ARTICULATED DUMP TRUCKS PRODUCT INFORMATION

Machinery for Challenging Conditions

Courtesy of Machine.Market

A WIN-WIN PARTNERSHIP BETWEEN DOOSAN INFRACORE AND MOXY

Built with Moxy technology.
Doosan Infracore is growing, enhancing technology, increasing the product offering and providing bigger opportunities for customers.

Doosan Moxy ARTICULATED DUMP TRUCKS OFFER RELIABLE MACHINERY FOR CHALLENGING CONDITIONS

DOOSAN Infracore Construction Equipment strives to be a pioneer in product development and performance.

With Doosan Moxy articulated dump trucks, the product's innovative features have been refined to meet the tough demands of the future. Our philosophy is to stay one step ahead of the competition and always deliver a full-range of articulated dump trucks to the market.

Doosan Moxy PLUS 1 CONCEPT

Our goal has been to develop a new line of advanced, reliable and cost-effective articulated dump trucks, loaded with significant competitive advantages.
With the new, modern product design and sophisticated technical features, Doosan Moxy is proud to introduce the unique Doosan Moxy Plus 1 concept with the following benefits:

Productivity
Power
Traction
Stability
Reliability
Comfort

Courtesy of Machine.Market

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ENGINE

MT 26
- Power rating:
  (ISO 3046) 306 hp (228 kW)
  (ISO 9249) 300 hp (224 kW)
- No. of cylinders: 5 (in line)
- Cylinder volume: 541 in³ (8.87 L)
- Air filter: Dry type

MT 31
- Power rating:
  (ISO 3046) 342 hp (255 kW)
  (ISO 9249) 331 hp (247 kW)
- No. of cylinders: 5 (in line)
- Cylinder volume: 541 in³ (8.87 L)
- Air filter: Dry type

MT 36
- Power rating:
  (ISO 3046) 394 hp (294 kW)
  (ISO 9249) 382 hp (285 kW)
- No. of cylinders: 6 (in line)
- Cylinder volume: 714 in³ (11.7 L)
- Air filter: Dry type

MT 41
- Power rating:
  (ISO 3046) 444 hp (331 kW)
  (ISO 9249) 432 hp (322 kW)
- No. of cylinders: 6 (in line)
- Cylinder volume: 714 in³ (11.7 L)
- Air filter: Dry type

Power

Doosan Moxy uses proven, reliable and powerful diesel engines with excellent torque to achieve low fuel consumption and comply with US/EPA emission regulations.

Doosan Moxy utilizes reliable transmissions that feature smooth gear shifting abilities. These features result in the transfer of maximum net power to the wheels, resulting in maximum fuel efficiency.

Productivity

Doosan Moxy offers a larger load capacity in all weight class categories. Additional load capacity, combined with superior power and traction, allow for improved productivity. The unique advantages of Doosan Moxy's permanent six-wheel drive, free-swinging rear tandem articulation hinge system, independent front wheel suspension system and sloping rear frame provide excellent driving stability with equal weight distribution and wheel power. The Doosan Moxy articulated dump truck is designed to work under rough conditions and can also travel at speeds up to 33 mph.

Stability

Doosan Moxy's free-swinging rear tandem bogie and the special articulation system offer excellent performance and the best possible ground contact in soft and difficult terrain. The sloping rear frame, in combination with the track width, provides a lower center of gravity and lateral stability.

One of the main highlights of the Doosan Moxy is the location of the turning ring in relation to the swing point, which helps to keep equal weight distribution to the front wheels.

Equal weight distribution to the front wheels makes it possible to use the differentials while maintaining maneuverability. Doosan Moxy's unique independent front-wheel suspension allows for maximum ground contact and shock absorption.

Traction

The unique Doosan Moxy concept offers permanent six-wheel drive, which improves stability and provides equal weight distribution to accommodate all job applications.

Doosan Moxy's superior driveline provides maximum traction performance and durability.

Courtesy of Machine.Market

Reliability

Doosan Moxy has one of the most reliable dump trucks in the industry because of its strong and reliable system solutions. The automatic central lubrication system is standard on all Doosan Moxy models.

With more than 30 years dedicated to product development, Moxy articulated dump trucks provide innovative drivetrain and stress-tested structure.

Courtesy of Machine.Market

Comfort

The cabin is equipped with air-conditioning and an operator seat with air suspension to provide excellent operator comfort. Precise steering, good visibility and low noise levels provide a comfortable cabin environment. The “tip-tronic” gearshift feature enables the operator to run the truck in both automatic and manual gears to ensure the smoothest possible gear-shifts and momentum while operating the truck.

The sloping hood provides an excellent view from the operator’s position combined with good rear visibility. Doosan Moxy cares about the environment and aims to set the best possible standards when manufacturing our products. Doosan Moxy utilizes industry-leading engines that achieve low fuel consumption and complies with US/EPA emission regulations in addition to all noise regulations.

Doosan Moxy provides exceptional operator comfort with low cabin vibration levels. Minimal fuel consumption is achieved while the lock-up clutch is engaged in mechanical mode.

Courtesy of Machine.Market

Line Up

MT41

	MT26	MT31	MT36	MT41
ENGINE				
Emission Level	T3	T3	T3	T3
Horsepower	310 hp (228 kW)	347 hp (255 kW)	388 hp (285 kW)	450 hp (331 kW)
Type	Turbo Diesel	Turbo Diesel	Turbo Diesel	Turbo Diesel
In-Line Cylinders	5	5	6	6
Exhaust Break	Std	Std	Std	Std
TRANSMISSION				
ZF6WG 260-4 auto shift	Std	Std	-	-
ZF6WG 310-4 Counter Shaft	-	-	Std	Std
EST-37 Shift control unit	Std	Std	-	-
Automatic converter lock-up in all gears	Std	Std	-	-
Automatic Power Shift	-	-	Std	Std
Gears	6 forward, 3 reverse	6 forward, 3 reverse	6 forward, 3 reverse	6 forward, 3 reverse
BODY				
High tensile steel	Std	Std	Std	Std
Double acting cylinders	Std	Std	Std	Std
Standard Body Sides	12mm	12mm	12mm	12mm
Standard Body Bottom	14mm	14mm	15mm	15mm
Standard Body Front	8mm	8mm	10mm	10mm
CAB				
ROPS/FOPS	Std	Std	Std	Std
Centally Mounted	Std	Std	Std	Std
Sound Suppressed	Std	Std	Std	Std
Fully enclosed	Std	Std	Std	Std
Heated	Std	Std	Std	Std
TIRES				
	23.5 x 25 tubeless two star radials	23.5 x 25 tubeless two star radials	26.5 x 25 tubless radials	26.5 x 25 tubless radials

