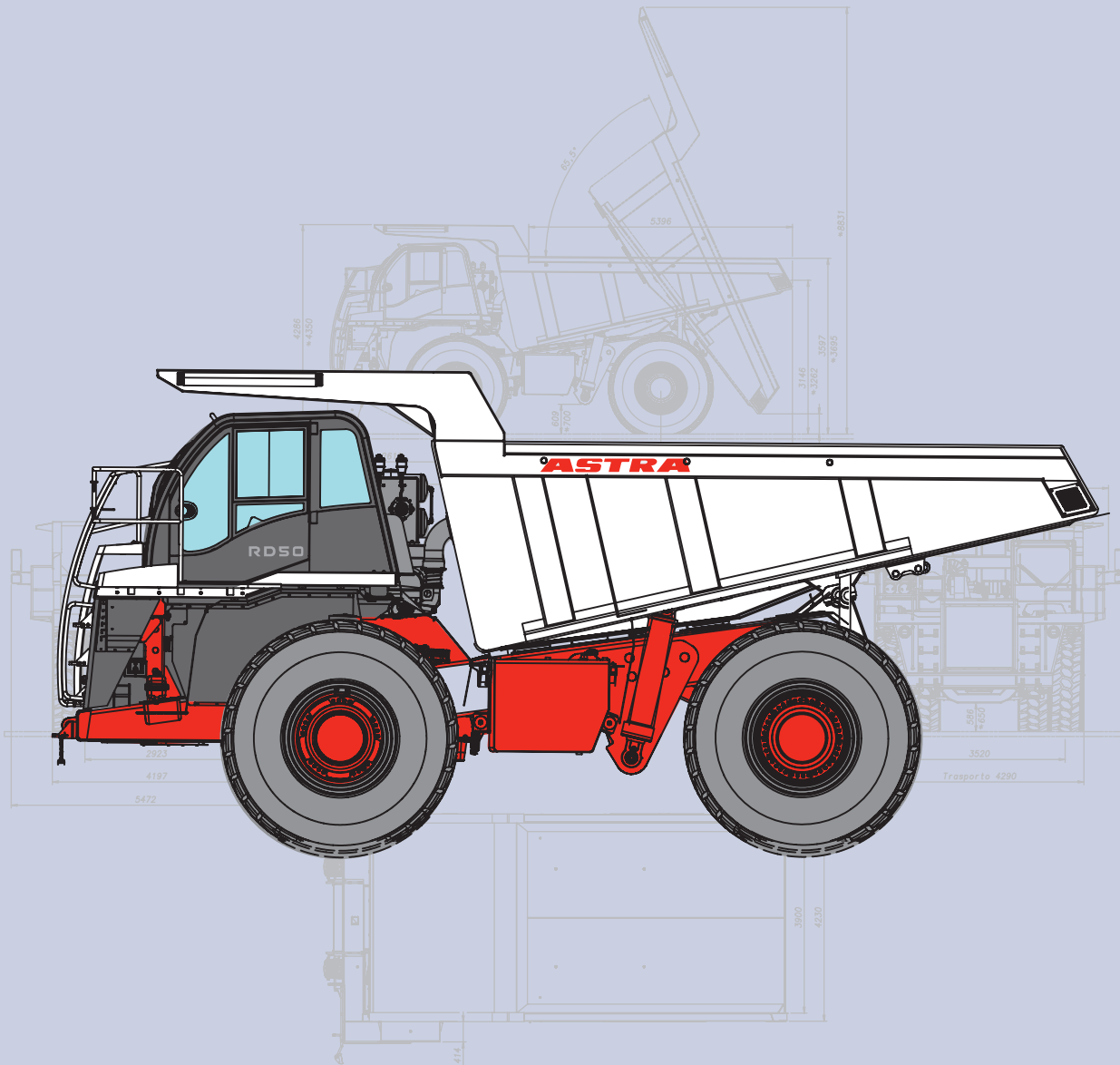




RD 50



- **Engine** Deutz TCD 2015 V8
- **Power** 500kW (680 CV)
- **G.V.W.** 87.850 kg
- **Payload** 50.000 kg
- **Capacity Struck** 23 m³
- **Heaped (SAE 2:1)** 32 m³

Rigid Dumper

ENGLISH
06-2009



ENGINE

Diesel V8 90°-angle, intercooler 4-valves, electronic injection system with solenoid valves.

