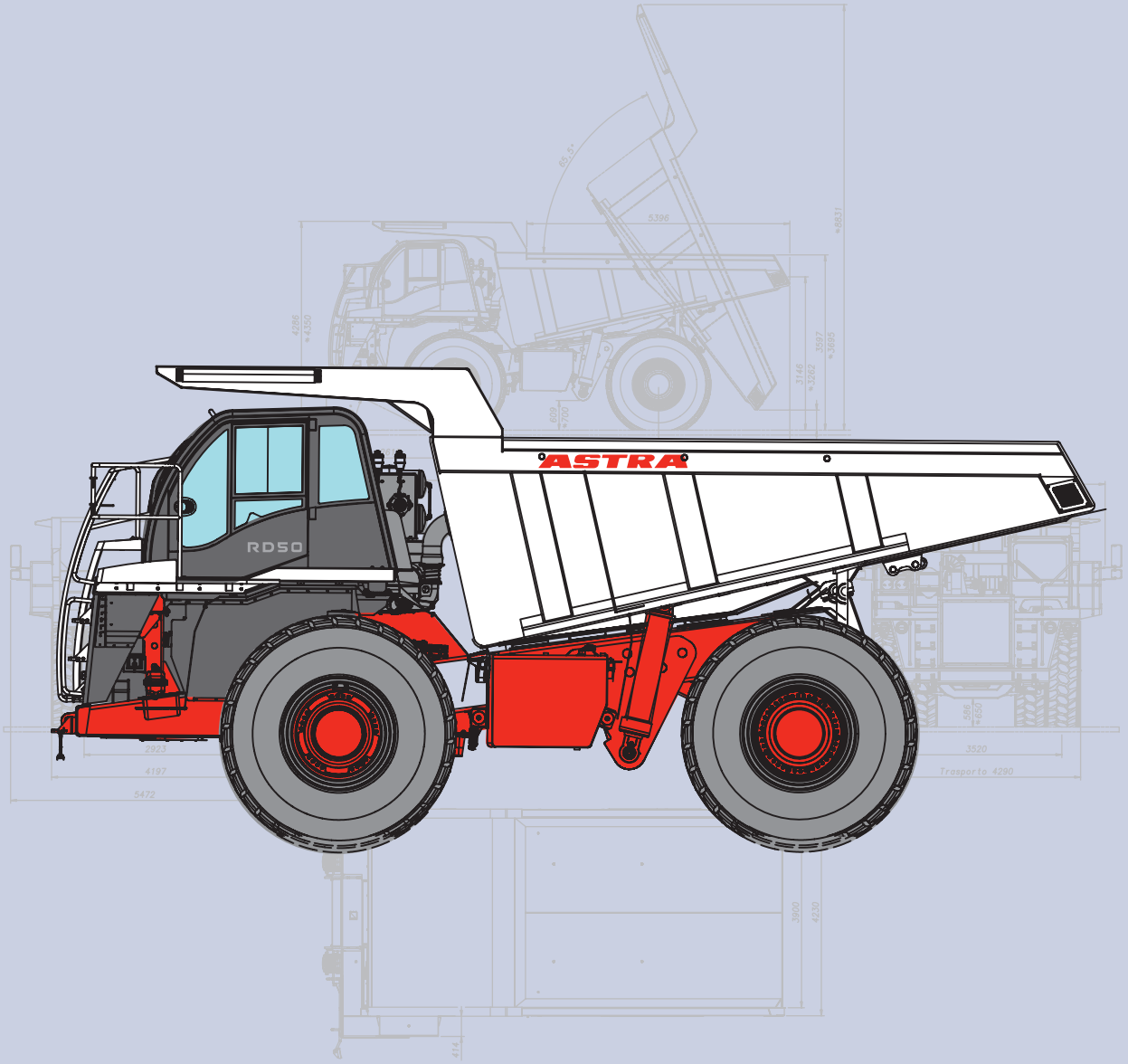
ASTRA

RD 50

Rigid Dumper



Engine	Deutz TCD 2015 V8
Power	500kW (680 CV)
G.V.W.	87.850 kg
Payload	50.000 kg
Capacity Struck	23 m^3
Heaped (SAE 2:1)	32 m^3

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 cm^3
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 rock version.