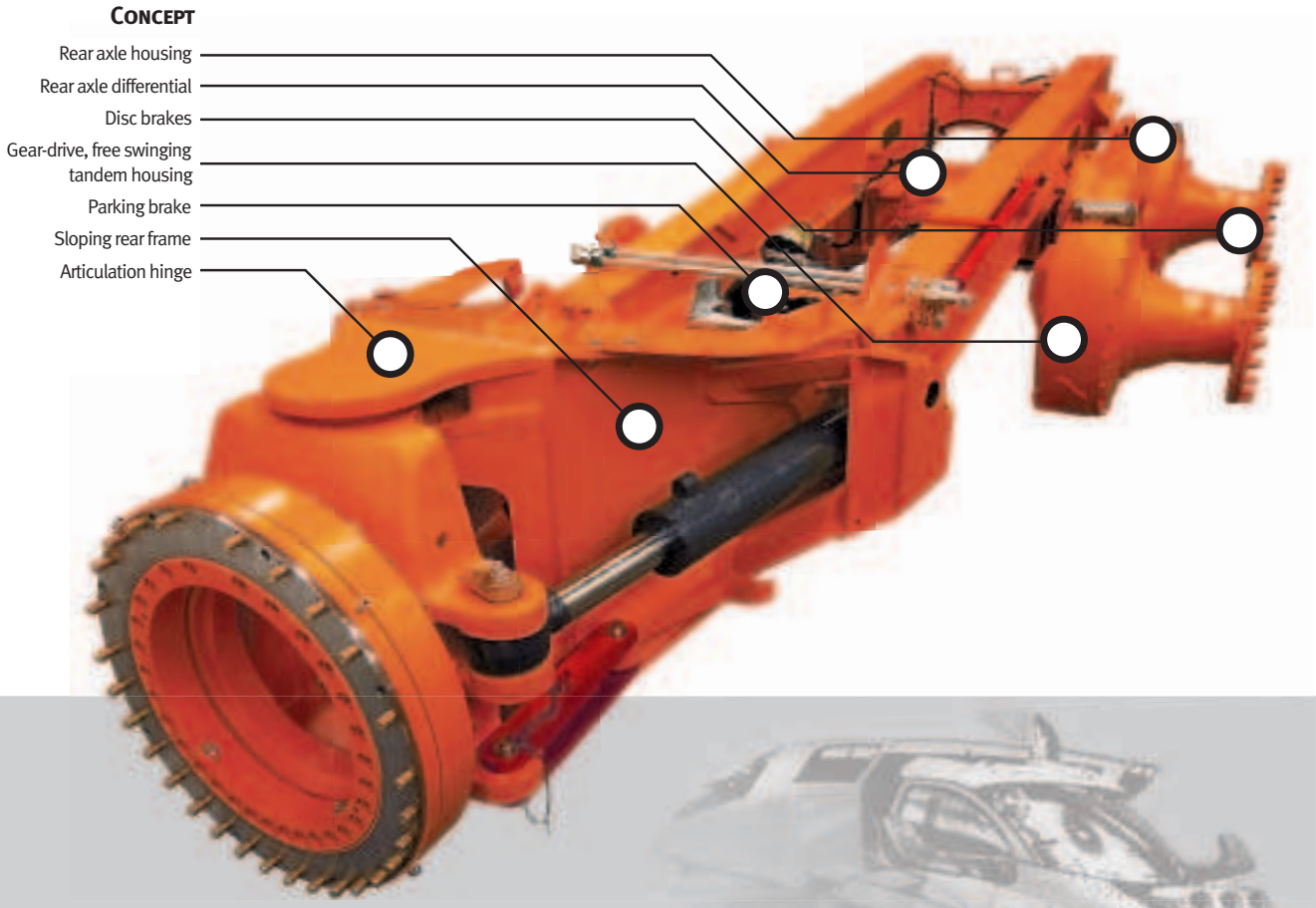
	MT26	MT31	MT36	MT41
3-Speed Cab Heater & Defroster	Std	Std	Std	Std
Adjustable Air-Ride Operator's Seat	Std	Std	Std	Std
Adjustable Gear Selector	-	-	Std	Std
Air Cleaner Service Indicator	Std	Std	-	-
Air Conditioner	Std	Std	Std	Std
AM/FM Cassette Radio	Std	Std	Std	Std
Back-Up Alarm	Std	Std	Std	Std
Back-Up Light	Std	Std	Std	Std
Cab Light	Std	Std	Std	Std
Central Auto Lube System	Std	Std	Std	Std
Directional and Flasher Lights	Std	Std	Std	Std
Door Retainers	-	-	Std	Std
Engine Exhaust Brake	Std	Std	Std	Std
Exhaust Heated Body Kit	Opt	Opt	Opt	Opt
Fire Extinguisher	Std	Std	Std	Std
Halogen Type Head Lamps	Std	Std	Std	Std
Horn	Std	Std	Std	Std
Hydraulic Transmission Retarder	Std	Std	Std	Std
Hydraulically Driven Engine Fan	Std	Std	-	-
Operating & Maintenance Manual	Std	Std	Std	Std
Parts Manual	Std	Std	Std	Std
Rear View Mirrors	Std	Std	Std	Std
Seat Belt	Std	Std	Std	Std
Sun Visor	Std	Std	Std	Std
Tailgate	Opt	Opt	Opt	Opt
Tilt & Telescoping Steering Wheel	Std	Std	Std	Std
Tinted Glass	Std	Std	Std	Std
Tire Inflator	Std	Std	Std	Std
Tow Hooks	Std	Std	Std	Std
Trainer Seat	-	-	Std	Std
Wet Hydraulic Brakes	Std	-	Std	Std
Windshield Wipers and Washer	Std	Std	Std	Std

Unique Concept of **Doosan Moxy Articulated Dump Trucks**

Best Structure for All-Condition Terrain

Doosan Moxy articulated dump trucks have permanent six-wheel drive for equal power distribution while the free-swinging rear tandem bogie and the special articulation system offer excellent driving performance. The articulation hinge is positioned behind the turning ring to provide equal weight distribution. The sloping body design further enhances Doosan Moxy stability and ensures fast and easy dumping for increased productivity in even the most demanding conditions.

The fully automatic transmission control unit and smooth gear-shifting abilities enable the operator to concentrate on working conditions with maximum comfort.



Top 10 Advantages of Doosan Moxy Articulated Dump Trucks

- Low operating cost
- Excellent performance in difficult terrain
- Independent front suspension provides maximum ground contact and stability
- Improved driver comfort and easy operation
- The sloping rear frame provides low center of gravity, good stability and excellent weight distribution to the front axle
- Complies with US/EPA and California emission regulations
- Easy maintenance
- Free-swinging rear tandem bogie provides the best possible ground contact
- Articulation hinge system provides equal weight distribution to the front axle in all situations
- Permanent six-wheel drive, a significant advantage in rugged terrain