Emissions: EU 2004/96 Stage 3A (Europa) ed EPA Off-road Tier3 (USA)

Make and type: DEUTZ TCD 2015 V8
 Stroke x bore: 132x145 mm
 Total displacement: 15900 cm³
 Max power: 500kw (680CV) @ 2100rpm
 Max torque: 2800 Nm @ 1300-1500 rpm
 Cold start -26°C



PERFORMANCE

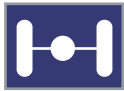
With 21.00R35 tyres

gears	gear ratio	Km/h	mph
1	4,00	10,2	66,3
2	2,68	15,2	9,4
3	2,01	20,3	12,6
4	1,35	30,2	18,7
5	1,00	40,8	25,3
6	0,67	60,8	37,7
1 RM	5,15	7,9	4,9
2 RM	3,46	11,8	7,3



TRANSMISSION

Automatic transmission Allison H6610A with 6 forward speeds and 2 reverse. Hydraulic torque converter, stall torque ratio: 1:1,77.



REAR AXLE

KESSLER axle.

Dual reduction: central by bevel gear pair and final in wheel hubs by planetary gear.

Central reduction ratio: 1:3,273
 Final reduction ratio: 1:5,895
 Total reduction ratio: 1:19,29

Optional:

Rear axle ratio: 1:22,2



TYRES

Steel rim 15"x35"x3"
 Tubeless radial tyres 21.00R35



STEERING

Meets ISO5010, SAE J53 standards

Hydraulic steering (ORBITROL), with Q-amp system and 2 double acting cylinders.

Gear pump flanged to the gearbox.

Max working pressure: 210 bar

Radial piston emergency pump driven by the transmission.

Adjustable steering column/wheel.



BRAKES

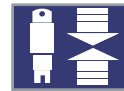
Independent circuits, complying with SAE J1473 OCT90 and ISO3450-1985.

Service brake: pneumo-hydraulic controlled dry disc for front axle, oil-cooled multiple disc for rear axle.

Parking brake: pneumatically controlled disc brake on propeller shaft, rear axle power take-off

Auxiliary service brake: pneumatic control on oil-cooled multiple disc brakes on rear axle acting as retarder. Pedal activation.

Optional: Hydraulic retarder between torque converter and gearbox.



SUSPENSION

Front: independent steering wheels, hydro-pneumatic suspension cylinders (oil-nitrogen) acting as suspension/shock absorber.

Rear: semi-independent with three reaction rods plus Panhard type cross bar. Two hydro-pneumatic cylinders (oil/nitrogen) acting as suspension/shock absorber.

Optional: front suspension gas charger kit .



ELECTRICAL SYSTEM

2 batteries: 12V / 170Ah
 Voltage: 24V
 Alternator:28V / 80Ah
 Starter: 6,6kw

All cables are coded, covered and fastened to the chassis. CAN bus Simple-Mux system between engine control unit (ECU), gearbox and Body Computer.

New cluster with high definition multifunctional colour display.

New Black Box able to manage 140 records for each memory area.

Optional: Rear view camera with cluster integrated display (3" ½).

Rear view camera with monitor in the cab (4" ½).



BODY TIPPING SYSTEM

Two body hoists installed outside the frame rails.
Two-stage telescopic cylinders with power down in the second stage.
Two gear pumps driven by a gearbox PTO (flow: 320 l/min @ 1500 rpm)
Tipping valve with on/off electropneumatic control, with possible mechanical control for emergency or service.



BODY

Walls and bottom in high abrasion resistance steel.
Hardness: HB400
Bottom thickness: 12 mm 0.47 in
Side walls thickness: 10 mm 0.39 in
Front thickness: 12 mm 0.47 in
Elastic pads between body and chassis.
Tipping angle: 65,5°
Tipping time: 12"
Lowering time: 12"
Body heating system.
Body capacity:
Struck: 23m³ 30yd³
Heaped (SAE 2:1): 32m³ 41 yd³
Integral cab protection according SAE J1040 ISO3471 (ROPS).
Optional: rock body bottom 20mm, body Extra Heavy Duty body bottom 25mm, body with side extensions (400mm).



CHASSIS

Built in high resistance steel.
Two extruded rectangular side members linked by stiffening cross members supporting the front and the rear suspensions systems.



GREASING SYSTEM

15 points centralised greasing system.
Optional: automatic central greasing system with a variable amount of grease according to the conditions of vehicle use.



