

INTRODUCING

The revolutionary Automated Cone Truck.

Single driver operated, the ACT removes workers from the line of fire and pioneers a new, safe way of working in live traffic.



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ARROWESTM
ROADING SAFETY



Developed in Australia, the Automated Cone Truck (ACT) is the future of road cone deployment and retrieval. Doing so more safely than ever before with just a single driver operator seated out of harms way inside the cab.

The ACT removes workers from the line of fire, making the high exposure, high risk task of repetitive manual heavy lifting amongst live traffic the job of a mechatronic solution.

A solution that can remove up to two people from being exposed to the risks of live traffic, reduce long term injuries from repetitive manual heavy lifting, and potentially save lives.

Defined by its reliability, flexibility, ease of use and featuring our proprietary robotic systems, cones can be deployed and retrieved from both sides of the vehicle, and retrieved either in forward or in reverse.



THE ARROWES MISSION

To lead the way with solutions that redefine health and safety conventions within the infrastructure and civil construction industry. As Australia's premier innovator in roading safety solutions, our engineers continuously strive to find new and better solutions to make our worksites a safer place.



AT A GLANCE...



Completely operated
by just a single driver /
operator

400

400 Cone
Capacity



In cabin dashboard and
industrial grade tablet
controller



Retrieval of cones
in both forward
and reverse



Deploy and retrieve
on both left
and right

3 - 24m

Adjustable cone
spacing between
3m to 24m



Manual override cone
deployment when required



Integrated arrow
board and VMS



Smart cone
monitoring system



Laser assisted
retrieval system



360 vision with
8 onboard cameras



Built on a 14T cab chassis
with air suspension

FEATURES



400 Cone Capacity

With a capacity of 400 cones, the ACT is equipped to close over nine kilometres of highway without stopping. This is over twice the capacity of most conventional cone trucks.

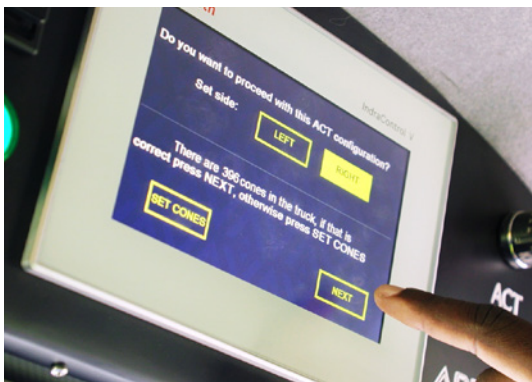


Deployment and Retrieval

Cone spacing set by operator from 3m to 24m or the user can configure an automatic deployment profile with the required spacings and distances for easy integration with the worksite's traffic guidance scheme.

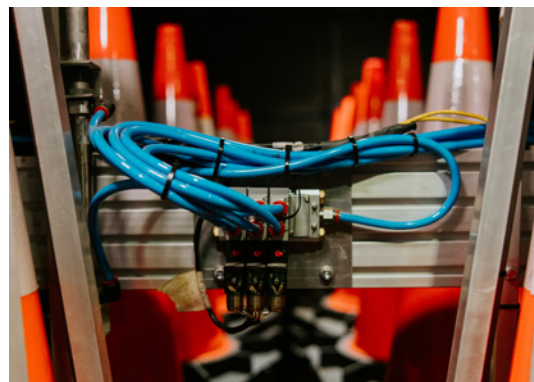
Manual override capability gives the operator flexibility when the occasional cone may be required outside of the set spacing.

In retrieval mode, smart sensors detect cone position and the gripper intuitively move towards the cone for collection. Video monitoring and a laser line with night vision also aids the operator with visual assistance in both deployment and retrieval.



Operator's control tablet

The touch control interface is simple, user friendly and smart. The ACT's smart tracking and planning system constantly tracks the number of cones placed and the number left onboard. The operator simply inputs the distance, desired cone spacing and the system will calculate and inform if there are sufficient cones onboard to meet that distance and spacing. The ACT can also alert the operator when there is a need to replenish cone stock.



