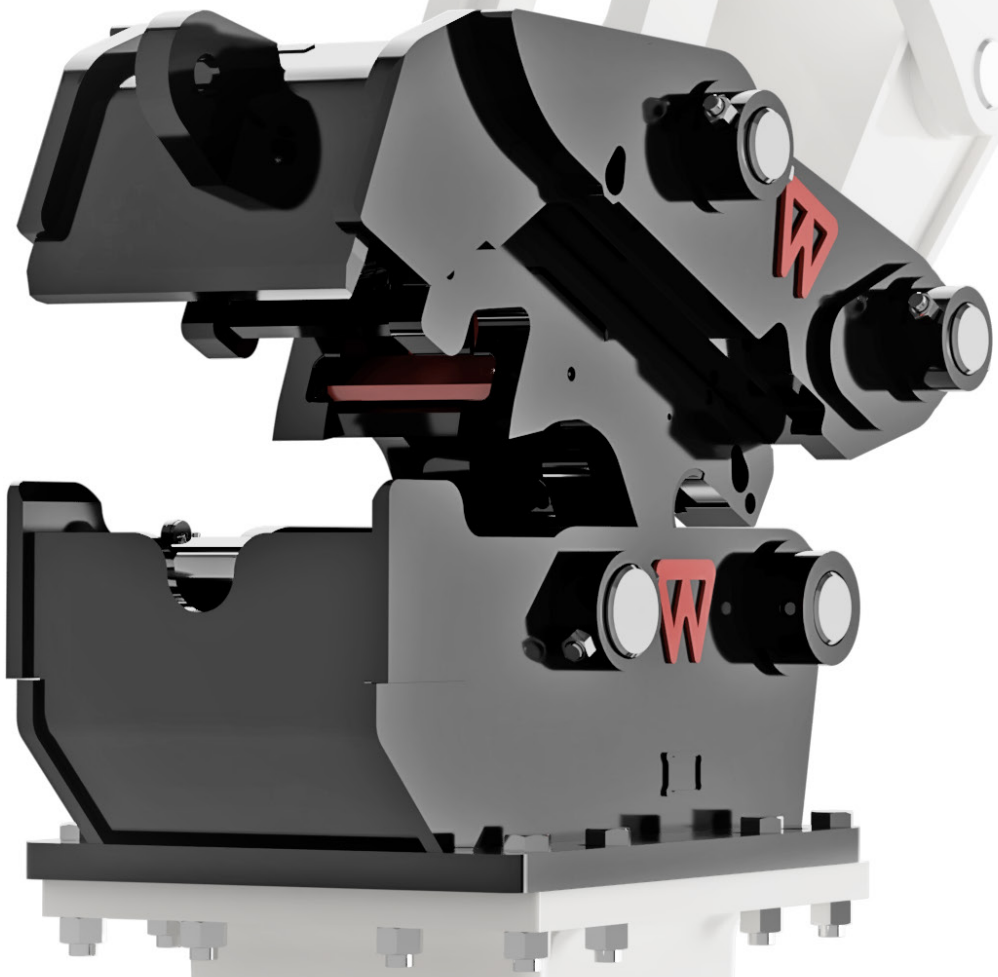
The Wedgelock

QUICKFLOW

COUPLER

13-120 TONNES



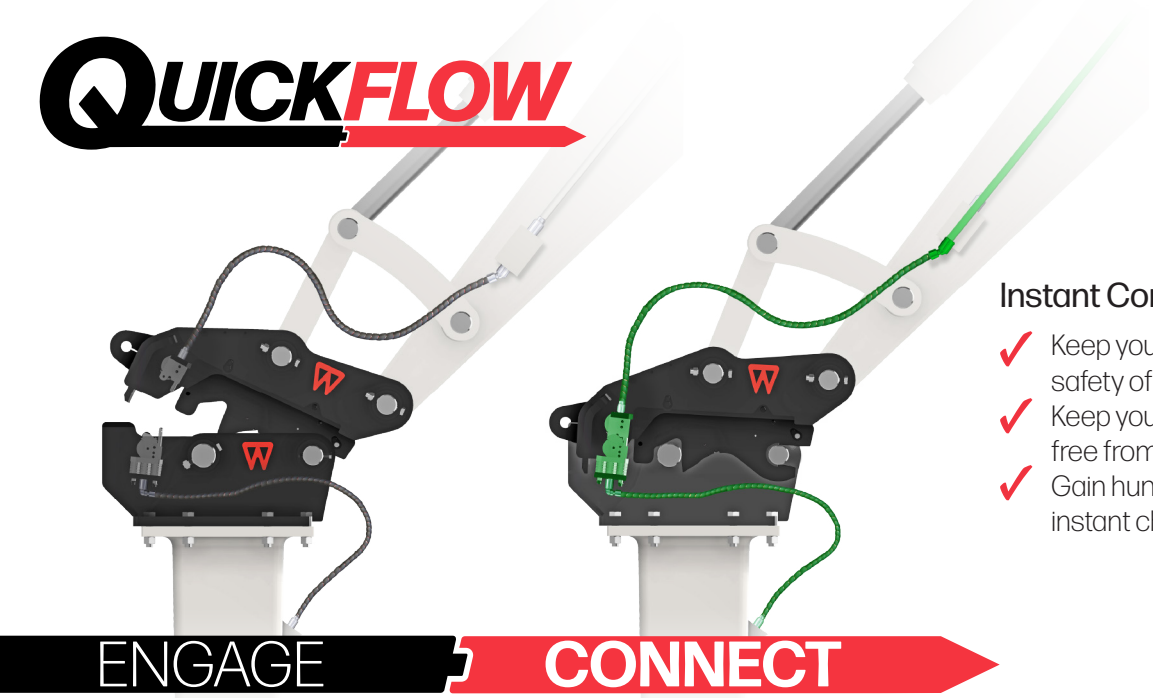
Connect to your hydraulic attachments **instantly** – without leaving the cab

Wedgelock

ENGINEERING **EXCELLENCE**

930-000-67 (REV 0)