STEERING

Meets ISO5010, SAE J1511.
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 and ISO 3450.
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: ..... 23m^3 30yd^3
Heaped (SAE 2:1): ..... 32m^3 41 yd^3
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.

CAB

Complying with FOPS ISO 3449 level II.
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(l)

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.

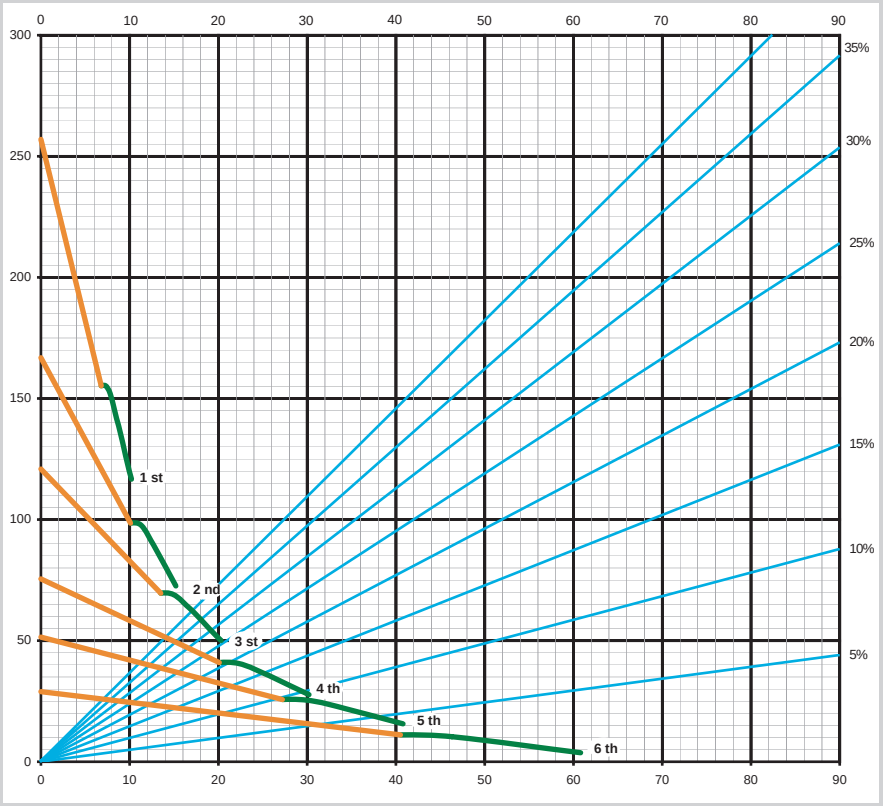
WEIGHTS Kg

	TARE (*) kg	TARE (*) lb	PAYLOAD kg	PAYLOAD lb	TOTAL WEIGHT kg	TOTAL WEIGHT lb
Front axle	20.290	44.732	9.810	21.627	30.100	66.358
Rear axle	17.560	38.713	40.190	86.602	57.750	127.315
Total	37.850	83.445	50.000	108.229	87.850	193.673