	Moxy MT26	Moxy MT31	Moxy MT36	Moxy MT41
Engine	Scania DC9	Scania DC9	Scania DC12	Scania DC12
Configuration	5 in. Line 541 in^3 (8.87 L)	5 in. Line 541 in^3 (8.87 L)	6 in. Line 714 in^3 (11.7 L)	6 in. Line 714 in^3 (11.7 L)
Gross Power	310 hp (228 kW) @2,200 rpm	342 hp (255 kW) @2,200 rpm	394 hp (294 kW) @2,200 rpm	444 hp (331 kW) @2,200 rpm
Net Power	299 hp (220 kW) @2,200 rpm	331 hp (247 kW) @2,200 rpm	382 hp (285 kW) @ 2,200 rpm	432 hp (322 kW) @2,200 rpm
Gross Torque	992 ft lb. (137 kg•m) @ 1,500 rpm	1,073 ft lb. (148 kg•m) @ 1,500 rpm	1,367 ft lb. (189 kg•m) @ 1,500 rpm	1,367 ft lb. (189 kg•m) @ 1,200 rpm
Load Index	128.58 hp/gal (25.33 kW/liter)	143.81 hp/gal (28.33 kW/liter)	127.57 hp/gal (25.13 kW/liter)	143.61 hp/gal (28.29 kW/liter)
Capacity	SAE 2:1	SAE 2:1	SAE 2:1	SAE 2:1
Body Volume	19.2 yd^3 (14.7 m^3)	23.0 yd^3 (17.6 m^3)	26.3 yd^3 (20.1 m^3)	29.7 yd^3 (22.7 m^3)
Density Index	1.25 ton/yd^3 (1.64 short ton/m^3)	1.24 ton/yd^3 (1.62 short ton/m^3)	1.25 ton/yd^3 (1.64 short ton/m^3)	1.25 ton/yd^3 (1.64 short ton/m^3)
Gross Weight	100,310 lb. (45,500 kg)	112,270 lb. (50,925 kg)	130,955 lb. (59,400 kg)	146,500 lb. (66,450 kg)
Net Weight	47,180 lb. (21,400 kg)	49,440 lb. (22,425 kg)	58,865 lb. (26,700 kg)	64,490 lb. (2,9250 kg)
Payload	53,130 lb. (24,100 kg)	62,830 lb. (28,500 kg)	72,090 lb. (32,700 kg)	82,010 lb. (37,200 kg)
Power to Weight	Net Power vs Ton	Net Power vs Ton	Net Power vs Ton	Net Power vs Ton
Empty	14.72 hp/ton (10.98 kW/short ton)	15.56 hp/ton (11.60 kW/short ton)	13.28 hp/ton (9.90 kW/short ton)	14.51 hp/ton (10.82 kW/short ton)
Loaded	6.75 hp/ton (5.03 kW/short ton)	6.64 hp/ton (4.95 kW/short ton)	6.21 hp/ton (4.63 kW/short ton)	6.38 hp/ton (4.76 kW/short ton)
Transmission	ZF 6WG260 RPC Countershaft	ZF 6WG260 RPC Countershaft	ZF 6WG310 RPC Countershaft	ZF 6WG310 RPC Countershaft
Speeds	6F - 3R	6F - 3R	6F - 3R	6F - 3R
Travel Speed	31.7/20.5 MPH (51/33 km/h)	31.7/20.5 MPH (51/33 km/h)	31.7/19.3 MPH (51/31 km/h)	32.9/21.1 MPH (53.0/34.0 km/h)
Brakes				
Front	Wet Multiple Disc	Wet Multiple Disc	Wet Multiple Disc	Wet Multiple Disc
Rear	Wet Multiple Disc	Wet Multiple Disc	Wet Multiple Disc	Wet Multiple Disc
Retarder	Exhaust Brake & T/M Retarder	Engine Exh & T/M Ret Brake	Engine Brake & T/M Retarder	Engine Brake & T/M Retarder
Body	Hardened Abrasion Resistant Steel Plates	Hardened Abrasion Resistant Steel Plates	Hardened Abrasion Resistant Steel Plates	Hardened Abrasion Resistant Steel Plates
Dimensions				
Total Length	32'2" (9,816 mm)	32'4" (9,857 mm)	34'3" (10,450 mm)	34'3" (10,450 mm)
Width	9'0" (2,750 mm)	9'10" (2,990 mm)	10'9" (3,275 mm)	11'5" (3,475 mm)
Load over Height	9'5" (2,864 mm)	9'8" (2,946 mm)	10'0" (3,040 mm)	10'5" (3,185 mm)
Turning Radius	25'11" (7,910 mm)	26'4" (8,030 mm)	28'8" (8,750 mm)	29'0" (8,850 mm)

The Doosan Moxy Concept

Ultimate Efficiency

Lower power curve when empty plus reduced weight achieved through state-of-the-art design and lightweight, high-grade, wear resistant steel.

Ultimate Traction & Stability

Sloping frame, well-positioned turning ring and excellent weight distribution remove the need for wide, low profile tires, significantly reducing running costs. New skip design further improves stability while dumping.

Ultimate Power/Weight Ratio

Class-leading power to weight ratio of 6.48 hp/ton (4.83 kW/short ton).

Ultimate Comfort

Fully independent nitrogen suspension and new, highly specified cabin offer better levels of comfort.

Ultimate Service Access

Remote mounted service points mean general servicing can be completed at ground level. Excellent access is offered by the side tilting cabin. Hood design capable of opening to 83° for improved access.

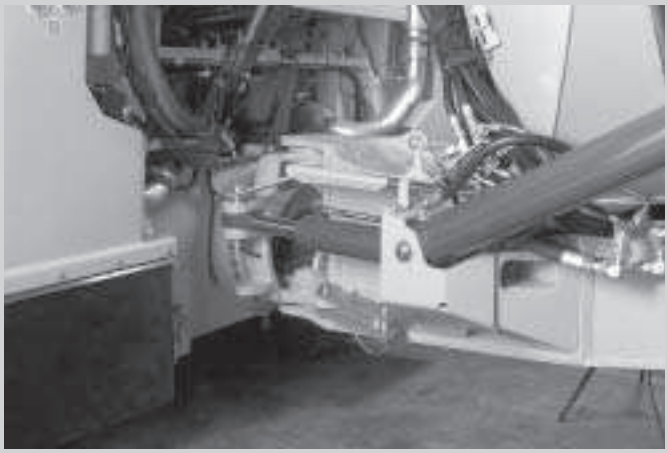
Ultimate Visibility

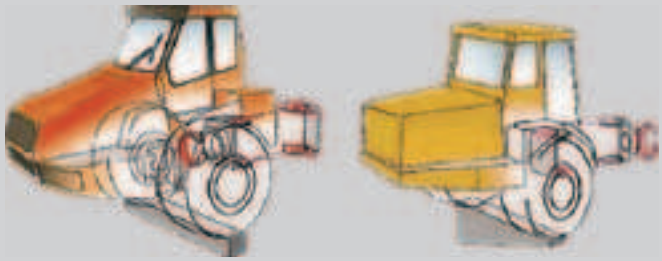
Superior visibility because of new front hood design.

Unique Concept of **Doosan Moxy Articulated Dump Trucks**

Forward Mounted Turning Ring

One of the main features of the Doosan Moxy Articulated Dump Trucks is the location of the turning ring in relation to the swing point. The turning ring is located in front of the swing point, which always ensures equal weight distribution to the front wheels in all situations, even during maximum turning. Equal weight distribution to the front wheels makes it possible to use the differential with only 45% locking value. This provides drive to both wheels in all situations without completely locking up the wheels. Our competitors have located the turning ring behind the swing point, giving different weight distribution to the front wheels. Due to differentials on the front wheels, our competitors use 100% differential lock causing steering difficulties.