QUICKFLOW



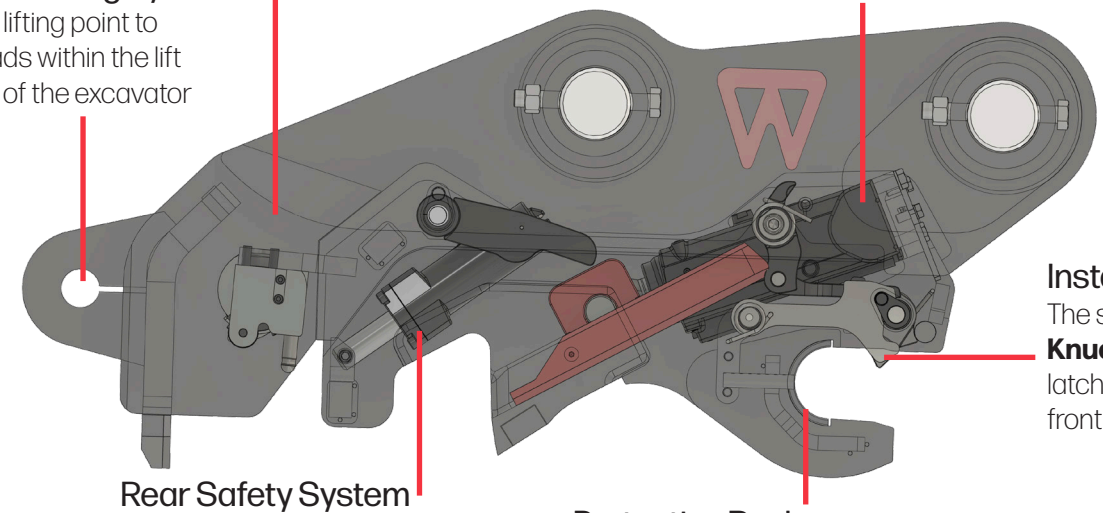
Instant Connect Sequence

- ✓ Keep your valuable personnel in the safety of the cab.
- ✓ Keep your hydraulic hose connections free from contaminants.
- ✓ Gain hundreds of productive hours with instant changeovers.

