

**EQUIPPING**  
**YOUR Success**



DISTRIBUTED IN NEW ZEALAND BY

**MOXY**  
Articulated Dump Trucks

**MIMICO**  
MATAMATA INDUSTRIAL MACHINERY IMPORTS LTD



## MOXY DELIVERS FOR KIWI OPERATORS

### **MIMICO PROVIDES NATIONWIDE SALES AND PRODUCT SUPPORT FOR MOXY EQUIPMENT, TO GO WITH THE COMPANY'S EXTENSIVE PARTS AVAILABILITY.**

MIMICO sells and supports the Moxy MDT30C and Moxy MDT45 in New Zealand.

- The **MDT30C** has a payload of 28,100kg and a capacity of up to 17.8m<sup>3</sup>.
- The **MDT45** can handle up to 40,000kg with its maximum capacity of 26.1m<sup>3</sup>.

### **INNOVATION FUELS PRODUCTIVITY**

High productivity means more material moved every day. Moxy brings an increased level of innovation to the productivity game. In every weight category, the Moxy ADT leads the industry with its superior body capacity.

It is designed to work in tough conditions and travel over 50 kilometres per hour. Add to this its sure-footed traction in rough terrain and a

quick-unloading tailgate and you get an ADT that delivers more, any way you look at it.

The Moxy ADT, with its unique forward-mounted turning ring, sloping rear frame and free-swinging gear driven tandem bogie, has stability that's hard to match and performance that can't be beaten. It all comes down to more contact with the ground, better traction and use of power, and faster work with better results.

Even the best equipment needs regular maintenance. Moxy delivers everything needed for a long lasting machine with a minimum of effort to achieve it: on-board diagnostic systems, easy component access plus a standard fleet management system.

Moxy fits neatly with MIMICO's existing brands such as Kobelco excavators, Metso:Outotec crushing and screening equipment, Dynapac construction equipment, Epiroc rock breakers, and ZF off-road parts and service. It also fits well with MIMICO's existing clientele in the quarrying, mining, construction and forestry industries.

# MOXY DELIVERS PRODUCTIVITY

The MDT30C offers best-in-class ground clearance and ground bearing pressure. Combined with superior torque at low engine RPM, and superior power and traction, Moxy offers you the best productivity. The MDT45 offers the best combination of payload and efficiency in its class. Thanks to its unique design, best productivity is delivered in all working conditions.

## OPERATOR'S ENVIRONMENT

Ergonomic controls, most spacious cab in the market, high-class seat, Bluetooth radio with USB, and much more.

## OPERATE AT EASE

Upgraded monitor panel, new control panel for more convenient use, real-life payload meter with external light indication, rear-view camera, body tip boost button.

## POWER

**MDT30C** Scania DC 09 engine: 276 kW (375 HP) at 2100 rpm with electronic exhaust brake.

**MDT45** Scania DC13 water-cooled diesel engine with turbo charger and air to air intercooler (368kw at 2100rpm).

## NEW QUALITY OF RIDE

New self-leveling, hydro-gas suspension supports soft ride in harsh conditions.

## DIFFERENTIAL

Front and rear differentials are limited slip, longitudinal differential can be manually locked by pushing one button.

## MANEUVERABILITY

Unique design of rear frame, body, and frontmounted differential on transmission make the Moxy the most compact ADT in its class, which results in smallest turning radius and outstanding stability.

## SAFETY HIGHLIGHTS

Gradient meter with body flip-over protection, Body Over Centre of Gravity function, fenders and hand rails all around cab, superior stability and always visible and clean front cab access.

## BODY

Steel plates with 400 HB hardness. Capacity without/with tailgate: **MDT30C** 16.8/17.8 m<sup>3</sup>, **MDT45** 24.5/26.1 m<sup>3</sup>. Tailgate, body heating and wear plates available as optional equipment.

## TELEMATICS

Monitor your fleet online. As standard, Doosan Connect system with dual mode (satellite, GSM). Check productivity, fuel consumption, system warnings, maintenance status.

## BRAKE SYSTEMS

Oil-cooled wet disc brakes (lifetime up to 15,000 hours). Standard hydraulic transmission retarder and hydraulic parking brake.

## SERVICE ACCESSIBILITY

Diesel and grease (for auto-lube system) filling from ground level, plus AdBlue (T4F only) for MDT45. Easy access to filters and oil filling points. Tilttable cab with self-positioning locking mechanism.







### **UNIQUE SLOPING FRAME - BETTER WEIGHT DISTRIBUTION**

Other brands use rigid axles which lose traction and have a rougher ride. The Moxy frame is sloped downward from the hinge points to provide equal weight distribution on all axles when the truck is fully loaded. This provides a lower centre of gravity along with superior stability and tractive effort - not to mention better tire wear.