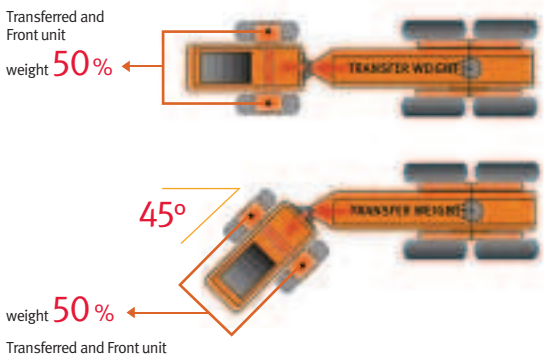


Doosan Moxy

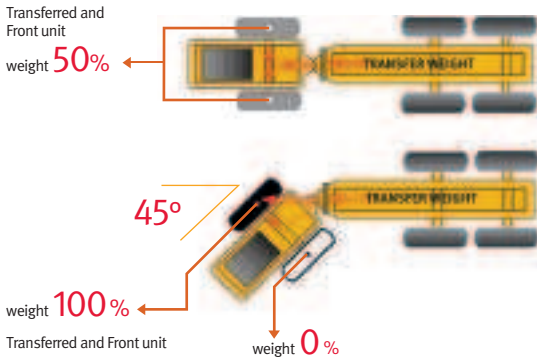
Competitors

Articulated Weight Distribution System

Doosan Moxy

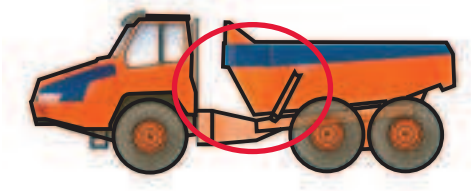


Competitors



Unique Sloping Frame for Weight Distribution

Doosan Moxy's philosophy on frame design is generally the same as manufacturers of rigid dump trucks. The frame is inclined (sloped) downward from the hinge points to obtain equal weight distribution on all axles while fully loaded. As a result, a lower center of gravity is obtained, giving better stability.



Doosan Moxy

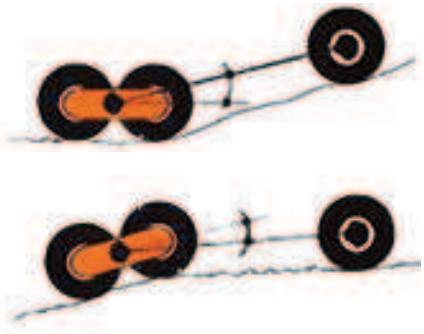
Competitors

Front Wheel Suspension

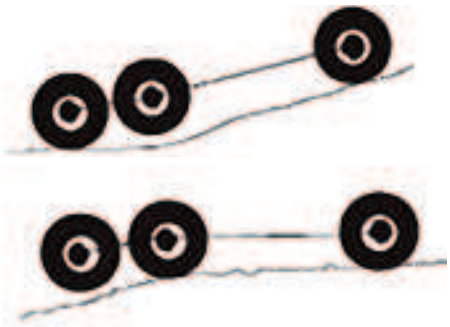
Doosan Moxy's unique independent front suspension allows for free suspension movement on one side with better shock absorption resulting in greater driver comfort than suspensions with rigid axles.

Free-swinging Tandem Housing

Doosan Moxy



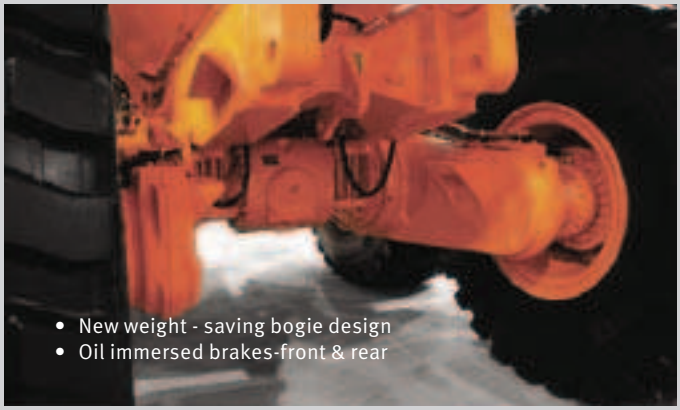
Competitors



Excellent Service Accessibility

- The hood has a wide opening to provide accessibility to the engine for easy maintenance.
- The tilting cabin allows the same clear access to the transmission and hydraulic components.
- All electrical and AC connections are at the rear of the cabin. This allows tilting of the cabin without disconnecting.

Improvements of III Series



Best Ground Contact in All Terrain Conditions

Operating in Tough Conditions

Dumping

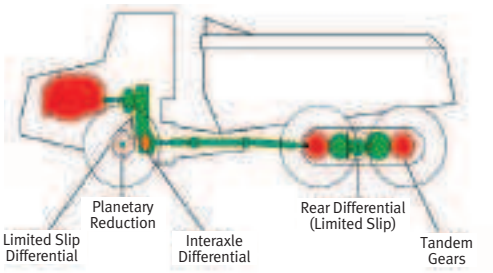
Hauling

Excellent Tire Wear Prevention

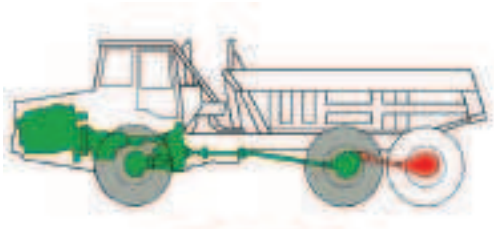
Doosan Moxy driveline only requires one differential lock/limited slip differential mounted on the rear tandem.

- Competitors' driveline requires two units on the rear axles.

Doosan Moxy Driveline



Competitor's Driveline



Green: Normal Drive
Red: 6-Wheel Drive With Wind-Up

Wet Disc Brake in Whole Line Up

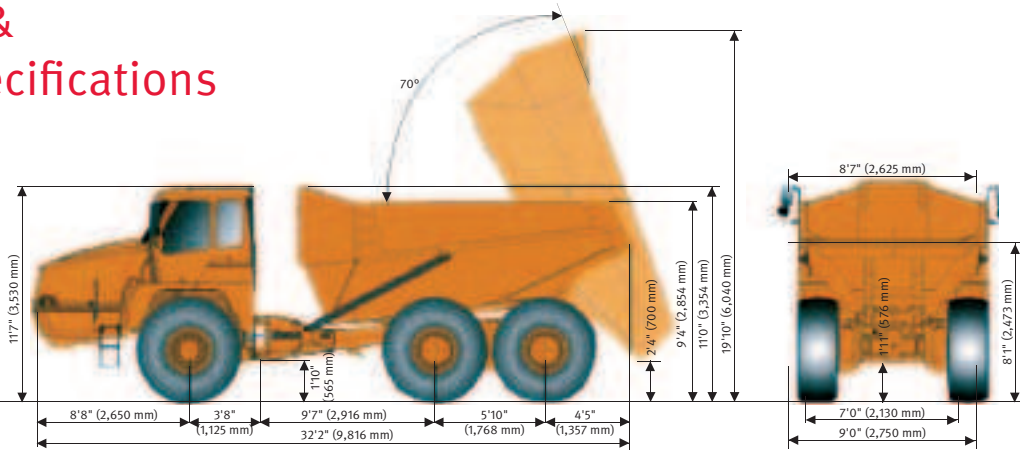
- More efficient braking under load, which means less brake fade because of the oil cooling plus more brake force.
- Less servicing intervals, brake discs last longer - In very adverse conditions like deep mud and water, the dry disc brakes cause the brake pads and discs to have a very short service life - Wet brakes are not affected by these conditions because they are fully encased in oil.
- Reduced maintenance cost.
- NAF system in MT26/31 III has a big advantage. It does not require forced cooling like most competitors.