QuickFlow™ Mechanism – Supply
Connects upon contact with full operating pressure and is ready to go immediately

Primary Cylinder
One piece forged-body trunnion-mounted Primary Cylinder rated to mains pressure. Includes a Pilot Operated Safety Check Valve and Cross Port Relief Valve for total cylinder protection

Certified Lifting Eye
Effective lifting point to move loads within the lift capacity of the excavator

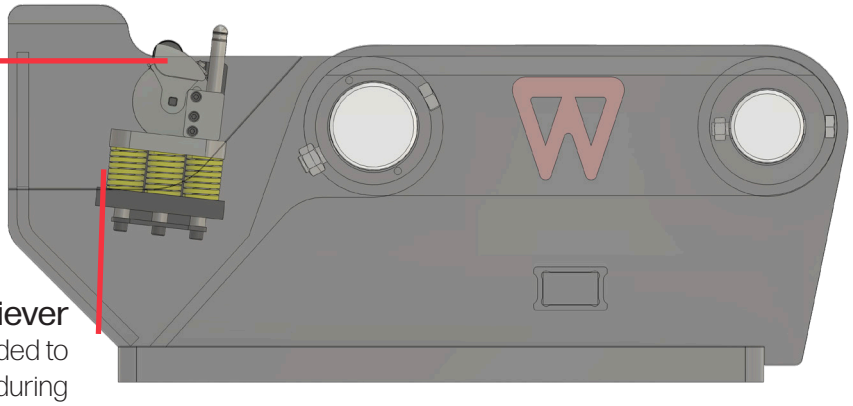


Instant Safety
The spring loaded **Safety Knuckle** allows for instant latching and locking of the front pin in the C-section

Rear Safety System
Automatically engaged Rear Safety System – retains the attachment in the working position if the engagement force is lost or reduced

Protective Bushes
Easily replaceable bushes shield the coupler from excessive wear, adding years to the coupler's effective life.

Self-Closing Cover
The patented QuickFlow™ mechanism is protected by self-closing solid protective covers on both the machine and attachment sides, preventing dirt, dust and contaminants from entering the hydraulic system.



Suspended Reciever
The QuickFlow mechanism is suspended to protect the hose couplings from damage during natural movement and impacts.

FULLY COMPLIANT: meets ISO13031-2016, EN474-1, EN474-4, EN474-5 & AS13031-2023 Quick Coupler Safety Standards.
Specifications are subject to change without notice. All images used are representative only and may differ from actual product.

Wedgelock
ENGINEERING EXCELLENCE

New Zealand
All Enquiries 0800 424 482
nzsales@wedgelock.com

Australia
All Enquiries 1800 731 757
aussales@wedgelock.com

www.wedgelock.com

QUICKFLOW

Why **innovation** with your excavator attachments use, **matters**

Excavator Attachment use has literally revolutionised the way excavators are used on job sites around the globe, with the invention of the Quick Coupler. In this article, we investigate a innovative solution to low productivity, high labour cost and safety on excavation sites with automatic oil connection to hydraulic attachments integrated within the quick coupler.

Competing in a world that requires **more** with less

Excavator Attachment use has increased rapidly over the last 30+ years since quick couplers were invented; quick couplers are now standard fitment on new excavators in many markets globally, especially in New Zealand, Australia, UK, USA/ Canada & most of Europe.

Interestingly, New Zealand and Australia have led the world in quick coupler fitment rates, with over 95% of all new machines having a quick coupler fitted from new. Vast improvements in productivity have occurred because of quick coupler fitment to excavators since the late 1980s, providing operators the right tool for the job, with seamless attachment changes from the comfort of the cabin the norm. However, costs are increasing rapidly for labour, safety and compliance on sites worldwide.

As large civil works Companies and small contracting firms look to compete long term, innovation is happening around automatic oil connection of hydraulic tools such as breakers, grapples, grab buckets and other specialized demolition tools. Europe has led the way with oil through systems now more the norm with some large and influential players spreading the word; however, the European market uses dedicated quick coupler systems that are not compatible with conventional excavator attachments (OEM Pin to Pin) across Australasia, UK and USA. This means that European oil through systems require bespoke attachment connections and therefore contractors need to change existing attachments to suit the European system(s). The cost of changing multiple existing attachments to the European systems is cost prohibitive for most operators.