### **CENTRE OF GRAVITY ADJUSTMENT**

This productivity-preserving feature keeps the load securely in place for reliable performance. If a load starts to pull system hoist cylinders backward, the system slows down the tipping speed, giving the operator time to react and prevent spillage or unexpected dumping.

### **FRONT WHEEL SUSPENSION**

The unique semi-independent front suspension allows free movement of one side, keeping the front wheels in contact with the ground for excellent traction and shock absorption.

### **FREE-SWINGING REAR TANDEM GEAR DRIVEN BOGIE SUSPENSION**

The Moxy ADT's free-swinging rear tandem bogie and special articulation system offer excellent performance and the best possible ground contact in soft and uneven terrain for maximum productivity. It also allows easy loading of the truck in almost all positions and applications.

### **SINGLE DRIVELINE**

The single driveline only needs one longitudinal differential lock to provide the optimal power split of 50% to the front and 50% to the rear drive train. Together with two state-of-the-art, limited-slip differentials, Moxy ADTs will always deliver best-in-class traction. One easy-to-lock differential is used in the rear, providing operator comfort when driving. Other brands use two rear differentials connected by an interaxle drive-through system. This type of design is subject to damage from the outside, loss of power and premature wear.

### **ONE REAR DIFFERENTIAL FOR CONSISTENT POWER**

Moxy ADTs have one rear differential to reduce loss in power. Therefore the driveline delivers more power with fewer parts.

### **SEMI-INDEPENDENT FRONT SUSPENSION**

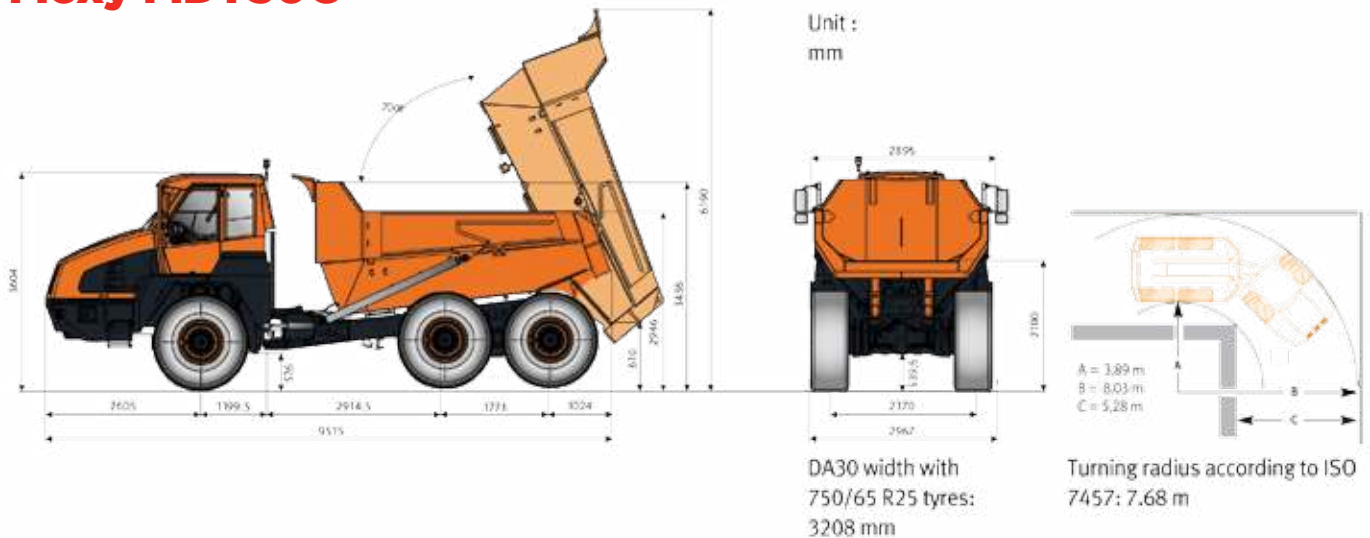
The new hydro-pneumatic system, exclusively designed for Moxy ADTs and available on the MDT45 only, works with the sloping rear frame and free swinging tandem to deliver low ground-bearing pressure, about equal to that of a traditional machine equipped with flotation tires.

