



# ARTICULATED DUMP TRUCKS

<b>DA30</b>	28,000 kg	61,729 lb.	23.3 yd <sup>3</sup>
<b>DA40</b>	40,000 kg	88,185 lb.	34.0 yd <sup>3</sup>

26 – 40 Metric Ton



**DOOSAN DELIVERS** *a heritage of dedication*



*Doosan can be found in every area of the infrastructure support business, which encompasses many facets of the heavy construction equipment industry.*

Many contractors might be surprised to know that, while Doosan is a relatively young brand in the North American construction equipment market, the organization has a global manufacturing history going back more than 75 years.

Today, Doosan Infracore Construction Equipment America (DICEA) is an industry leader in the engineering, manufacturing and marketing of construction equipment including skid-steer loaders, excavators, wheel loaders, articulated dump trucks, attachments, air compressors, lighting systems and generators as well as compact construction equipment and engine power systems.

### **Building Your Tomorrow Today**

Our construction equipment group leads Doosan's infrastructure support business (ISB) segment. Other ISB businesses include:

- Forklifts & Material Handling
- Machine Tools
- Castings & Forgings
- Construction & Engineering
- Power Generation
- Water Treatment & Desalination
- Renewable Energy

### **Your North American Partners**

Throughout our decades of selling equipment in North America, we've been building a network of dealers designed to surpass the standards for customer service. From coast to coast, there's a solid infrastructure that supports your equipment, including a parts distribution and service training facility in Georgia, research and development center in Arizona, attachments design and development in Minnesota and sales & marketing support in North Dakota.



**West Fargo, ND**  
Sales & Marketing

**Tucson, AZ**  
Product Training & Testing

**Litchfield, MN**  
Heavy Attachments

**Suwanee, GA**  
Parts, Service & Product Management

**Atlanta, GA**  
DICEA, NA Headquarters

# DOOSAN DELIVERS *Productivity*



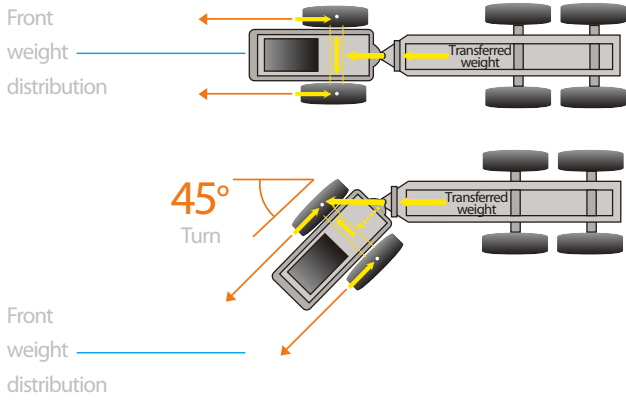
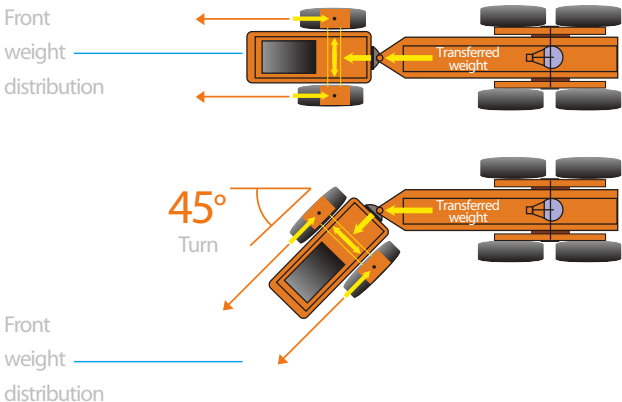
**Innovative  
Front-Mounted Turning Ring**

One of the most innovative features in the Doosan ADT design is the location of the turning ring in relation to the articulation point. Most manufacturers put the turning ring behind the point of articulation. This, along with a 100% differential lock, can cause steering difficulties that slow you down. Doosan does it differently: we place the turning ring in front of the articulation point.

This design ensures equal weight distribution to the front wheels in all operating situations. It also enables you to use the differential with only 45% locking value to maintain drive to both front wheels and optimize maneuverability without locking them up.



*DOOSAN ADT*



# DOOSAN DELIVERS *Productivity*



## Interim Tier 4 (iT4) Compliant

Optimized to provide the ultimate in power delivery and fuel economy, Doosan Articulated Dump Trucks feature iT4 compliant engines to reduce air pollution.