Operator Comfort

- Cabin is equipped with air-conditioning and an operator seat with air-suspension.
- Sloping hood provides an excellent view from the operator's position combined with good rear visibility.
- Cabin is attached with rubber suspension mounts for low vibration levels.
- "Tip-tronic" gearshift feature enables the operator to run the truck in both automatic and manual gear to ensure the smoothest possible gear-shift.

Dimensions & Technical specifications

MT 26



BODY
- Material: Hardened abrasion-resistant steel plates
- Tilt cylinders: Single stage, double-acting
- Tipping time: Up: 11 sec. / Down 10 sec.
- The body is designed for exhaust heating
- Sloping body down from the hinge point

	Cubic Yards	Cubic Meters
• Level capacity:	16	12
• Heaped capacity: (Acc. SAE J1363, 2:1)	20	15
• Heaped capacity: (Acc. SAE J1363, 1:1)	24	18

WEIGHTS		LB	KG
Empty:	Front axle	24,640	11,200
	Rear axle	21,230	9,650
Loaded:	Front axle	32,164	14,620
	Rear axle	66,726	30,330
Pay load		53,020	24,100
Total weight (loaded)		98,890	44,950

NOTE: All weights include a full fuel tank and operator

GROUND PRESSURES			
Standard 23.5 x 25 tires with 15% sinkage		PSI	kPa
Empty:	Front axle	15.52	107
	Rear axle	6.53	45
Loaded:	Front axle	20.02	138
	Rear axle	20.89	144

CAPACITIES	U.S. GALLONS	LITERS
• Fuel Tank	84.5	320
• Hydraulic System	36.4	138
• Engine Cooling System	11.9	45
• Transmission	15.1	57
• Dropbox	8.7	33
• Engine Crankcase	3.5	13.2
• Front Reduction Gear	2 x 0.80	2 x 3
• Rear Differential	8.5	32
• Tandem Housing	2 x 19.8	2 x 75

SPEEDS	MPH	KM/H
1st	4	6
2nd	6	9
3rd	7	14
4th	14	22
5th	20	33
6th	32	51

SUSPENSION
- Front: Independent with long life rubber springs and hydraulic shock absorbers
- Rear: Free-swinging tandem housing

ARTICULATION HINGE AND STEERING
- Articulation hinge with forward mounted turning ring
- Steering cylinders (two): Double-acting
- The steering is approved according to ISO 5010
- Max. steering angle: 45°
- Ground driven emergency steering pump

DRIVELINE
- Full-time 6 x 6 drive with two transverse differentials and one longitudinal
- Front axle transverse differential: Limited-slip with 45% locking ratio
- Rear axle transverse differential: 100% locking
- Inter-axle longitudinal differential: Torque-proportioning differential, integrated into
  Torque distribution:
  - 1/3 to the front axle
  - 2/3 to the rear axle
  - 100% lockable
- Tandem housing: Gear driven, free-swinging.
  Provides equal drive to rear wheels and ensures the best possible ground contact - whatever the ground conditions

ENGINE
Scania DC9, water-cooled, unit injected diesel engine with turbo charger and air to air intercooler
- Complies with Stage 3 of EU Directive 97/68/-EC and Tier 3 of USA/California regulations (ISO 8178) for emissions
- Power rating: (1.34 hp = 1 kW)
  (ISO 3046) 306 hp (228 kW)
  (ISO 9249) 295 hp (220 kW)
- No. of cylinders: 5 (in line)
- Cylinder volume: 541 in³ (8.87 L)
- Air filter: Dry type

TRANSMISSION
ZF 6WG260 Dash 4 electronically-controlled automatic transmission the torque converter has automatic lock-up in all gears

BRAKE SYSTEM
- Dual circuit braking system acting on all six wheels
- Approved according to ISO 3450
- All hydraulic operated brakes with enclosed oil-cooled wet multiple discs all around
- Spring actuated hydraulic released parking brake, mounted on propeller shaft
- Max. gradient, parking brake: 20% or about 11.3°
- Automatic engine brake as standard
- Automatic transmission retarder as standard

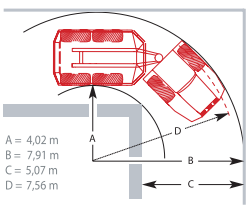
HYDRAULIC SYSTEM
- Pumps: 2 variable displacement piston pumps: for steering & tipping - for cooling, fan, brakes & auxiliaries
- Delivery: 60.8 gallon/min (230 l/min) @ 2,200 rpm
- Filtration: One return flow filter & high pressure filter
- Pressure-setting, main safety valves:
- Tipping Circuit: 4,061 PSI (280 bar)
- Steering Circuit: 3,046 PSI (210 bar)

ELECTRICAL SYSTEM
- Alternator: 28 V 100 A
- Batteries: 2, 12 V 140 Ah (series connected to give 24 V)
- Starter: 5.4 hp (4.0 kW)

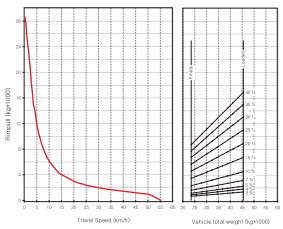
CAB
- Approved to ROPS/FOPS standards (ISO 3471, ISO 3449, SAE J231 and SAE J1040 April '88)
- Low interior sound level 74 dB(A) (ISO 6394)
- The cab is centrally located on rubber mountings
- Hand and arm vibrations are less than 2.5 m/s according to ISO 5349-2
- Whole body vibration is less than 0.5 m/s according to ISO 2631-1
- Excellent visibility - for safer operation
- Excellent operating controls location
- Adjustable suspended operator seat with seat belt
- Adjustable steering column
- Heater and Air Conditioning
- Tilting for service access