### **UNIQUE FRONT-MOUNTED DIFFERENTIAL**

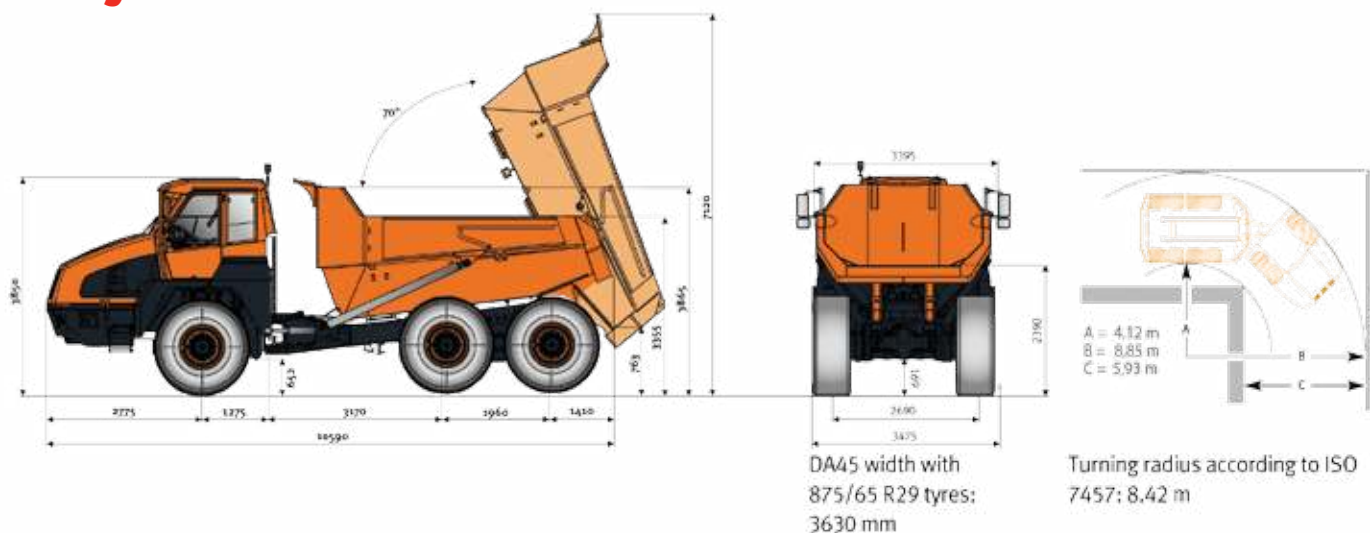
Since the front differential is integrated into the transmission, the total length of the truck is reduced. This design brings better weight distribution and a smaller turning radius. That's an important advantage in confined areas.

# SPECIFICATIONS

## Moxy MDT30C



## Moxy MDT45



### HEAVY-DUTY WET DISC BRAKES FOR EACH WHEEL

The oil-cooled wet disc brakes on all six wheels provide excellent braking performance. Dry disc brakes are open and exposed to dirt and water. The wet brakes on Moxy ADTs are not affected by these conditions because they are fully encased in oil. Wet disc brakes last longer, have fewer service intervals, and are especially useful in extreme conditions such as in deep mud and water. Air-cooled disc brakes on the MDT30C do not require forced cooling like most competitor designs.

### OPERATE IN COMFORT AND SIMPLICITY

The operator's cab meets both Rollover Protective Structure (ROPS) and Falling Object Protective (FOPS) criteria. The cab is also equipped with heating and air-conditioning, plus a high quality

air-suspension seat with a seat belt to provide excellent comfort. Precise steering, good visibility and low noise levels provide a productive and comfortable cab environment for the operator.

### DOWNHILL SPEED MODULATION

Downhill braking can be increased or decreased by simply 'feathering' the accelerator pedal.

### BEST MANUFACTURING, BEST COMPONENTS

Moxy ADTs are among the most reliable dump trucks in the industry thanks to the long history of using reliable and proven components and manufacturing processes. With in-house control of all machining and robotic welding, Moxy maximizes the durability of all its assemblies. Moxy ADTs use proven, specifically designed engine and transmission components tested not only by our suppliers, but by Moxy itself.

# SPECIFICATIONS

## Moxy MDT30C

### BODY

- Body volume (without Tailgate): 16.8 m<sup>3</sup>.
- Material: Hardened abrasion-resistant steel plates (400 HB).
- Tilt cylinders: Single stage, double-acting.
- Tipping time: Up : 12 sec. / Down : 10 sec.
- Body: Designed for exhaust heating.
- Sloping frame: Down from the hinge point.
- Level capacity (with/without tailgate): 14.2 m<sup>3</sup> / 13.6 m<sup>3</sup>.
- Heaped capacity (with/without tailgate): 17.8 m<sup>3</sup> / 16.8 m<sup>3</sup>.

### ELECTRICAL SYSTEM

- Batteries: 2 x 12V 105Ah (series connected to give 24V).
- Starter: 6KW (8HP).
- Alternator: 24 V 100 A.

### WEIGHTS

- Empty (Front axle): 12,500kg.
- Empty (Rear axle): 10,600kg.
- Max. admissible axle load (Front axle): 16,700kg.
- Max. admissible axle load (Rear axle): 37,000kg.
- Max. admissible weight: 51,200kg.
- Payload: 28 metric ton (31 short ton).
- Net weight: 23,200kg.

NOTE: All weights include a full fuel tank and operator.

### POWER TO WEIGHT RATIO (NET POWER VS TON)

- Empty: 11.9 kW/t.
- Loaded: 5.4 kW/t.