## Hydrolysis Catalyst

In the hydrolysis catalyst canister, diesel exhaust fluid solution mixes with hot exhaust gases, breaking it down into urea and water vapor (H<sub>2</sub>O), which then catalyzes into carbon dioxide (CO<sub>2</sub>) and ammonia (NH<sub>3</sub>).

## Diesel Exhaust Fluid (DEF)

DEF is a solution of pure urea and deionized water. During machine operation, DEF is injected into the exhaust system to transform nitrogen oxides (NO<sub>x</sub>) produced during combustion to carbon dioxide (CO<sub>2</sub>), water (H<sub>2</sub>O) and nitrogen (N). A minimum level of DEF is required for proper machine operation, and the DEF supply tank is heated for proper operation in cold weather. DEF is available from your Doosan dealer in various container sizes.

## (Hydrolysis)



## (SCR)

## SCR Catalyst

In the SCR catalyst canister, nitrogen oxide (NO<sub>x</sub>) mixes with ammonia (NH<sub>3</sub>) and a chemical reaction takes place, resulting in nitrogen (N) and water (H<sub>2</sub>O) emitting from the system.



## (DEF Tank)



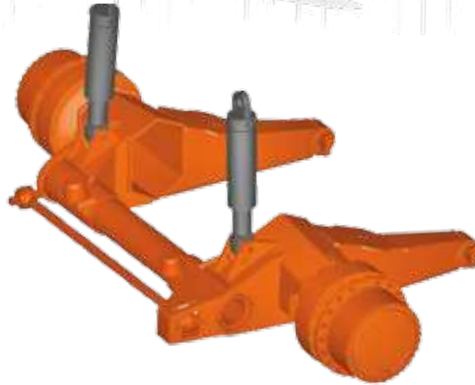
### Unique Sloping Frame for Better Weight Distribution

Other brands use rigid axles which lose traction and have a rougher ride. The Doosan 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 center of gravity along with superior stability and tractive effort – not to mention better tire wear.



### 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.

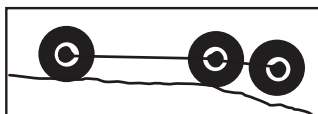


### Free-Swinging Rear Tandem Bogie Suspension

The Doosan 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.



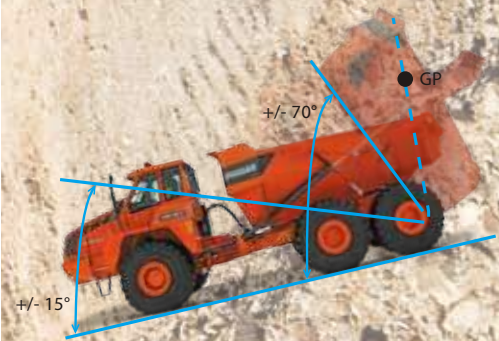
Doosan ADT



Competitors' ADT

### Center 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.



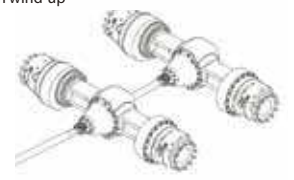
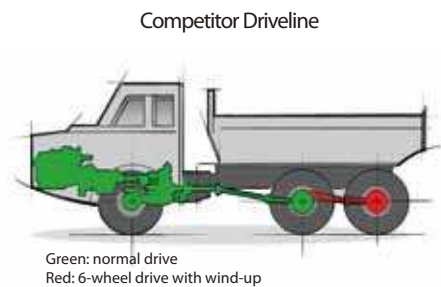
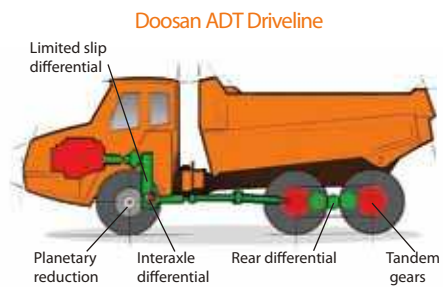
● : Shows position of the Gravity Point (GP) when hydraulic flow will be reduced .

# DOOSAN DELIVERS *Productivity*



## 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, Doosan ADTs will always deliver best-in-class traction. One easy-to-lock differential is used in the rear, providing operator comfort when driving.