WEIGHTS Kg

	TARE (*)		PAYLOAD		TOTAL WEIGHT	
	kg	lb	kg	lb	kg	lb
Front axle	20.290	44.732	9.620	21.208	29.910	65.940
Rear axle	17.560	38.713	39.380	86.818	56.940	125.531
Total	37.850	83.445	50.000	110.231	87.850	193.676

* Tare including fuel, lubricants and driver (75 kg / 165 lb)



CAB

Complying with FOPS SAE J231, ISO3449
In steel, soundproof and installed on the left side.
Compressed air quick coupling for cab cleaning.
Athermic glasses.
Door with glazing in the lower part for maximum visibility.
Fully adjustable air suspension central operator seat with safety belts.
Instructor seat with safety belts.
Cab suspension with elastic pads.
Windscreen sunvisor.
Automatic climate control with pollen filter.
Optional:
Work lights on the top of the cab.
RDS radio.
Refrigerator.



INSTRUMENTS

On-board computer with digital/analogic instrumentation and performance/fault messages to manage all vehicle operating information (levels, warning lights, etc.).
Advanced vehicle diagnostics system: management, display and storage of engine, transmission, steering system, braking, body tipping and service pneumatic system data.
Emergency engine switch in the cab.
Connection for data download and analysis.
Trip computer for vehicle productivity analysis.
Optional: Ground emergency engine switch.



FLUID CAPACITIES(I)

For fluids specifications, refer to the Use and Maintenance Manual.
Engine oil: 48 l 12.6 US Gals
Gearbox oil: 68 l 17.9 US Gals
Cooling circuit: 80 l 21.1 US Gals
Fuel tank: 600 l 158.5 US Gals
Rear axle: 100 l 26.4 US Gals
Hydraulic system oil: 550 l 145.2 US Gals
Brakes hydraulic system oil: 24 l 6.3 US Gals
Final reductions oil (each): 7 l 1.8 US Gals