### GROUND PRESSURE

- Ground pressure: Standard 23.5 x 25 tyres with 15% sinkage.
- Empty (Front axle): 121.7 kPa - 17.65 psi.
- Empty (Rear axle): 51.6 kPa - 7.48 psi.
- Loaded (Front axle): 161.6 kPa - 23.44 psi
- Loaded (Rear axle): 169.8 kPa - 24.63 psi.

### SPEEDS

- Forward (1 - 2 - 3 - 4 - 5 - 6 - 7 - 8): 6 - 8 - 11 - 16 - 23 - 32 - 45 - 55 km/h.
- Reverse (1 - 2 - 3 - 4): 6 - 8 - 11 - 16 km/h.

### TRANSMISSION

- Electronically-controlled automatic transmission with retarder. The torque converter has automatic lock-up in all gears. ZF 8 EP320.

### HYDRAULIC SYSTEM

- 1 variable displacement piston pump for steering & tipping for cooling fan, brakes & auxiliaries: 294 l/min @ 2100 rpm.
- Filtration: One return flow filter.
- Main safety valves pressures, tipping/steering circuit: 280 / 210 bar.

### ENGINE

- Complies with Tier2, Tier4F emission: Scania DC 9, water-cooled, diesel engine with turbo charger and air-to-air intercooler.
- Power rating ISO 3046 @ 2100 rpm: Tier2 375hp(267kW) / Tier4F 375hp(276kW).
- No. of cylinders: 5 (in line).
- Gross torque: 1873Nm @1300rpm.
- Cylinder volume: 9.3 litres.
- Bore diameter x stroke: 130 x 140 mm.
- Air filter: Dry type.

### CAPACITIES

- Fuel tank: 335 l.
- Hydraulic system: 95 l.
- Hub front: 9.6 (2) l.
- Tandem housing, rear differential and hubs: 155 (2) l.
- Cooling circuit: 45 l.
- Engine: 35 l.

### TYRES

- Standard: 23.5 R25 Tubeless, two Star radial.

## Moxy MDT45

### BODY

- Body volume (without Tailgate): 24.6 m<sup>3</sup>.
- Material: Hardened abrasion-resistant steel plates (400 HB).
- Tilt cylinders: Single stage, double-acting.
- Tipping time: Up : 10 sec. / Down : 10 sec.
- Body: Designed for exhaust heating.
- Sloping frame: Down from the hinge point.
- Level capacity (with/without tailgate): 20.4 m<sup>3</sup> / 19.6 m<sup>3</sup>.
- Heaped capacity (with/without tailgate): 26.1 m<sup>3</sup> / 24.6 m<sup>3</sup>.

### ELECTRICAL SYSTEM

- Batteries: 2 x 12V 105Ah (series connected to give 24V).
- Starter: 6KW (8HP).
- Alternator: 24 V 100 A.

### WEIGHTS

- Empty (Front axle): 14,500kg.
- Empty (Rear axle): 16,000kg.
- Max. admissible axle load (Front axle): 22,500kg.
- Max. admissible axle load (Rear axle): 55,000kg.
- Max. admissible weight: 71,100kg.
- Payload: 41 metric ton (45 short ton).
- Net weight: 30,100kg.

NOTE: All weights include a full fuel tank and operator.

### POWER TO WEIGHT RATIO (NET POWER VS TON)

- Empty: 11.8 kW/t.
- Loaded: 5.0 kW/t.

### GROUND PRESSURE

- Ground pressure: Standard 29.5 x 25 tyres with 15% sinkage.
- Empty (Front axle): 93.9 kPa – 13.62 psi.
- Empty (Rear axle): 51.8 kPa – 7.51 psi.
- Loaded (Front axle): 139.2 kPa – 20.19 psi.
- Loaded (Rear axle): 161.3 kPa – 23.39 psi.

### SPEEDS

- Forward (1 - 2 - 3 - 4 - 5 - 6 - 7 - 8): 6 - 9 - 12 - 17 - 24 - 34 - 48 - 55 km/h.
- Reverse (1 - 2 - 3 - 4): 6 - 9 - 12 - 17 km/h.

### TRANSMISSION

- Electronically-controlled automatic transmission with retarder. The torque converter has automatic lock-up in all gears. ZF 8 EP420.

### HYDRAULIC SYSTEM

- 1 variable displacement piston pump for steering & tipping for cooling fan, brakes & auxiliaries: 294 l/min @ 2100 rpm.
- Filtration: One return flow filter.
- Main safety valves pressures, tipping/steering circuit: 280 / 210 bar.

### ENGINE

- Complies with Tier2 / 3 / 4F emissions: Scania DC 13, water-cooled, diesel engine with turbo charger and air-to-air intercooler.
- Power rating ISO 3046 @ 2100 rpm: Tier2 500hp(368kW) / Tier3 450hp(331kW) / Tier4F 500hp(368kW).
- No. of cylinders: 6 (in line).
- Gross torque: 2373Nm @1300rpm.
- Cylinder volume: 12.7 litres.
- Bore diameter x stroke: 130 x 160 mm.
- Air filter: Dry type.