### **One Rear Differential for Consistent Power**

Doosan ADTs have one rear differential to reduce loss in power.

### **Semi-Independent Front Suspension**

The new hydro-pneumatic system, exclusively designed for Doosan ADTs, 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.



### **Wet Disc Brakes for Each Wheel**

The oil-cooled wet disc brakes on all six wheels provide excellent braking performance.



# DOOSAN DELIVERS *Operator Comfort*



## **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.



# DOOSAN DELIVERS *Durability*



## THE TOUGHEST TRUCKS AROUND

Doosan 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.

### Best Manufacturing, Best Components

With in-house control of all machining and robotic welding, Doosan maximizes the durability of all its assemblies. Doosan ADTs use proven, specifically designed engine and transmission components tested not only by our suppliers, but by Doosan itself.



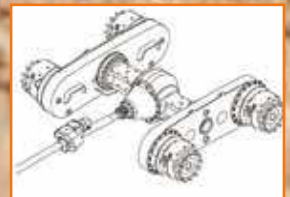
Axles



Turning ring

### One Rear Differential

As there is only one rear differential on Doosan ADTs, the driveline delivers more power with fewer parts.





### **Driveline Durability**

A single driveline delivers the optimal power split of 50% to the front and 50% to the rear drive train. 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.

### **Heavy-Duty Brakes**

Dry disc brakes are open and exposed to dirt and water. The wet brakes on Doosan 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 DA30 do not require forced cooling like most competitor designs.



# DOOSAN DELIVERS *Easy Maintenance*

DOOSAN MAKES MAINTENANCE SIMPLE.  
Even the best equipment needs regular maintenance.  
If you want a long lasting machine and a minimum  
of effort to get it, Doosan delivers  
everything you need: onboard  
diagnostic systems, easy  
component access plus a  
standard fleet management  
system.



The hood has a wide opening  
(up to 83°) for easy accessibility  
to the engine



Easy maintenance



Tilting cab allows easy access to the transmission and hydraulic components



### Doosan Telematics (GPS)

A simple user interface, accessible online via a web-enabled computer or cell phone, provides location information and a full range of machine operational information to you, your dealer and Doosan, allowing a complete machine maintenance management strategy to reduce operating costs.



Electrical and AC connections are at the rear of the cab, allowing for tilting of the cab without disconnecting



Automatic central lubrication system  
With the Vehicle Control Unit (VCU), grease is only pumped when necessary

# DOOSAN DELIVERS *Unique design*

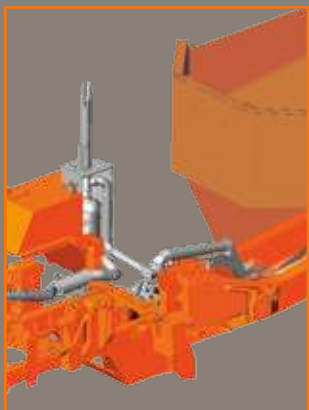
Day in and day out, in the toughest conditions imaginable, DOOSAN articulated dump trucks keep coming back for more, often working extensive hours without an engine overhaul. And because durability should never require a sacrifice in ease-of-use or comfort, a fully automatic transmission and smooth gear-shifting allow the operator to concentrate on the work at hand.

DOOSAN Articulated Dump Trucks have permanent 6-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 ensure equal weight distribution. The sloping rear frame provides a lower center of gravity and improves the overall stability of the truck, ensuring fast and easy tipping of the body for increased productivity in even the most demanding conditions.



### A superior design

- Multiple wet disc brakes
- Rear axle housing
- Rear axle differential
- Gear-drive, free swinging tandem housing
- Parking brake
- Articulation hinge
- Sloping rear frame



Heated Body



Fast Fill



Quarry Tires (optional)



High Flotation Tires (optional)



