

# Autonomous

READY

Articulated Dump Trucks



**BELL**



## THE FUTURE OF HAULAGE IS HERE

All Bell E-series ADTs are now Autonomous Ready, offering cutting-edge solutions that improve operator safety, boost machine availability, and enhance performance. With accurate and consistent radar scanning, our ADTs can operate in all weather conditions, ensuring productivity in any environment.

Our Autonomous Ready system provides the flexibility to switch between autonomous and manual modes without any changes to the operator station. This means you can run your ADT with or without an operator, depending on your needs. Additionally, site safety is further optimized with integrated Proximity Detection Systems (PDS) and Collision Avoidance Systems (CAS), built directly into our autonomous solutions.

## KEY FEATURES OF BELL'S AUTONOMOUS READY ADTs

- **Safety First:** Autonomous haulage solutions reduce operator risks by enabling remote operation and eliminating human error.
- **Maximized Uptime:** Autonomous operation increases machine availability with fewer interruptions and quicker response to failure modes.
- **Weather-Resilient:** Radar scanning ensures consistent performance, even in challenging weather conditions.
- **Flexibility:** Switch easily between autonomous and manual modes without altering the operator station.
- **Enhanced Site Safety:** Integrated PDS and CAS systems protect your site, minimizing accidents and collisions.





## BELL'S ROLE IN AUTONOMOUS INTEGRATION

Bell's Autonomous Ready ADTs require the optional electronic steering kit which, allows seamless connection with third-party autonomous suppliers.. Here's how it works:

- **BELL Executes:** Our system receives and executes commands from the third-party autonomous system, facilitating drive-by-wire control through the BELL CAN bus interface (ISO 21815-2).
- **Third-Party Hardware:** The third-party supplier provides the autonomous hardware, which detects and instructs the ADT's movements.

Description	Bell	Third Party
Remote Activation Ignition	Both	Both
Manual Override	Yes	
Electronic Controlled Steering	Yes	
Electronic Controlled Braking	Yes	
Speed Control System	Yes	
Bin Operation	Yes	
Traction Control System	Yes	
Machine Lighting	Yes	
Onboard Camera		Yes
High Precision Location System		Yes
Forward Object Detection System		Yes
Rear Object Detection System		Yes
High Speed Remote Communication		Yes
Machine Interface Controller		Yes
CAN Gateway	Yes	

## AUTONOMOUS PROCESS

● **Initial Inquiry & Feasibility:** Upon receiving an autonomous inquiry, we collect basic site information to assess the feasibility of autonomous operation. This is done through a collaboration with the operations, Bell product managers and autonomous suppliers.

### Favourable site conditions

1. Fixed stockpile dumping or dumping into a hopper
2. Haul roads with two-way traffic capabilities
3. More isolated sites with minimal or zero outside traffic
4. Decent network coverage

● **Supplier Selection:** Refer to the below list of third-party suppliers who have integrated with the Bell ADT. Customers may choose from this list or propose a new supplier. The latter would require preliminary remote integration testing. Once successful, machine testing follows.

● **Cost and Fitment:** BELL provides pricing through aftermarket for the electronic steering kit and its fitment, while the customer engages directly with the chosen supplier for autonomous hardware, site assessment, and deployment timelines.

● **Order and Installation:** If the customer decides to proceed, they can place an order for the ADT and electronic steering kit through the BELL dealer. The autonomous hardware is ordered directly from the third-party supplier.

● **Deployment:** The BELL dealer is responsible for the ADT and its support, while the third party handles the autonomous solution, ensuring smooth integration and operation on-site.

### List of autonomous suppliers who have integrated with a Bell ADT:

1. Xtonomoy (Europe)
2. Pronto AI (USA)
3. ABD Solutions (UK)
4. Teleo (USA)

Engage with 3rd party supplier for more detail.







All dimensions are shown in millimetres, unless otherwise stated between brackets.  
Under our policy of continuous improvement, we reserve the right to change technical  
data and design without prior notice. Photographs featured in this brochure may  
include optional equipment. Available in E-series only.

**BELL INTERNATIONAL: +27 (0)35-907 9111**

**E-mail: [connect@bellequipment.com](mailto:connect@bellequipment.com) • [www.bellequipment.com](http://www.bellequipment.com)**



Tel: +61 (0)8-9355-2442



Tel: +49 (0)6631 / 91-13-0



Tel: +33 (0)5-55-89-23-56



Tel: +27 (0)11-928-9700



Tel: +44 (0)1283-712862



Tel: +1 (854) 855 7507

**Strong Reliable Machines  
Strong Reliable Support**

**BELL**