### CAPACITIES

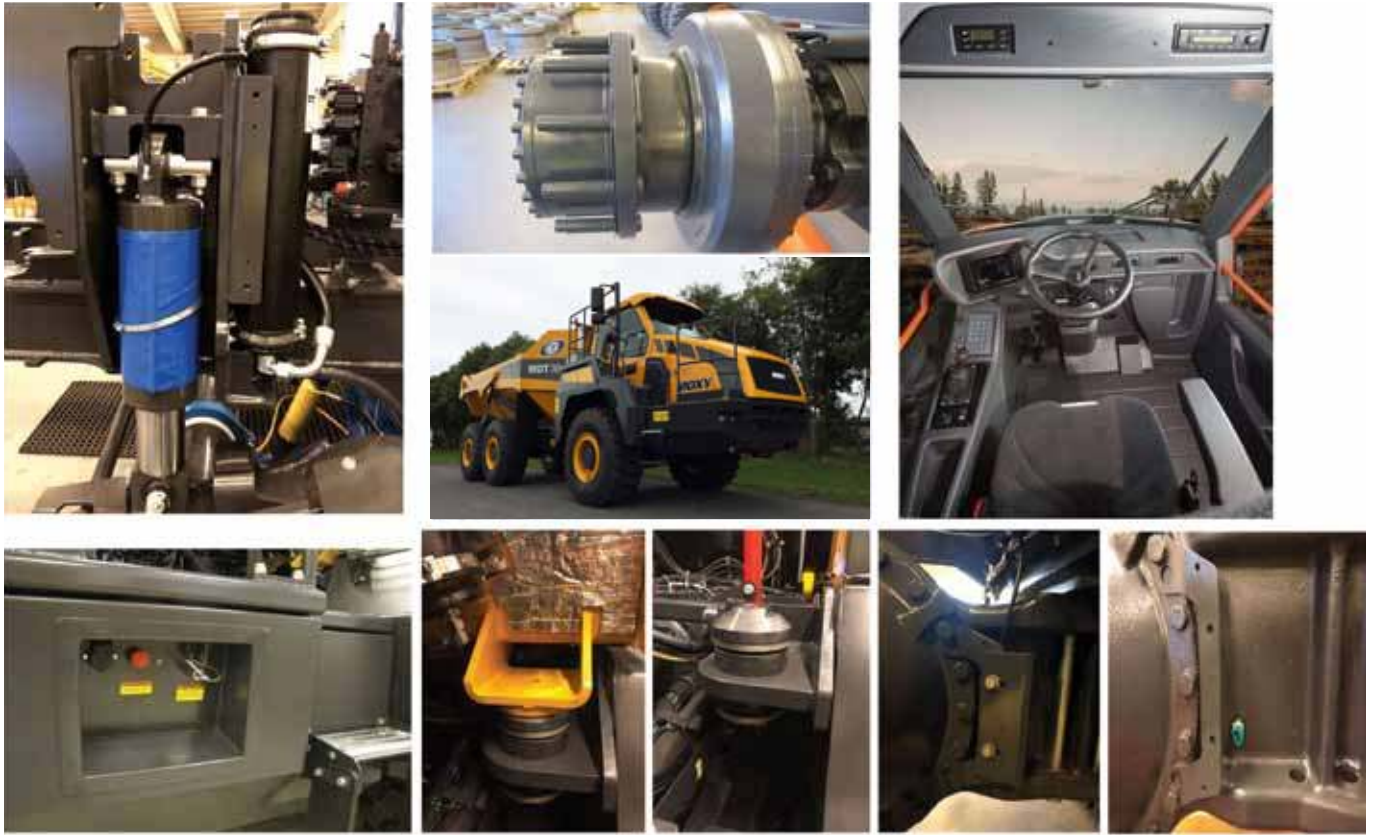
- Fuel tank: 530 l.
- Hydraulic system: 100 l.
- AdBlue tank (T4F only): 70 l.
- Hub front: 9.6 (2) l.
- Tandem housing, rear differential and hubs: 228 (2) l.
- Cooling circuit: 50 l.
- Engine: 45 l.

### TYRES

- Standard: 29.5 R25 Tubeless, two Star radial.



# FEATURES



## Driveline

### REAR TANDEM

Twin wheeled, gear driven, freeswinging tandems give almost 40° rotation (rear wheel 15° down / 25° up).