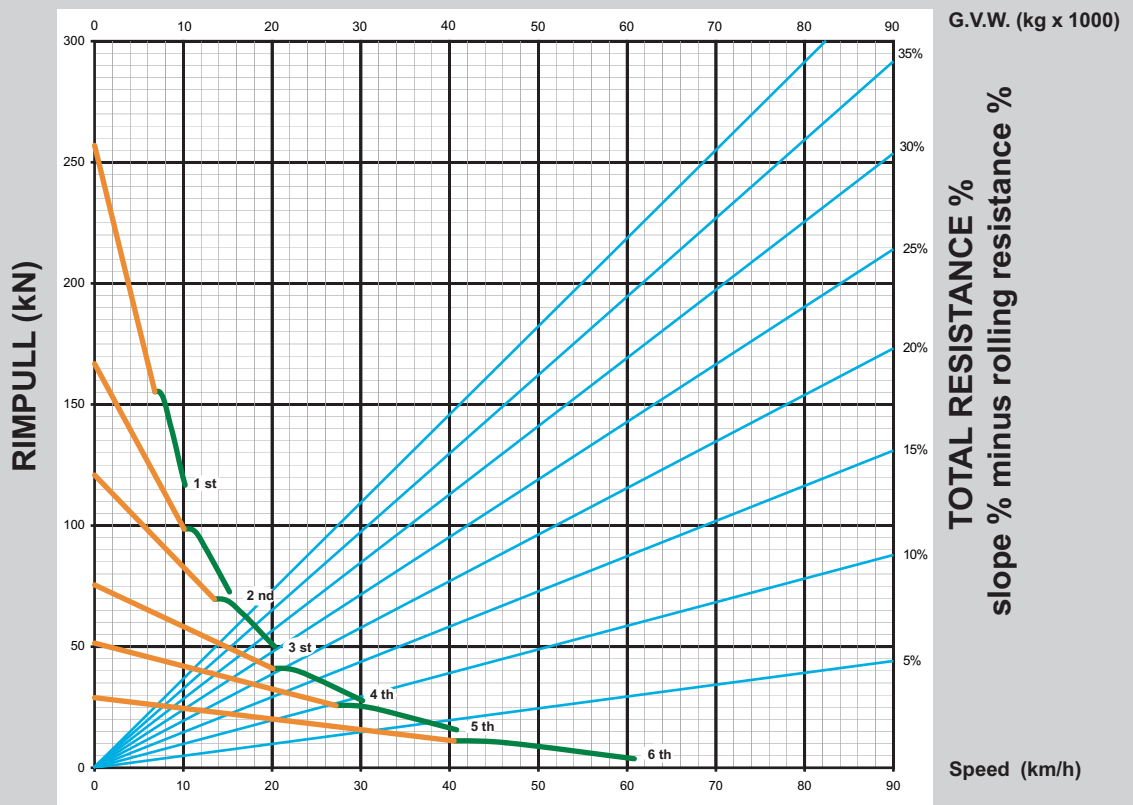


PNEUMATIC SYSTEM

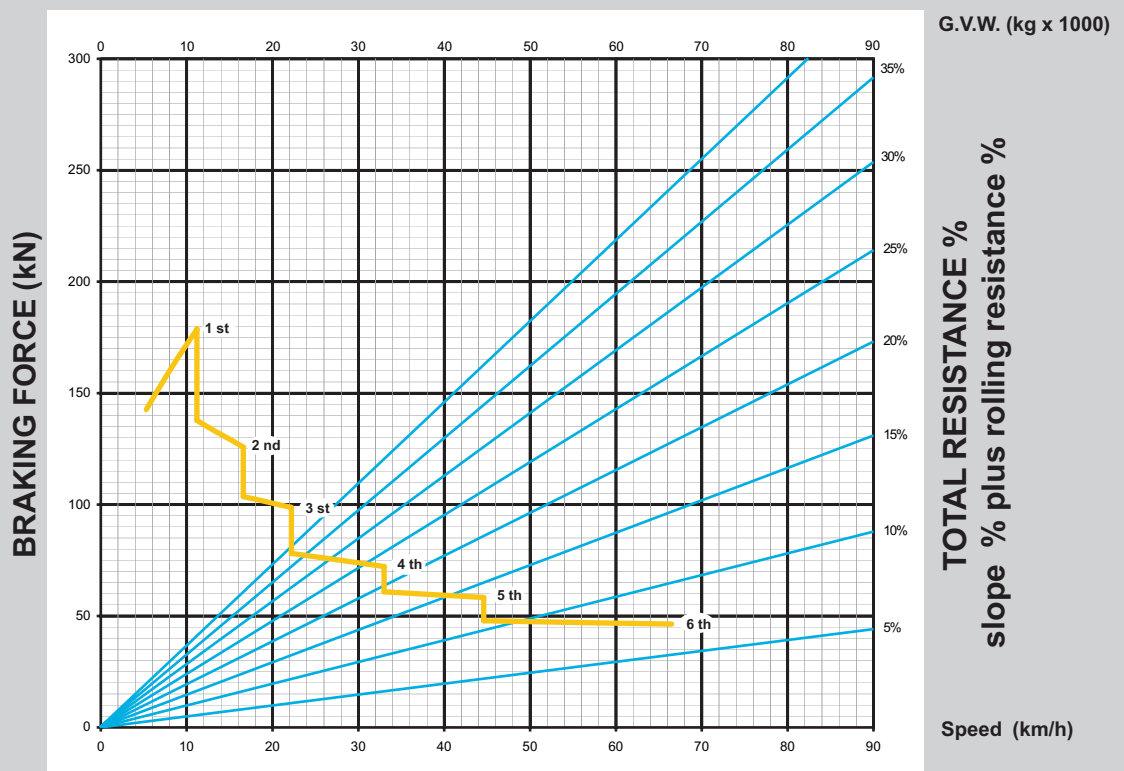
Two-cylinder air compressor. Air drier.
Air tanks n° 5 30l.
Pneumatic circuit for tipping system, parking brake, auxiliary service brake, suspension seat, horn and air take up in the cab.

To determine gradeability performance, read from G.V.W. down to the percent of total resistance. From this point, read horizontally to the curve with the highest obtainable gear, then down to the maximum speed

