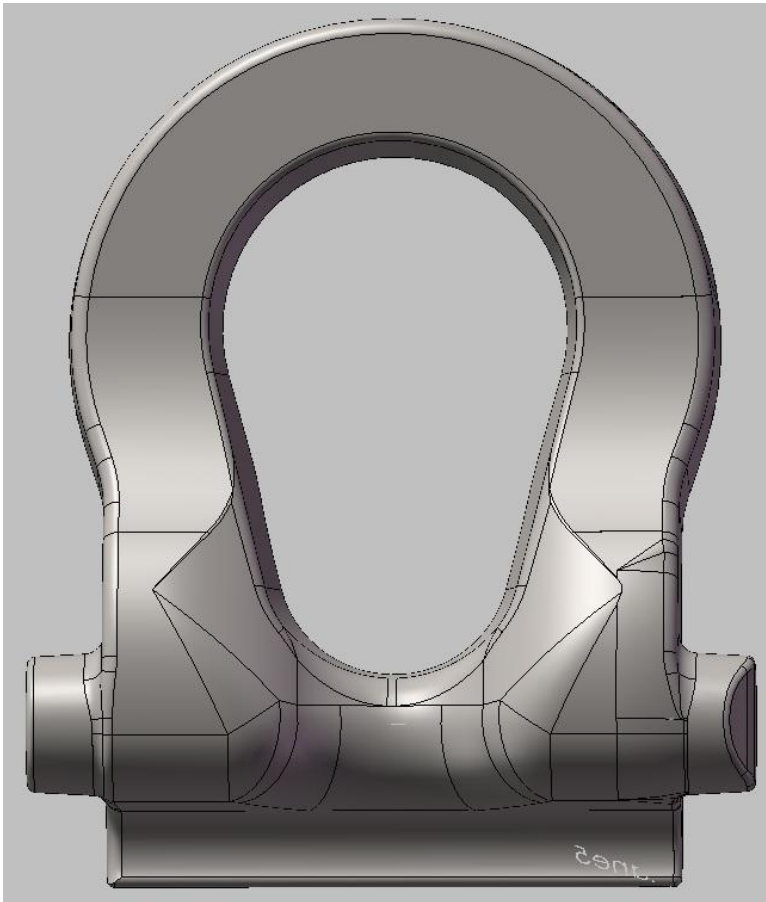
# Patented Features



Innovative Armour  
Push plate for  
raising the eye –  
simply push down  
on the Push plate



# Patented Features



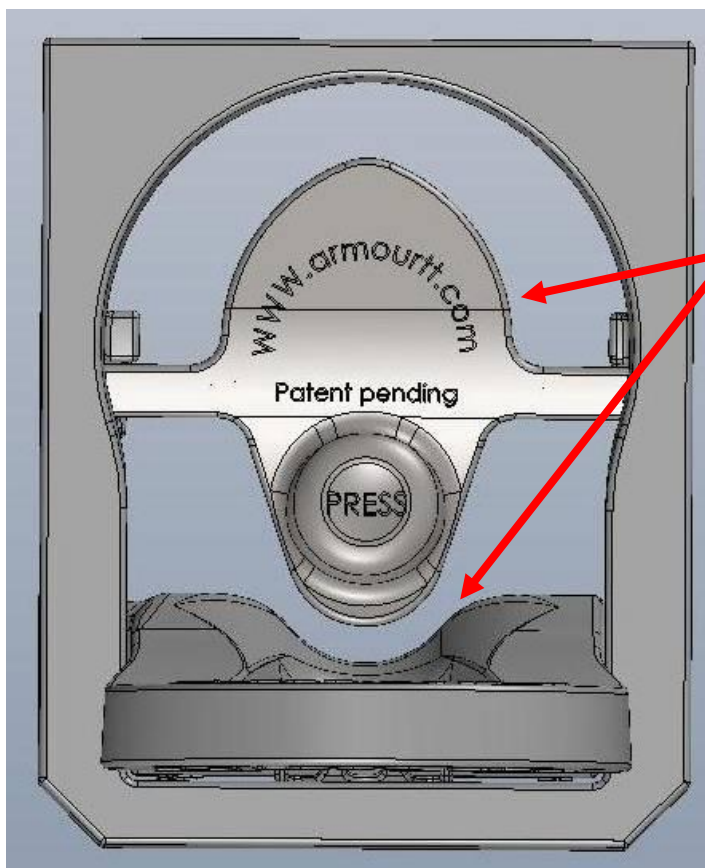
Integrated pin design greatly increases product capacity







# Features – Self cleaning

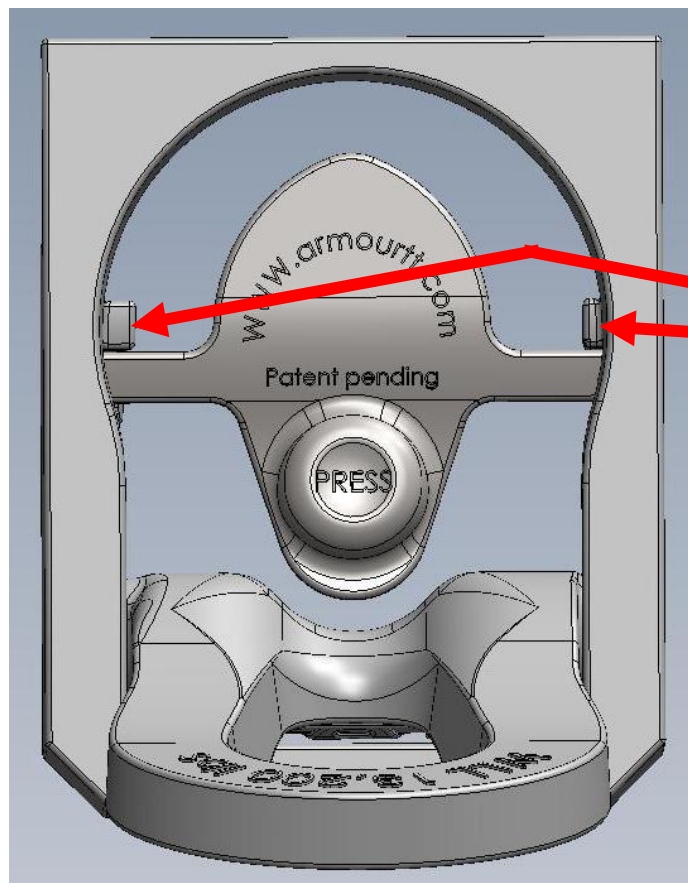


When the eye is raised any build up of dirt or water simply falls through the bottom of the anchor to the ground





# Minimum Freeze Points



The innovative design means the eye rests on only two small points – minimising the potential for the eye to freeze down in colder climate

**reducing costly  
down time &  
potential injury**



# Promotional Support

- ❖ [www.ratchet.co.nz](http://www.ratchet.co.nz) contains animation, instruction videos, and other information on the ratchet and winder
- ❖ [www.armourtt.com](http://www.armourtt.com) has additional information on the Load Anchors
- ❖ DLE Ratchet flier available
- ❖ ART has a library of photos and images suitable for use in promotional material
- ❖ Animation on the website available for playing in-store on tablets, TV and similar electronics



# Contacts:

For further information contact:

David McKewen  
Armour Ratchet Technology Ltd  
P O Box 7040  
Dunedin 9040  
New Zealand  
Email: [david@quie.co.nz](mailto:david@quie.co.nz)

[www.ratchet.co.nz](http://www.ratchet.co.nz)