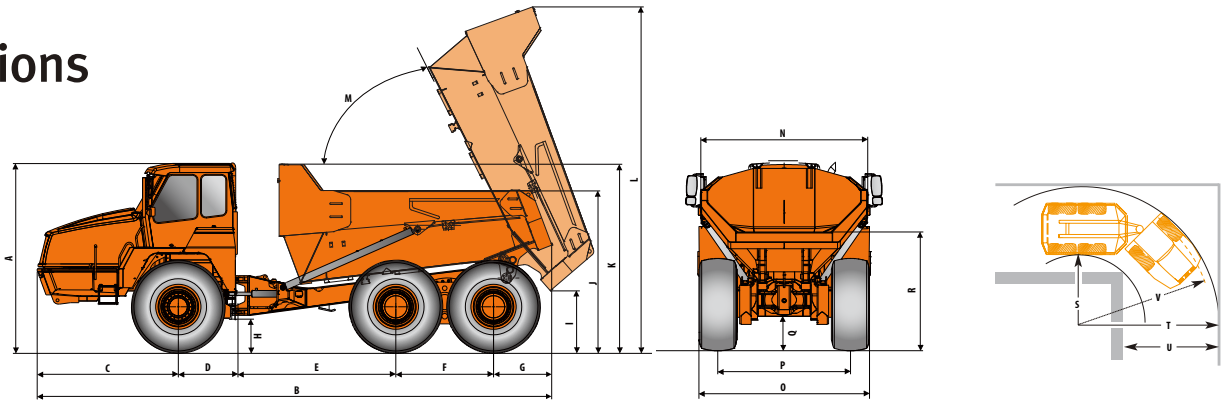
## Standard/Optional Equipment

- Standard Equipment
- Optional Equipment
- N/A

	DA30	DA40
<b>ENGINE</b>		
Emissions (EPA)	IT4	IT4
Selective Catalyst Reduction (SCR)	•	•
Diesel Exhaust Fluid (DEF)	•	•
High Pressure Common Rail (HPCR)	•	•
Fuel Filter with Water Separator	•	•
Coolant Recovery Tank	•	•
Dual Element dry-type air filter with Evacuator	•	•
Electronic Engine Control	•	•
Cool Down Mode	•	•
<b>HYDRAULIC</b>		
Variable Displacement Axial Piston	•	•
Variable Speed Hydraulic Cooling Fan	•	•
Emergency steering pump (Ground-driven)	•	•
- Variable Displacement Radial Piston	•	•
<b>ELECTRICAL</b>		
Alternator - 24V, 100 AMP	•	•
2 x 12V Batteries 140Ah Reserve Capacity	•	•
Blade Type Fuse Panel	•	•
Work Lights (Front & Rear)	■	■
Work lights - LED (Front & Rear)	■	■
Rotating Beacon	■	■
Hour Meter	•	•
Rear View Camera	•	•
Laptop Service Port	•	•
Telematics	•	•
Diesel Powered Coolant Heater	■	■
Block Heater	■	■
Emergency Shutdown Switch	•	•
<b>CABIN</b>		
Steel, All-Weather & Sound Suppressed	•	•
ROPS (ISO 3471)	•	•
FOPS (ISO 3449)	•	•
Front Window with Wiper/Washer	•	•
Tinted Safety Glass	•	•
Retractable roller sunblind	•	•
Adjustable Sliding Side Door Window	•	•
Defrost	•	•
Lockable Doors	•	•
Seat	•	•
- Air Suspension	•	•
- 2" (51 mm) Seat Belt	•	•
- Adjustable Height	•	•
- Adjustable Recline	•	•
- Adjustable Fore/Aft	•	•
- Adjustable Arm Rests	•	•
Seat - Heated	■	■
Instructors Seat, folding	•	•
Storage for Operator's Manuals	•	•
Mirrors	•	•
- Interior Rear View	•	•
- Exterior	•	•
Mirror, Heated Exterior	■	■
Fully Adjustable HVAC	•	•
Multi-Function LCD Display	•	•
Cigarette lighter	•	•
AM/FM Stereo with CD Player & MP3 port	•	•
Speakers (2)	•	•
Antenna	•	•
Space for cooler box	•	•
Storage	•	•
Power Socket, 12V	•	•
Beverage Holder	•	•
Interior Light	•	•
Guard, Rear Window	•	•
Cab tilting system	•	•
<b>CONTROLS</b>		
Adjustable steering column	•	•
- Tilting	•	•
- Telescoping	•	•
- RPM	•	•
- Speedometer	•	•
- Engine Coolant Temperature	•	•
- Transmission Oil Temperature	•	•
<b>FRAME &amp; SUSPENSION</b>		
Articulation hinge	•	•
Steering Cylinder, Double-acting (2)	•	•
- Cushion, Retracting	•	•
Turning ring, Forward-mounted	•	•
Towing hook, front and rear	•	•
Sloping Rear Frame	•	•
Semi-independent rubber spring & shock absorbers (Front)	•	-
Semi-Independent gas-hydraulic (Front)	-	•
Tires - Radial, 23.5 R25	•	-
Tires - Radial, 29.5 R25	-	•