### TURNING RINGS

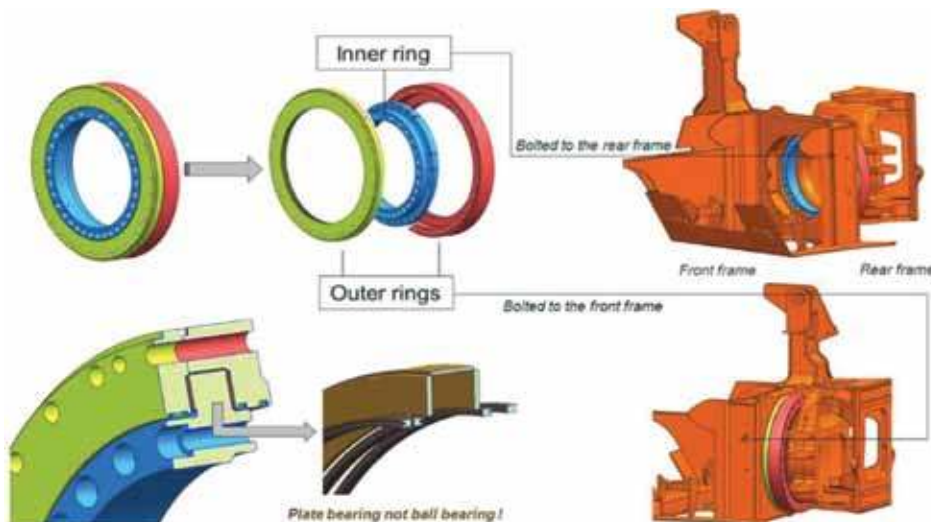
Automatically lubricated bearings allows the tandem drives to rotate on the rear axle providing superior ground contact.

### WET DISC BRAKES

Brakes at front hubs and the front tandem hubs.

### PERMANENT ALL WHEEL DRIVE

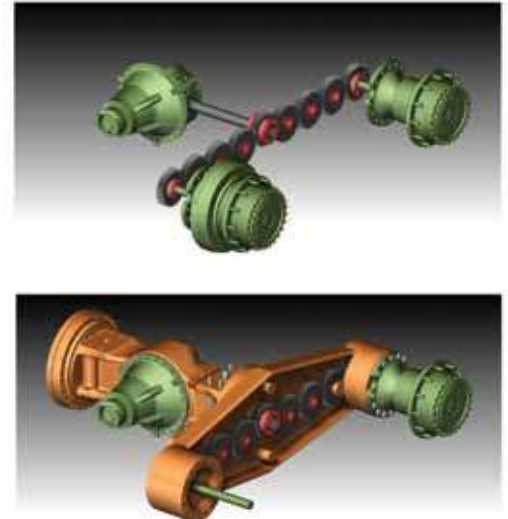
The new MDT30C has limited slip differential. Normal operation: Torque 1/3 to the front and 2/3 to the rear. Longitudinal differential locking in the transmission. When you engage the differential lock, the front and rear axles are locked to transfer 50% torque to the front and 50% to the rear.



**Driveline - turning ring**



## Inside the tandem system



## Engineering Objectives for Product Improvement

1. Increase Productivity.
2. Increase Fuel Efficiency.
3. Improve Operator Comfort.
4. Increase Reliability & Durability.
5. Ease of Maintenance & Serviceability.

## Improved Operator Comfort

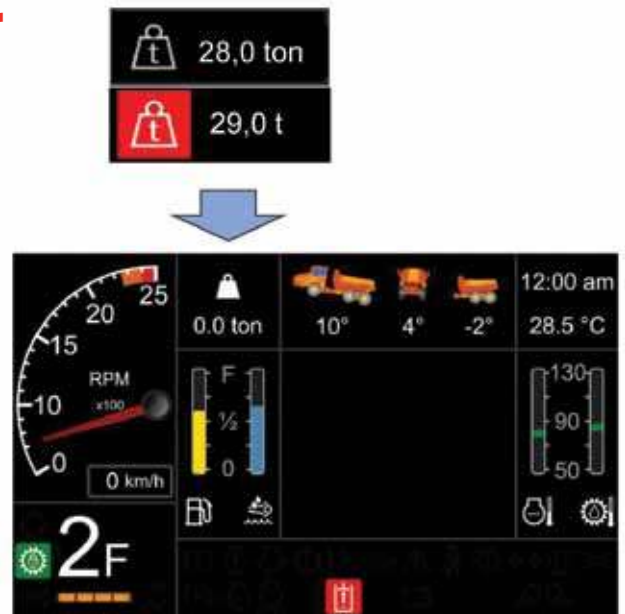
- Lowest-in-class noise level (MDT45=72 Db).
- Climate control standard.
- Grab handle RHS.
- Large cab with excellent 360° visibility.
- LCD display showing all parameters with integrated rear view camera as standard.
- High quality comfort seat.
- Adjustable steering wheel.
- Sliding windows on both sides standard.
- Integrated weight system.
- Body up lever with integrated adjustable body up /down speed feature.
- Sliding window RHS and LHS.