TIRES
- Standard 23.5 R25 two star radial

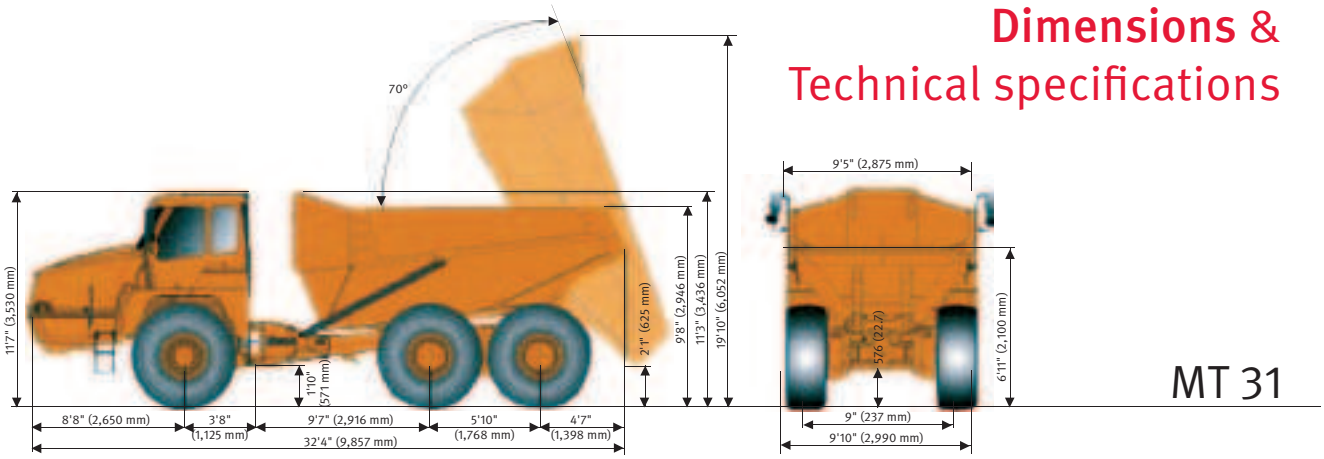
Turning radius according to ISO 7457 : 24' 10" (7,560 mm)



PERFORMANCE DIAGRAM



Dimensions & Technical specifications



MT 31

BODY
- Material: Hardened abrasion-resistant steel plates
- Tilt cylinders: Single stage, double-acting
- Tipping time: Up: 11 sec. / Down 10 sec.
- The body is designed for exhaust heating
- Sloping body down from the hinge point

	Cubic Yards	Cubic Meters
• Level capacity:	18	14
• Heaped capacity: (Acc. SAE J1363, 2:1)	24	18
• Heaped capacity: (Acc. SAE J1363, 1:1)	29	22

WEIGHTS		LB	KG
Empty:	Front axle	25,135	11,425
	Rear axle	25,300	11,500
Loaded:	Front axle	36,300	16,500
	Rear axle	75,735	34,425
Pay load		61,600	28,000
Total weight (loaded)		112,035	50,925

NOTE: All weights include a full fuel tank and operator

GROUND PRESSURES			
Standard 23.5 x 25 tires with 15% sinkage		PSI	kPa
Empty:	Front axle	15.37	106
	Rear axle	7.83	54
Loaded:	Front axle	22.34	154
	Rear axle	23.64	163

CAPACITIES	U.S. GALLONS	LITERS
• Fuel Tank	92.4	350
• Hydraulic System	39.6	150
• Engine Cooling System	11.9	45
• Transmission	15.1	57
• Dropbox	8.7	33
• Engine Crankcase	3.5	13.2
• Front Reduction Gear	2 X 0.8	2 X 3
• Rear Differential	8.5	32
• Tandem Housing	2 X 19.8	2 X 75

SPEEDS	MPH	KM/H
1st	4	6
2nd	6	9
3rd	9	14
4th	14	22
5th	20	33
6th	32	51

SUSPENSION
- Front: Independent with long life rubber springs and hydraulic shock absorbers
- Rear: Free-swinging tandem housing

ARTICULATION HINGE AND STEERING
- Articulation hinge with forward mounted turning ring
- Steering cylinders (two): Double-acting
- The steering is approved according to ISO 5010
- Max. steering angle: 45°
- Ground driven emergency steering pump

DRIVELINE
- Full-time 6 x 6 drive with two transverse differentials and one longitudinal
- Front axle transverse differential: Limited-slip with 45% locking ratio
- Rear axle transverse differential: 100% locking
- Inter-axle longitudinal differential: Torque-proportioning differential, integrated into
  Torque distribution:
  - 1/3 to the front axle
  - 2/3 to the rear axle
  - 100% lockable
- Tandem housing: Gear driven, free-swinging.
  Provides equal drive to rear wheels and ensures the best possible ground contact - whatever the ground conditions

ENGINE
Scania DC9, water-cooled, unit injected diesel engine with turbo charger and air to air intercooler
- Complies with Stage 3 of EU Directive 97/68/-EC and Tier 3 of USA/California regulations (ISO 8178) for emissions
- Power rating: (1.34 hp = 1 kW)
  (ISO 3046) 342 hp (255 kW)
  (ISO 9249) 331 hp (247 kW)
- No. of cylinders: 5 (in line)
- Cylinder volume: 541 in³ (8.87 L)
- Air filter: Dry type

TRANSMISSION
ZF 6WG260 Dash 4 electronically-controlled automatic transmission the torque converter has automatic lock-up in all gears

BRAKE SYSTEM
- Dual circuit braking system acting on all six wheels
- Approved according to ISO 3450
- All hydraulic operated brakes with disc brakes all around
- Spring actuated hydraulic released parking brake, mounted on propeller shaft
- Max. gradient, parking brake: 20% or about 11.3°
- Automatic engine brake as standard
- Automatic transmission retarder as standard

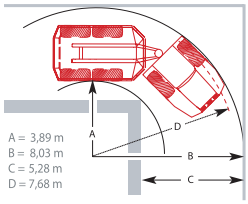
HYDRAULIC SYSTEM
- Pumps: 2 variable displacement piston pumps: for steering & tipping - for cooling, fan, brakes & auxiliaries
- Delivery: 60.8 gallon/min (230 l/min) @ 2,200 rpm
- Filtration: One return flow filter & high pressure filter
- Pressure-setting, main safety valves:
- Tipping Circuit: 3,046 PSI (280 bar)
- Steering Circuit: 4,061 PSI (210 bar)

ELECTRICAL SYSTEM
- Alternator: 28 V 100 A
- Batteries: 2, 12 V 140 Ah (series connected to give 24 V)
- Starter: 5.4 hp (4.0 kW)

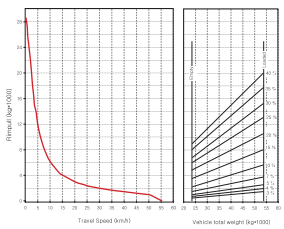
CAB
- Approved to ROPS/FOPS standards (ISO 3471, ISO 3449, SAE J231 and SAE J1040 April '88)
- Low interior sound level 74 dB(A) (ISO 6394)
- The cab is centrally located on rubber mountings
- Hand and arm vibrations are less than 2.5 m/s according to ISO 5349-2
- Whole body vibration is less than 0.5 m/s according to ISO 2631-1
- Excellent visibility - for safer operation
- Excellent operating controls location
- Adjustable suspended operator seat with seat belt
- Adjustable steering column
- Heater and Air Conditioning
- Tilting for service access

TIRES
- Standard 23.5 R25 two star radial

Turning radius according to ISO 7457 : 25' 2" (7,680 mm)