	DA30	DA40
<b>DISPLAY MONITOR &amp; WARNINGS</b>		
- Fuel Level	•	•
Body Control Lever	•	•
Gear Selector Joystick	•	•
Throttle pedal (accelerator)	•	•
Brake Pedal	•	•
<b>Gauges</b>		
- RPM	•	•
- DEF Level	•	•
- Speedometer	•	•
- Engine Coolant Temperature	•	•
- Transmission Oil Temperature	•	•
- Retarder Oil Temperature	•	•
- Fuel Level	•	•
- DEF Level	•	•
- Transmission Gear Indicator	•	•
- Hour Meter	•	•
- Fuel Consumption	•	•
- Trip Meter	•	•
<b>Warning &amp; Indicator Lights</b>		
- Engine Coolant Level & Temp	•	•
- Engine Oil Pressure	•	•
- Air Filter	•	•
- Transmission Oil Temp	•	•
- Retarder Oil Temp	•	•
- Fuel Level	•	•
- DEF Level	•	•
- Transmission Lock-Up	•	•
- Transmission Mode	•	•
- Retarder Brake	•	•
- Engine Brake	•	•
- Emergency Steering	•	•
- Lubrication System	•	•
- Battery Charge	•	•
- Error Code	•	•
- Seat Belt	•	•
- Body Down	•	•
- Direction Signal	•	•
- Lights (High, Main, Work, Beacon)	•	•
<b>DRIVELINE</b>		
Transmission	•	•
- Automatic	•	•
- Electronic Shift Control	•	•
- Torque Converter Lock-up Clutch	•	•
Full-time 6x6 Drive	•	•
Tandem Rear Bogey	•	•
- Gear Driven	•	•
- Free-swinging	•	•
Driveline Interaxle Differential	•	•
- 1/3 Front, 2/3 Rear	•	•
- Torque Divider, 100% Locking Ratio	•	•
Front axle transverse differential	•	•
- Limited-slip, 45% locking ratio	•	•
Rear axle transverse differential (1)	-	•
- Limited-slip, 45% locking ratio	-	•
Rear axle transverse differential (1)	•	-
- Clutch-engaged, torque dependent locking ratio	•	-
<b>BODY</b>		
Body, High tensile HB400 steel	•	•
Body (none)	■	■
Lifting Cylinder, Double-acting (2)	•	•
- Cushion, Extending	•	•
Tailgate, Scissor Type	•	•
Tailgate (none)	■	■
Spill guard on front of body	•	•
Body heating kit	■	■
Body Heating Ready	•	•
Body lining standard	■	■
Body lining full	■	■
Side extensions	■	■
Payload meter	•	•
<b>BRAKES</b>		
Dual circuit braking system	•	•
Hydraulic, wet multiple discs (each wheel)	•	•
Spring applied hydraulic release parking brake (driveshaft mounted)	•	•
Automatic engine brake	•	•
Automatic hydrodynamic transmission retarder	•	•
<b>OTHER</b>		
Automatic lubrication system	•	•
Handrails	•	•
Skid-Resistant Steps	•	•
Body Lift Support	•	•
Fire extinguisher	■	■
First aid kit	■	■
Manuals	•	•
- Operation & Maintenance	•	•
- Parts	•	•
- AEM Safety Manual	•	•
Telematics, 1 Year Subscription	•	•
Vandalism Protection	•	•
- Lockable Panels	•	•
- Lockable Fluid Fill points	•	•
48 Hour Parts Guarantee	•	•
Speed limitation	■	■
Tool kit	■	■
Warning triangle	■	■
Fast fill	■	■
Mud Flaps	■	■