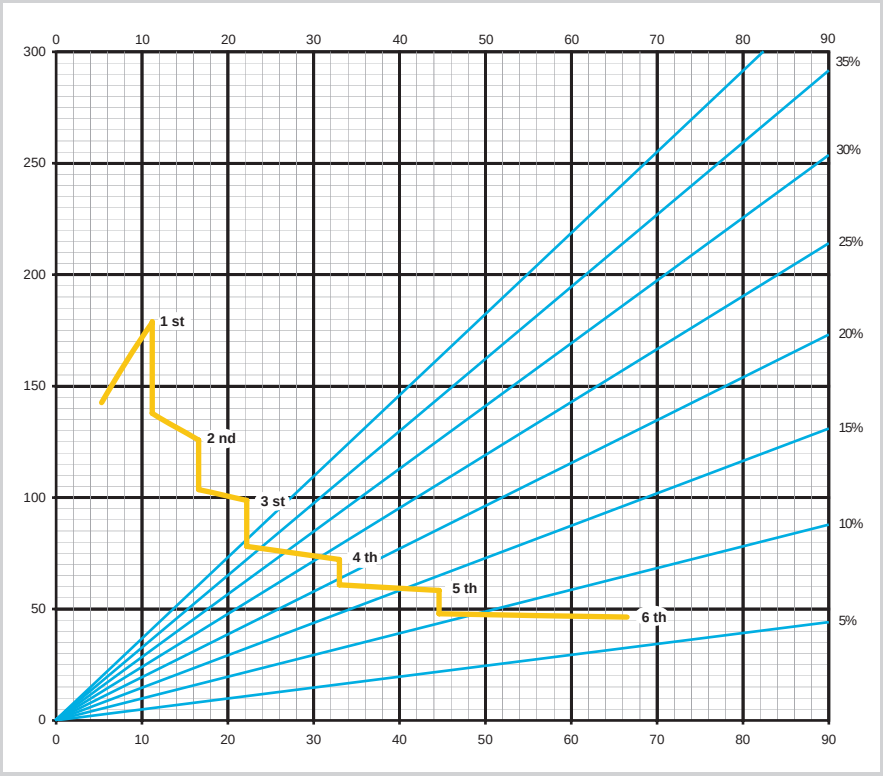
* Tare including fuel, lubricants and driver (75 kg / 165 lb)