The solution is an oil through system that seamlessly connects to existing attachments and utilizes the highly popular multi-coupler (universal) system within a given weight class. Using innovative but proven technologies in auto-oil connection has led to the development by Wedgelock of the QuickFlow Coupler, whilst retaining the ability to use existing attachments with a conventional Pin to Pin quick coupler and attachment system.

Operators can now connect seamlessly from a bucket (no hydraulics) to a hydraulic tool without leaving the cab of the machine. In addition to the huge productivity gains the QuickFlow provides, the system also vastly improves safety, significantly reduces potential for environmental damage, and creates an opportunity to move towards autonomous excavation in the future.

What are the **real gains** with QuickFlow

Some major gains in the key areas of cost, productivity, safety and environmental impact are provided by this advancement in technology. But what are the real gains experienced by operators.

Safer for operators & co-workers

Better breakout force and the right tool for the job

Better for the environment minimising oil contamination risks

Significant cost benefits & improved productivity

Operators have reported a minimum 30% increase in daily output of certain civil works tasks that require multiple changes from Hydraulic Breakers to buckets for hard rock trenching work. There are cases of operators changing work tools in hard rock up to twenty times per hour (that is not a miss print). Being able to change from a hydraulic breaker to a bucket to clean a trench, within 5-6 seconds, brings efficient, safe, and reliable attachment changes to the forefront of the productivity gains experienced.

Other operators have reported routinely changing attachments 10-20 times per day, depending on the job and work tools available. For anyone that has changed the hydraulic connections on an auxiliary circuit manually, you will be aware of the safety risks, the loss of time and the associated environmental hazards.

Furthermore, the QuickFlow opens significant opportunities for mainstream contractors in general construction environments, to improve machine performance and break out force across a range of work tasks. At least 35% of excavators across Australia are fitted with Pin Grabber Quick Couplers with Rotary Actuator (RA) tilt motors. RA tilt couplers, provide the operator tilt in both directions of up to 90 degrees. This has been useful for operators, providing an additional axis on the end of the excavator arm, but this comes at a prohibitive cost. There are only a selected few Rotary Actuator suppliers worldwide that are able to meet the reliability levels needed, and many emerging low-cost copycat versions which are not fit for purpose. The popularity and rising demand of RA Tilt Couplers use has resulted in some suppliers increasing RA Motor costs by at least 50% during the last 5 years. The reliability of Rotary Actuators is variable, depending on operator application, the quality systems of the manufacturer and adherence or otherwise with manufacturers installation instructions. As a result, RA Tilt Couplers can often be the weakest point in the link, with costly breakdowns, oil leaks and excessive wear and tear (mostly from overloading with oversized attachments).

The problems do not stop at reliability, cost and wear and tear with RA Tilt Couplers. The breakout force of your excavator is reduced by at least 20% when compared to a conventional standard quick coupler, due to addition height that the RA motor adds to the system. Every bucket used to dig, therefore defaults to 20% lower breakout force. This reduces the efficiency and productivity of your machine and burns more fuel. QuickFlow brings that performance curve back up to the level of a standard quick coupler but additionally provides the opportunity to use tilting or rotating buckets to provide the extra axis often needed by operators. When you want to dig hard materials, simply change attachments with your QuickFlow, instantly restoring breakout force as well as reducing overall fuel burn when compared to a Tilt Coupler.

QUICKFLOW

Connect to all of your existing attachments.

The Wedgelock QuickFlow Coupler operates with all the functionality of the standard Wedgequip hydraulic coupler.

Where do we think this is **heading**

Driven by over 3 decades of industry experience with Quick Couplers, Wedgelock has been involved from the start with co-founders Graham Calvert and two sons Matthew & David creating some of the very first quick coupler systems available in Australasia, back in 1987.