## Dimensions



		UNIT	DA30	DA40
HEIGHT, CABIN	A	in. (mm)	11' 8" (3560)	12' 8" (3850)
LENGTH, OVERALL	B	in. (mm)	31' 4" (9558)	34' 9" (10590)
OVERHANG, FRONT	C	in. (mm)	8' 7" (2650)	9' 1" (2775)
ARTICULATION JOINT - FRONT AXLE	D	in. (mm)	3' 11" (1195)	4' 2" (1275)
ARTICULATION JOINT - REAR AXLE	E	in. (mm)	9' 7" (2916)	10' 5" (3170)
WHEELBASE, REAR TANDEM	F	in. (mm)	5' 10" (1768)	6' 5" (1960)
OVERHANG, REAR	G	in. (mm)	3' 5" (1029)	4' 8" (1410)
GROUND CLEARANCE, FRONT	H	in. (mm)	1' 11" (576)	2' 2" (652)
BODY DUMP CLEARANCE	I	in. (mm)	2' 0" (610)	2' 6" (763)
BODY LOADING CLEARANCE	J	in. (mm)	9' 8" (2946)	11' 0" (3355)
BODY HEIGHT (LOWERED)	K	in. (mm)	11' 3" (3436)	12' 1" (3685)
BODY HEIGHT (RAISED)	L	in. (mm)	19' 4" (5885)	21' 11" (6680)
BODY DUMP ANGLE	M	°	70	70
BODY WIDTH	N	in. (mm)	9' 5" (2875)	11' 2" (3395)
TIRE WIDTH	O	in. (mm)	9' 10" (2990)	11' 5" (3475)
TREAD WIDTH	P	in. (mm)	7' 9" (2370)	8' 10" (2690)
GROUND CLEARANCE, REAR	Q	in. (mm)	1' 11" (576)	2' 4" (706)
BODY FLOOR HEIGHT	R	in. (mm)	6' 11" (2100)	7' 10" (2390)
TURNING RADIUS, INSIDE	S	in. (mm)	12' 9" (3890)	13' 6" (4120)
TURNING CLEARANCE, OUTSIDE	T	in. (mm)	26' 4" (8030)	29' 1" (8850)
ROAD WIDTH, MINIMUM (90° TURN)	U	in. (mm)	17' 4" (5280)	19' 6" (5930)
TURNING RADIUS, OUTSIDE*	V	in. (mm)	25' 2" (7680)	27' 8" (8420)
			*Turning radius according to ISO 7457	

## Weight

		UNIT	DA30	DA40
<b>WEIGHTS</b>				
GROSS WEIGHT		lb. (kg)	113,318 (51,400)	158,292 (71,800)
NET WEIGHT		lb. (kg)	51,588 (23,400)	70,107 (31,800)
PAY LOAD		lb. (kg)	61,729 (28,000)	88,185 (40,000)
EMPTY	FRONT AXLE	lb. (kg)	26,235 (11,900)	31,967 (14,500)
	REAR AXLE	lb. (kg)	25,353 (11,500)	38,140 (17,300)
LOADED	FRONT AXLE	lb. (kg)	36,597 (16,600)	49,070 (22,258)
	REAR AXLE	lb. (kg)	76,721 (34,800)	109,221 (49,542)
WEIGHT DISTRIBUTION, EMPTY	FRONT/REAR	%	51 / 49	48 / 52
WEIGHT DISTRIBUTION, LOADED	FRONT/REAR	%	31 / 69	31 / 69
NOTE: All weights include a full tank and operator				
<b>GROUND PRESSURES</b>				
EMPTY	FRONT AXLE	psi (bar)	15.0 (1.0)	12.8 (0.88)
	REAR AXLE	psi (bar)	7.7 (0.53)	7.0 (0.48)
LOADED	FRONT AXLE	psi (bar)	20.5 (1.41)	18.9 (1.3)
	REAR AXLE	psi (bar)	23.5 (1.62)	22.0 (1.52)
Measured with standard tires with 15% sinkage				
<b>POWER (NET) TO WEIGHT RATIO</b>				
EMPTY		hp/t (kW/t)	16.7 (11.45)	13.98 (11.32)
LOADED		hp/t (kW/t)	6.44 (5.2)	6.19 (5.01)