# FEATURES

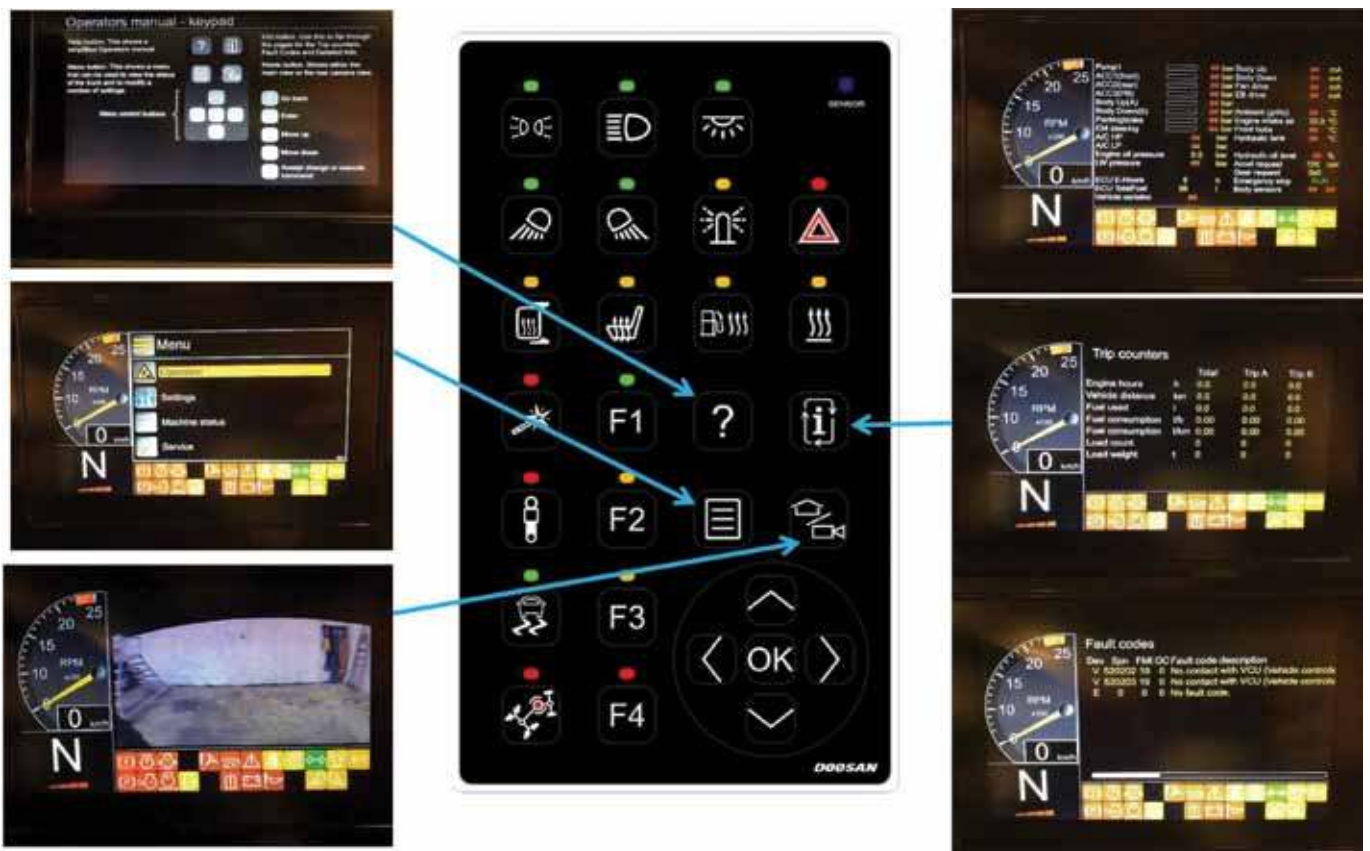
## Payload meter & cycle counter

- The load is calculated from both a & b pressures.
- The load is registered and counted in the Vehicle Control Unit if the weighing value is at least 3.0t.
- To avoid more than one registration per load the next registration is not possible before the vehicle has traveled > 50m or after a timeout of 3 minutes.
- When the body is raised, the tip up drive has a limited speed during the measurement phase.
- The measure time lasts for less than one second.



Payload meter & cycle counter

## Operator panel



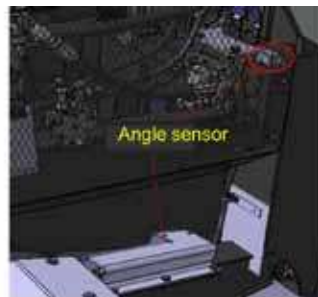
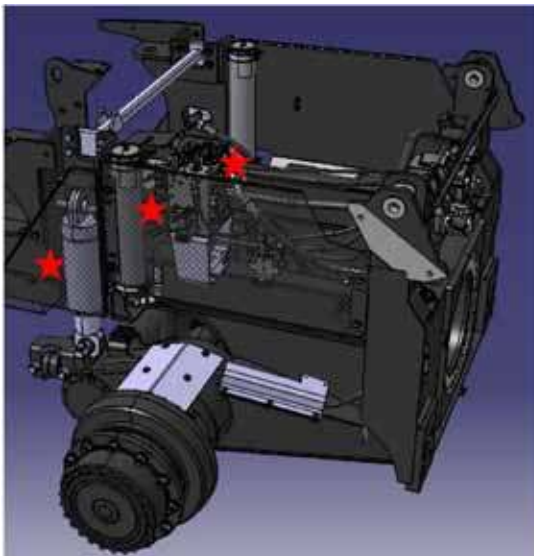
## New power module