Automation / Robotics

Developed to have the least moving parts possible with robust and proven components, the ACT features several automations designed to improve health, safety and efficiency.

FEATURING:

- Deploy and retrieval mechatronics
- Automated roller doors
- Automated air safety booms
- Generator controlled from within cab





Emergency Stop

The ACT has a total of 6 emergency stops. 3 of which are readily available to the operator and bystanders and 3 emergency/isolation stops for maintenance purposes.



Obstruction Sensors and Barriers

Any object or persons crossing the defined zones on either side of the vehicle will cause the ACT to immediately stop operations. The operator can then check for hazards and once deemed safe and clear of any danger can reset and continue operations. The ACT also features 4 x physical airbar barriers with signal lights.



Non-tipping cones

Custom designed, our RA90060 cones literally stand up to harsh temperature and strong wind conditions. Cones are designed to be tipped as far as 45 degrees and still return to a standing position.

They meet with Australian standards and have the following specifications:

1. 900mm height
2. 6kg weight
3. Cone is made with 100% PVC
4. Base is made from recycled PVC
5. Temperature range -18 – 50 degrees Celsius
6. Tensile strength at 500mm/min is 13 Mpa
7. Hardness is at Shore A75



Cameras and Sensors

A full suite of 8 cameras provide 360 degree vision giving the operator complete situational awareness and allowing fleet managers to comprehensively review incidents.

The cameras are supported by 2 x 8 channel DVR with 1TB enabling 150 hours continuous recording. The cameras are projected on 4 monitors positioned in the operator's cabin. The ACT also comprises of smart vision cameras and multitude of sensors for cone detection.



Integration

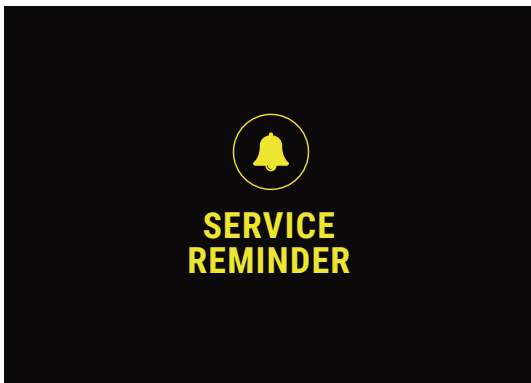
We have integrated our complete range of traffic control products into the ACT including our in-house designed and manufactured arrow boards and variable message signs, making the ACT a single vehicle solution.

For more information on the Variable Messaging Signs and Arrow Boards visit arrows.com.au



Other safety features

Handbrake alarms, reverse squawker, jump start, starter lockout, wheel nut indicators, wheel chokers, spill kit, fire extinguishers, first aid kit, 3 x work lights, 4 x beacons, 4 x Laser lights



Alerts

Various alerts have been programmed into the HMI to pop-up based on activity and duration of use. These alerts include but are not limited to:

- ACT mechanical service reminder
- Generator service reminder
- Cone storage empty
- Air pressure system
- Error/Faults



Support

Three troubleshooting methods are available for the ACT, these include

- Quick troubleshooting guide provided in the user manual
- Support Engineer remote troubleshooting
- Support Engineer onsite callout troubleshooting

**For more information or to arrange a demonstration
phone +61 (07) 3881 3302 or email sales@arrows.com.au**



Quality Australian manufacturing.

Our manufacturing facilities are closely embedded into the local and regional supply chain and ecosystem. Arrowes sources as many components, parts and supplies as possible from our Queensland and Australian suppliers. We support the local business community and ensure our close connections benefit our clients in terms of response times, quality and service.

Find out more about how the ACT can help your team:

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Electronic Variable Message Signs | Pilot Vehicle Signs | Cone Trucks | Ute Fit-outs | Truck Mounted Attenuators



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