# General

	UNIT	DA30	DA40
<b>ENGINE</b>			
MODEL		Scania DC9	Scania DC13
NUMBER OF CYLINDERS	INLINE	5	6
POWER RATING GROSS (HP per ISO 3046)	hp (kW) @ rpm	375 (276) @ 2100	500 (368) @2100
POWER RATING NET (HP per ISO 9249)	hp (kW) @ rpm	365 (268) @ 2100	490 (360) @ 2100
MAXIMUM TORQUE GROSS	ft.-lb. (Nm) @ rpm	1381 (1873) @ 1,300	1750 (2373) @ 1,300
PISTON DISPLACEMENT	in. <sup>3</sup> (L)	568 (9.3)	775 (12.7)
BORE AND STROKE	in. x in. (mm x mm)	5.0 x 5.5 (127 x 140)	5.1 x 6.3 (130 x 160)
STARTER	V, hp (Kw)	24, 7.5 (5.5)	24, 7.5 (5.5)
BATTERY	V, AH	2 x 12, 140	2 x 12, 225
ALTERNATOR	V, amp	24V, 100	24V, 100
AIR CLEANER		Double Element, Dry	Double Element, Dry
<b>HYDRAULICS</b>			
MAIN PUMP	gpm (L/min)	80.6 (305)	80.6 (305)
RELIEF PRESSURE (MAIN)	psi (bar)	4061 (280)	4061 (280)
EMERGENCY STEER PUMP	gpm (L/min)	13.2 (50)	13.2 (50)
RELIEF PRESSURE (EMER. STEER)	psi (bar)	3046 (210)	3046 (210)
<b>ENVIRONMENT</b>			
SOUND LEVEL (per ISO6395)	dB(A)	108	107
CABIN SOUND LEVEL (per ISO 6394)	dB(A)	72	71
<b>TRANSMISSION SPEEDS</b>			
TRAVEL SPEED - FORWARD (8)	mph (km/h)	3.1 / 5.0 / 6.8 / 9.3 / 13.7 / 18.6 / 26.1 / 34.2 (5 / 8 / 11 / 15 / 22 / 30 / 42 / 55)	3.1 / 5.0 / 6.8 / 9.3 / 13.7 / 18.6 / 26.1 / 34.2 (5 / 8 / 11 / 15 / 22 / 30 / 42 / 55)
TRAVEL SPEED - REVERSE (4)	mph (km/h)	3.1 / 5.0 / 6.8 / 9.9 (5 / 8 / 11 / 16)	3.1 / 5.0 / 6.8 / 9.9 (5 / 8 / 11 / 16)
<b>REFILL CAPACITIES</b>			
FUEL TANK	gal. (L)	88.5 (335)	140 (530)
DIESEL EXHAUST FLUID TANK	gal. (L)	10 (38)	10 (38)
COOLING SYSTEM (RADIATOR)	gal. (L)	11.9 (45)	13.2 (50)
ENGINE OIL	gal. (L)	8.7 (33)	11.6 (44)
TRANSMISSION	gal. (L)	19.8 (75)	19.8 (75)
FRONT DIFFERENTIAL	gal. (L)	3.5 (13.2)	3.5 (13.2)
REAR DIFFERENTIAL	gal. (L)	4.2 (16)	12.2 (46)
FRONT HUB (2)	gal. (L)	2.9 (11)	2.0 (7.5)
TANDEM HOUSING	gal. (L)	12.7 (48)	37.0 (140)
HYDRAULIC TANK	gal. (L)	32.5 (123)	55.2 (209)
<b>BODY</b>			
BODY VOLUME (2:1)	yd <sup>3</sup> (m <sup>3</sup> )	23.3 (17.8)	34 (26)
TIPPING TIME	seconds	Up: 10 / Down: 9	Up: 10 / Down: 10
LEVEL CAPACITY	WITH TAILGATE	yd <sup>3</sup> (m <sup>3</sup> )	18.6 (14.2)
	WITHOUT TAILGATE	yd <sup>3</sup> (m <sup>3</sup> )	17.8 (13.6)
HEAPED CAPACITY	WITH TAILGATE	yd <sup>3</sup> (m <sup>3</sup> )	23.3 (17.8)
	WITHOUT TAILGATE	yd <sup>3</sup> (m <sup>3</sup> )	22 (16.8)
DENSITY INDEX	lb./yd <sup>3</sup> (kg/m <sup>3</sup> )	2468 (1119)	2468 (1119)

# Cylinders

	UNIT	DA30	DA40
<b>HYDRAULIC CYLINDERS</b>			
BODY TILT CYLINDERS (2)	BORE	in. (mm)	4.5 (115)
	STROKE	in. (mm)	90.2 (2290)
STEERING (2)	BORE	in. (mm)	4.5 (115)
	STROKE	in. (mm)	20.3 (515)



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