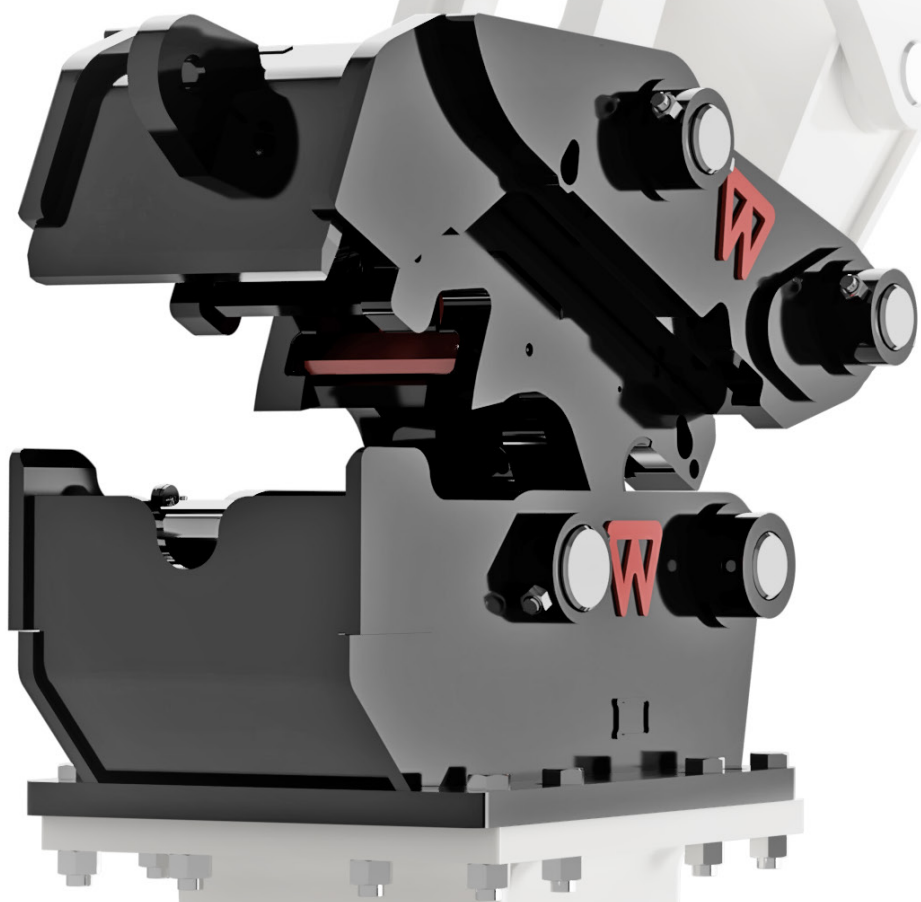
Leading the way in safety with Instant front locking on the first connection and direct involvement in the writing of both AS 4772 and ISO 13031 quick coupler safety standards, Wedgelock has continued to develop world leading solutions for excavator operators.

The QuickFlow innovation, joins the safest quick coupler system available (our proprietary locking mechanisms) with a seamless oil connection, using the conventional and popular Pin Grabber technology as a platform. This provides operators a pathway to safe, reliable and productive tool changes for increasingly prevalent hydraulic tools fitted to excavators. Quick Couplers are not going away and are becoming OEM standard fitment in leading markets.

Furthermore, global trends in construction are demanding better utilization from less machines, reduced cost inputs, improved safety, autonomous machine operation, electrification, as well as digital connection and monitoring of construction machines and equipment. The QuickFlow system ticks several of these boxes providing a future that is likely to open up further innovation with specialised hydraulic tools, which can be used on our global work sites.

The Wedgelock QuickFlow coupler is available for machines from 13 Tonne - 120 Tonnes and has been proven and tested over the last 5 years in extreme conditions across Australasia.

For more information;
visit www.wedgelock.com
or email our sales team.



Wedgelock
ENGINEERING **EXCELLENCE**

New Zealand
All Enquiries 0800 424 482
nzsales@wedgelock.com

Australia
All Enquiries 1800 731 757
aussales@wedgelock.com

www.wedgelock.com