— = LOCK UP
— = CONVERTER



— = RETARDER + WET BRAKES

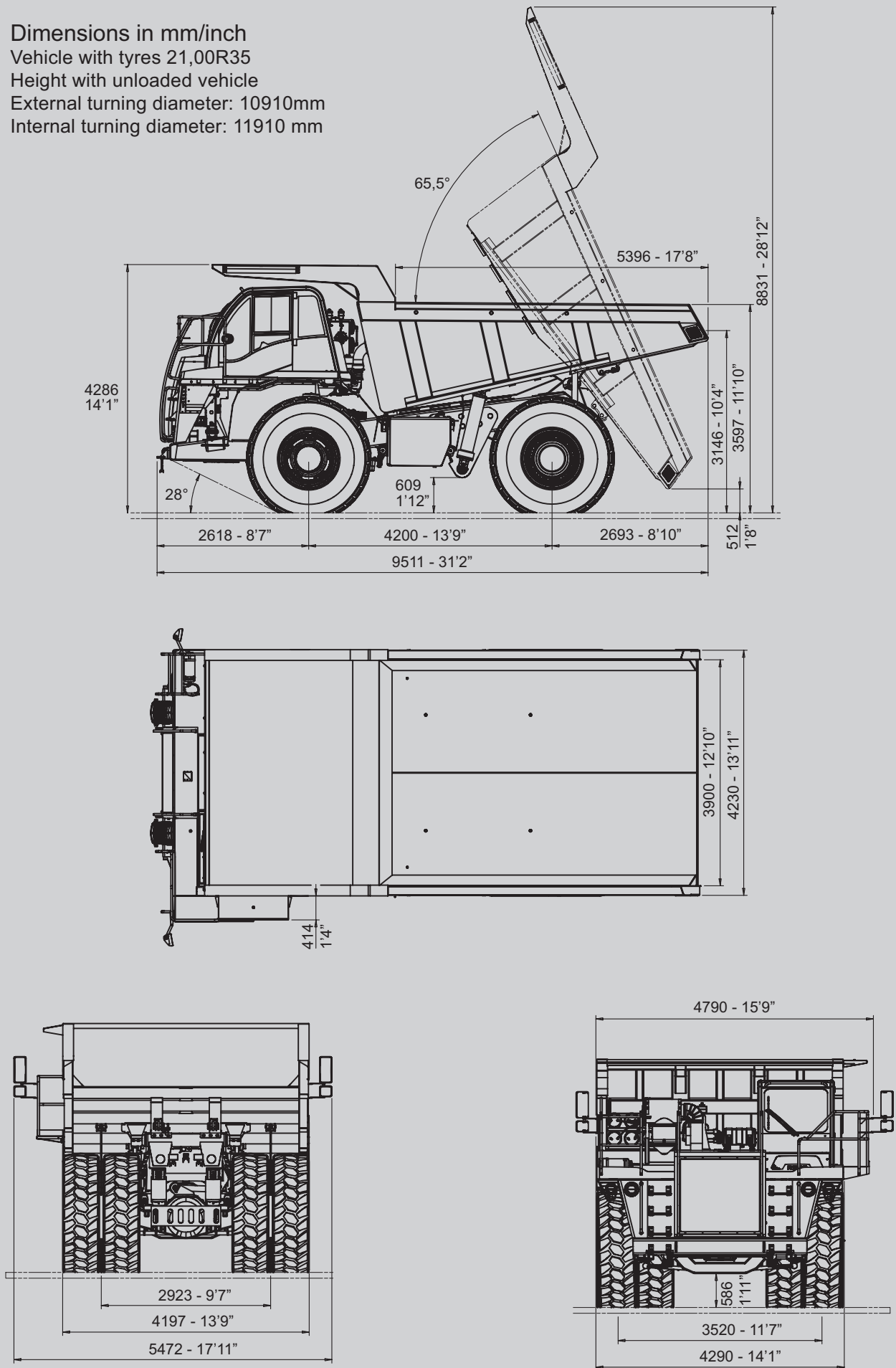


ROLLING RESISTANCE		
Road surface features	for gross weight t	%
Black top - Concrete	15kg	1,5%
Hard packed soil	20kg	2,0%
Mud on packed soil	40kg	4,0%
Packed snow	25kg	2,5%
Soft snow	45kg	4,5%
Sand - Gravel	100kg	10,0%

To determine retarding performance, read from G.V.W. down to the percent effective grade. From this point, read horizontally to the curve with the highest obtainable gear, then down to the maximum descent speed brakes can properly handle without exceeding cooling capacity.

Rigid Dumper RD 50

Dimensions in mm/inch
Vehicle with tyres 21,00R35
Height with unloaded vehicle
External turning diameter: 10910mm
Internal turning diameter: 11910 mm





Rigid Dumper **RD 50**



Characteristics and equipment are subject to changes without prior notice

M.K.T.- 06.09- A3501815

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DEALER