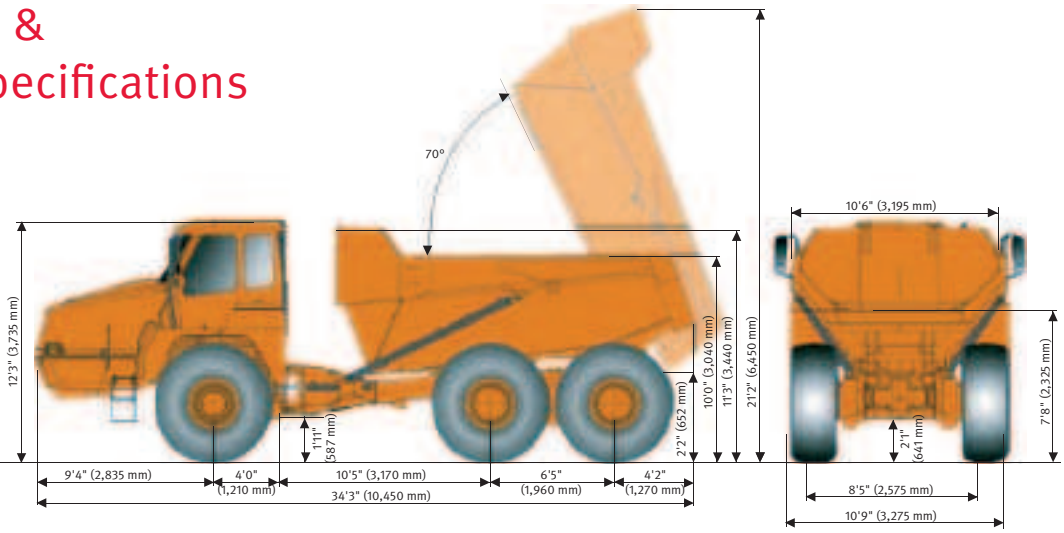


PERFORMANCE DIAGRAM



Dimensions &
Technical specifications

MT 36



BODY
- Material: Hardened abrasion-resistant steel plates
- Tilt cylinders: Single stage, double-acting
- Tipping time: Up: 12 sec. / Down 11 sec.
- The body is designed for exhaust heating
- Sloping body down from the hinge point

	Cubic Yards	Cubic Meters
• Level capacity:	21	16
• Heaped capacity: (Acc. SAE J1363, 2:1)	27	21
• Heaped capacity: (Acc. SAE J1363, 1:1)	34	26

WEIGHTS		LB	KG
Empty:	Front axle	29,480	13,400
	Rear axle	29,260	13,300
Loaded:	Front axle	42,900	19,500
	Rear axle	87,780	39,900
Pay load		71,940	32,700
Total weight (loaded)		130,680	59,400

NOTE: All weights include a full fuel tank and operator

GROUND PRESSURES			
Standard 26.5 x 25 tires with 15% sinkage		PSI	kPa
Empty:	Front axle	15.66	108
	Rear axle	8.99	62
Loaded:	Front axle	23.21	160
	Rear axle	24.66	170

CAPACITIES	U.S. GALLONS	LITERS
• Fuel Tank	112.2	425
• Hydraulic System	66	250
• Engine Cooling System	13.2	50
• Transmission	14.5	55
• Dropbox	9	34
• Engine Crankcase	3.5	13.2
• Front Reduction Gear	2 x 2	2 x 7.5
• Rear Differential	12.1	46
• Tandem Housing	2 x 40	2 x 150

SPEEDS	MPH	KM/H
1st	4	6
2nd	6	9
3rd	9	14
4th	14	22
5th	20	32
6th	32	51

SUSPENSION
- Front: Independent with long life rubber springs and hydraulic shock absorbers
- Rear: Free-swinging tandem housing

ARTICULATION HINGE AND STEERING
- Articulation hinge with forward mounted turning ring
- Steering cylinders (two): Double-acting
- The steering is approved according to ISO 5010
- Max. steering angle: 45°
- Ground driven emergency steering pump

DRIVELINE
- Full-time 6 x 6 drive with two transverse differentials and one longitudinal
- Front axle transverse differential: Limited-slip with 45% locking ratio
- Rear axle transverse differential: 100% locking
- Inter-axle longitudinal differential: Torque-proportioning differential, integrated into
  Torque distribution:
  - 1/3 to the front axle
  - 2/3 to the rear axle
  - 100% lockable
- Tandem housing: Gear driven, free-swinging.
  Provides equal drive to rear wheels and ensures the best possible ground contact - whatever the ground conditions

ENGINE
Scania DC12, water-cooled, unit injected diesel engine with turbo charger and air to air intercooler
- Complies with Stage 3 of EU Directive 97/68/-EC and Tier 3 of USA/California regulations (ISO 8178) for emissions
- Power rating: (1.34 hp = 1 kW)
  (ISO 3046) 394 hp (294 kW)
  (ISO 9249) 382 hp (285 kW)
- No. of cylinders: 6 (in line)
- Cylinder volume: 714 in³ (11.7 liters)
- Air filter: Dry type

TRANSMISSION
ZF 6WG310 Dash 4 electronically-controlled automatic transmission the torque converter has automatic lock-up in all gears

BRAKE SYSTEM
- Dual circuit braking system acting on all six wheels
- Approved according to ISO 3450
- All hydraulic operated brakes with enclosed oil-cooled wet multiple discs all around
- Spring actuated hydraulic released parking brake, mounted on propeller shaft
- Max. gradient, parking brake: 20% or about 11.3°
- Automatic engine brake as standard
- Automatic transmission retarder as standard

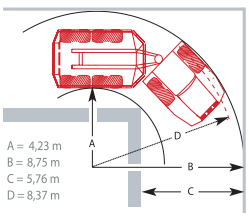
HYDRAULIC SYSTEM
- Pumps: 2 variable displacement piston pumps: for steering & tipping - for cooling, fan, brakes & auxiliaries
- Delivery: 84.5 gallon/min (320 l/min) @ 2,200 rpm
- Filtration: One return flow filter & high pressure filter
- Pressure-setting, main safety valves:
- Tipping Circuit: 4,061 PSI (280 bar)
- Steering Circuit: 3,046 PSI (210 bar)

ELECTRICAL SYSTEM
- Alternator: 28 V 100 A
- Batteries: 2, 12 V 225 Ah (series connected to give 24 V)
- Starter: 9 hp (6.7 kW)

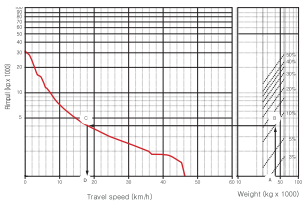
CAB
- Approved to ROPS/FOPS standards (ISO 3471, ISO 3449, SAE J231 and SAE J1040 April '88)
- Low interior sound level 74 dB(A) (ISO 6394)
- The cab is centrally located on rubber mountings
- Hand and arm vibrations are less than 2.5 m/s according to ISO 5349-2
- Whole body vibration is less than 0.5 m/s according to ISO 2631-1
- Excellent visibility - for safer operation
- Excellent operating controls location
- Adjustable suspended operator seat with seat belt
- Adjustable steering column
- Heater and Air Conditioning
- Tilting for service access