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



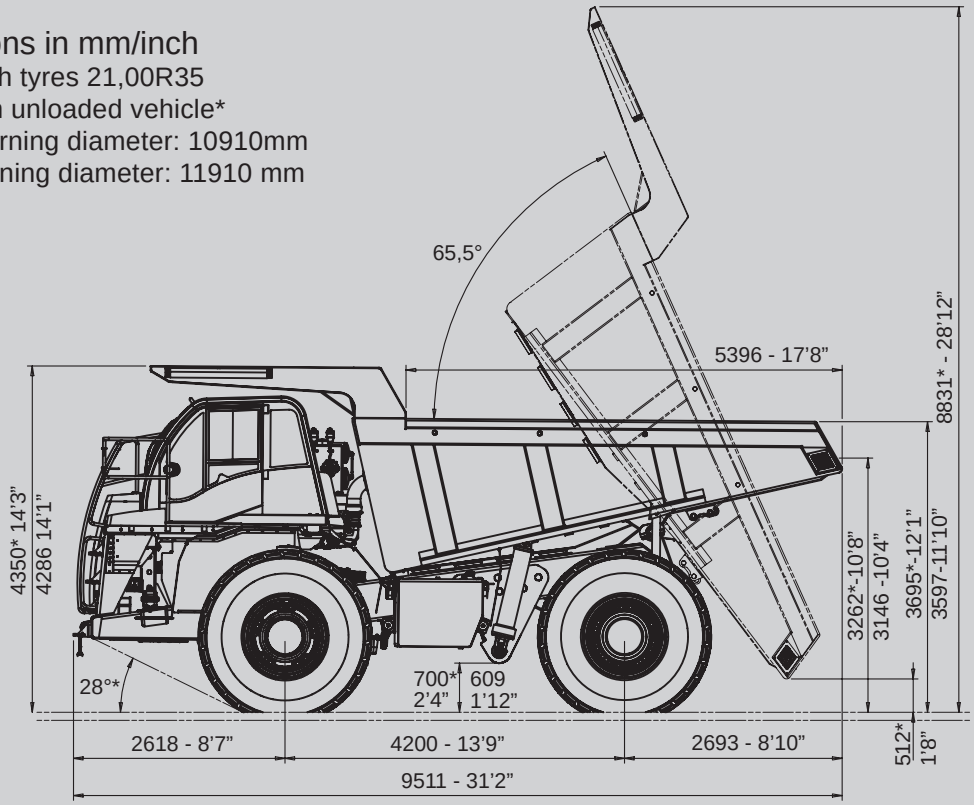
ROLLING RESISTANCE

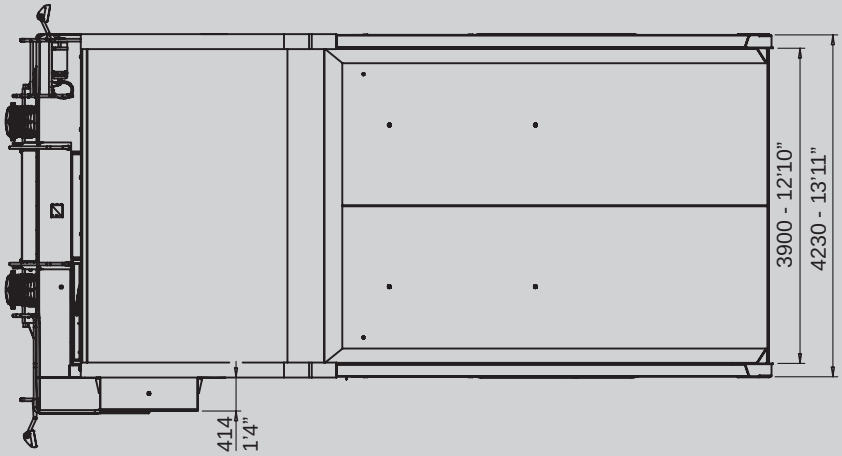
Road surface features	for gross weight t	%
Black top - Concrete	15kg	1,5%
Hard packed soil	20kg	2,0%
Mud on packed soil	40kg	4,0%
Packed snow	25kg	2,5%
Soft snow	45kg	4,5%
Sand - Gravel	100kg	10,0%

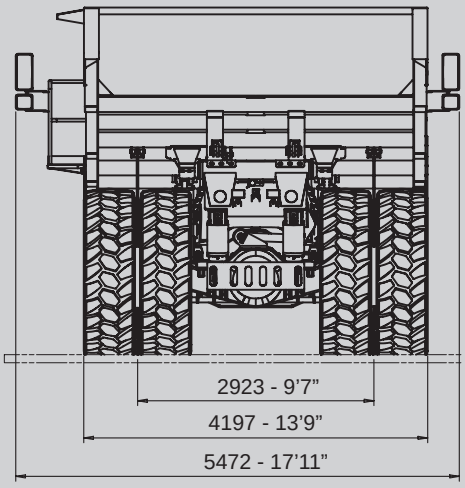
To determine retarding performance, read from G.V.W. down to the percent effective grade. From this point, read horizontally to the curve with the highest obtainable gear, then down to the maximum descent speed brakes can properly handle without exceeding cooling capacity.

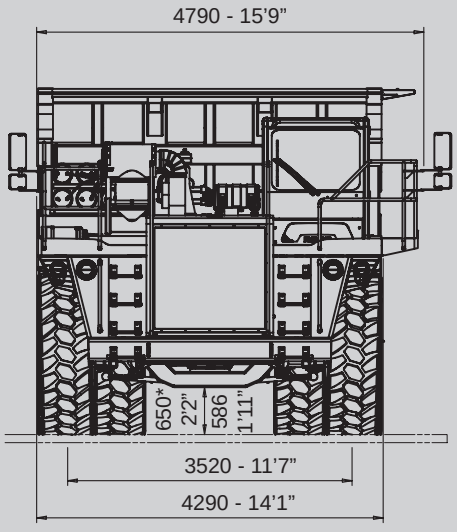
Dimensions in mm/inch

Vehicle with tyres 21,00R35
Height with unloaded vehicle*
External turning diameter: 10910mm
Internal turning diameter: 11910 mm









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Characteristics and equipment are subject to changes without prior notice

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ASTRA Veicoli Industriali S.p.A.
Via Caorsana, 79
29122 Piacenza (Italy)
Tel. ++39-523.5431
Fax ++39 523.591773
www.astraspa.com

DEALER