- Main current switch moved away from access steps.
- Main switch can be locked in off position with a padlock.
- Auxiliary power output, for customer equipment.
- Engine shutdown indicator lamp to prevent wrong shutdown of engine.
- Space for optional equipment. (Battery jump start connector.)
- Clean layout easy access. Main switch has plastic cover for protection. Fuse and relay diagram (sticker on lid.)



## New hydraulic self levelling suspension

- New suspension cylinders.
- Accumulator for cylinder adjustment.
- Angle sensors.
- New hydraulic main valve.
- VCU controlled, self levelling system.





# FEATURES

## Maintenance & serviceability



## EASY ACCESS FOR FILLING / EASY ACCESS FOR PRESSURE CHECK, LOCATED ON TOP OF HYDRAULIC TANK

**Transmission oil level check & filling**

**Pressure check points**



**Groeneveld central greasing**



## Standard & optional lights and mirrors

### STANDARD



### OPTION



**Headed and electrical adjustable mirrors.**



**Rear plate with white noise alarm, LED revers light package, and light protection. Work light also available as halogen.**



**Front main light LED.**

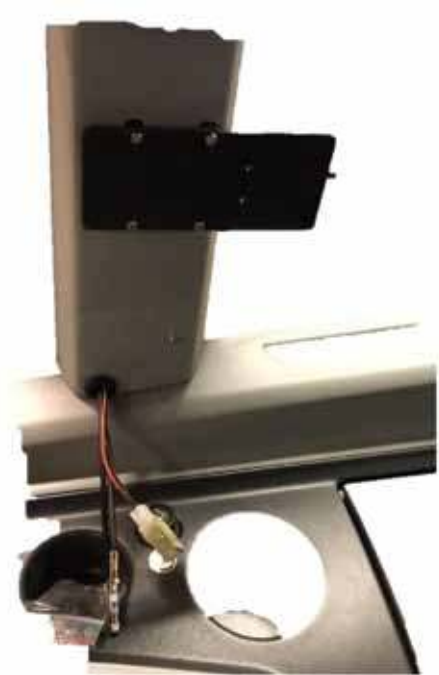
**Rear and front work light on mirror arms, LED or halogen.**



# FEATURES

## Option - High performance heated seat

- Four point belt.
- Two point w/ 3 inch belt.
- CB Radio preparation (wiring and power supply).



## Option - Body lining set

**MDT30C** Weight 920 kg.

**MDT45** Weight 1615 kg.

**MDT30C thickness** 8mm, with tailchute (section 60) 12mm.

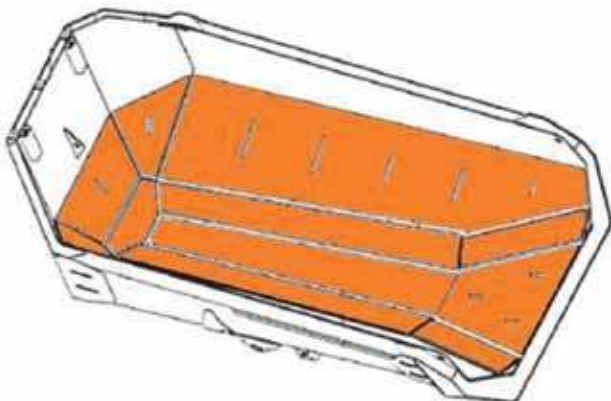
**MDT45 thickness** 12mm, With front plates (section 30 & 40) 10mm.

### Advantages

- Protects the body (impact plates).
- Extends lifetime of body (abrasive material).

### Disadvantages

- Adds weight to the machine (fuel, production).
- Body front also fitted with wear plates.
- May be needed when loading with excavator rather than wheel loader.









**MIMICO** sells, hires and services heavy machinery for the quarrying, mining, contracting, construction, recycling and forestry industries.

We are the New Zealand distributor of **Metso** crushing and screening equipment, **Kobelco** hydraulic excavators, **Moxy** Articulated Dump Trucks, **Epiroc** rock breakers and demolition equipment, **Dynapac** construction equipment, **Superior** wash systems and conveyors, **MDS** trommels and apron feeders, **ZF** transmission and drive components and **Cesco** concrete mixer bowls.

These equipment brands are backed by our extensive OEM and indent **parts supply** and nationwide, factory-trained **service support** team.

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