TIRES
- Standard 26.5 R25 two star radial

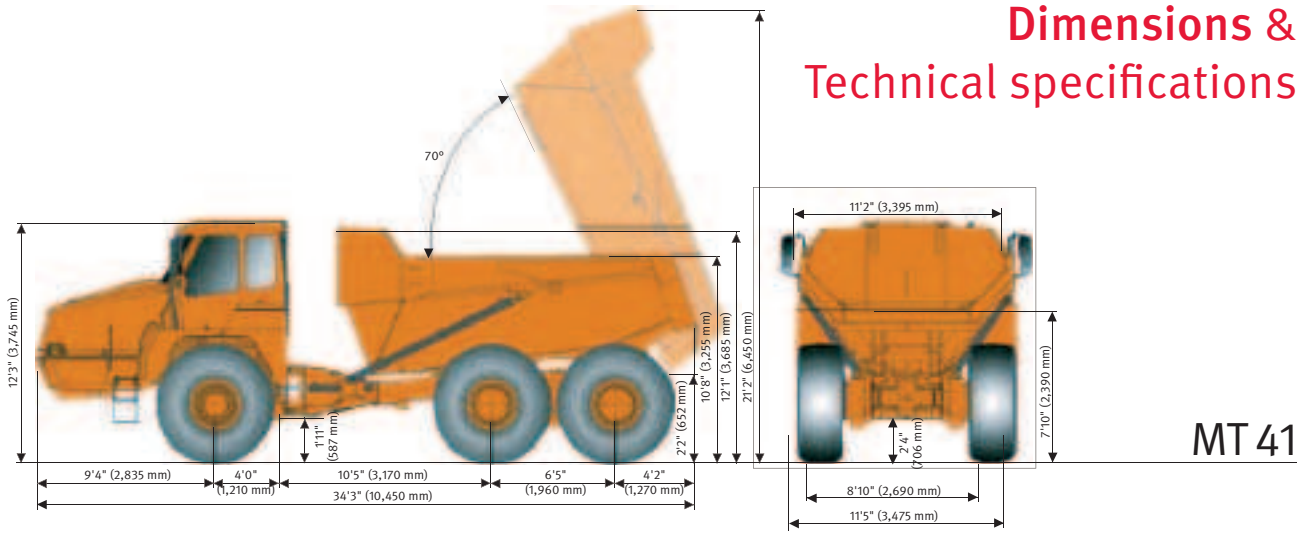
Turning radius according to ISO 7457 : 27'6" (8,370 mm)



PERFORMANCE DIAGRAM



Dimensions & Technical specifications



MT 41

BODY
- Material: Hardened abrasion-resistant steel plates
- Tilt cylinders: Single stage, double-acting
- Tipping time: Up: 12 sec. / Down 11 sec.
- The body is designed for exhaust heating
- Sloping body down from the hinge point

	Cubic Yards	Cubic Meters
• Level capacity:	24	18.5
• Heaped capacity: (Acc. SAE J1363, 2:1)	31	24
• Heaped capacity: (Acc. SAE J1363, 1:1)	38	29

WEIGHTS		LB	KG
Empty:	Front axle	30,690	13,950
	Rear axle	29,038	13,200
Loaded:	Front axle	44,000	20,000
	Rear axle	97,568	44,350
Pay load		81,840	37,200
Total weight (loaded)		141,568	64,350

NOTE: All weights include a full fuel tank and operator

GROUND PRESSURES		PSI	kPa
Standard 29.5 x 25 tires with 15% sinkage			
Empty:	Front axle	12.76	88
	Rear axle	6.96	48
Loaded:	Front axle	18.85	130
	Rear axle	22.05	152

CAPACITIES	U.S. GALLONS	LITERS
• Fuel Tank	129	490
• Hydraulic System	73	275
• Engine Cooling System	13	50
• Transmission	14.5	55
• Dropbox	9	34
• Engine Crankcase	3.5	13.2
• Front Reduction Gear	2 x 2	2 x 7.5
• Rear Differential	12	46
• Tandem Housing	2 x 40	2 x150

SPEEDS	MPH	KM/H
1st	4	6
2nd	6	9
3rd	9	15
4th	14	23
5th	21	34
6th	33	53

SUSPENSION
- Front: Independent with long life rubber springs and hydraulic shock absorbers
- Rear: Free-swinging tandem housing

ARTICULATION HINGE AND STEERING
- Articulation hinge with forward mounted turning ring
- Steering cylinders (two): Double-acting
- The steering is approved according to ISO 5010
- Max. steering angle: 45°
- Ground driven emergency steering pump

DRIVELINE
- Full-time 6 x 6 drive with two transverse differentials and one longitudinal
- Front axle transverse differential: Limited-slip with 45% locking ratio
- Rear axle transverse differential: 100% locking
- Inter-axle longitudinal differential: Torque-proportioning differential, integrated into
  Torque distribution:
  - 1/3 to the front axle
  - 2/3 to the rear axle
  - 100% lockable
- Tandem housing: Gear driven, free-swinging.
  Provides equal drive to rear wheels and ensures the best possible ground contact - whatever the ground conditions

ENGINE
Scania DC12, water-cooled, unit injected diesel engine with turbo charger and air to air intercooler
- Complies with Stage 3 of EU Directive 97/68/-EC and Tier 3 of USA/California regulations (ISO 8178) for emissions
- Power rating: (1.34 hp = 1 kW)
  (ISO 3046) 444 hp (331 kW)
  (ISO 9249) 432 hp (322 kW)
- No. of cylinders: 6 (in line)
- Cylinder volume: 714 in³ (11.7 liters)
- Air filter: Dry type

TRANSMISSION
ZF 6WG310 Dash 4 electronically-controlled automatic transmission the torque converter has automatic lock-up in all gears

BRAKE SYSTEM
- Dual circuit braking system acting on all six wheels
- Approved according to ISO 3450
- All hydraulic operated brakes with enclosed oil-cooled wet multiple discs all around
- Spring actuated hydraulic released parking brake, mounted on propeller shaft
- Max. gradient, parking brake: 20% or about 11.3°
- Automatic engine brake as standard
- Automatic transmission retarder as standard

HYDRAULIC SYSTEM
- Pumps: 2 variable displacement piston pumps:
  1 for steering & tipping -
  1 for cooling, fan, brakes & auxiliaries
- Max Capacity: 84.5 gallon/min (320 l/min) @ 2,200 rpm
- Filtration: One return flow filter & high pressure filter
- Safety valve settings: Steering: 3,046 PSI (210 bar)
  Tipping: 4,061 PSI (280 bar)

ELECTRICAL SYSTEM
- Alternator: 28 V 100 A
- Batteries: 2, 12 V 225 Ah
  (series connected to give 24 V)
- Starter: 9 hp (6.7 kW)

CAB
- Approved to ROPS/FOPS standards (ISO 3471, ISO 3449, SAE J231 and SAE J1040 April '88)
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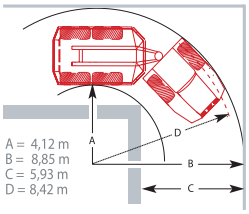
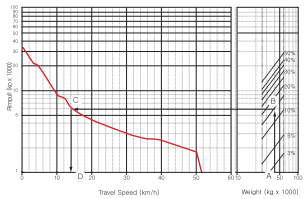
- Excellent visibility - for safer operation
- Excellent operating controls location
- Adjustable suspended operator seat with seat belt
- Adjustable steering column
- Heater and Air Conditioning
- Tilting for service access

TIRES
- Standard 29.5 R25 two star radial

Turning radius according to ISO 7457 : 27'7" (8,420 mm)



PERFORMANCE DIAGRAM



M-ADT-MP (12/11) Kn-2M-1211-23320-4-F

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