

- Engine *Iveco Cursor 13*
- Power *335kW (455 HP)*
- G.V.W. *66.000 kg*
- Payload *37.000 kg (40 Sht)*
- Body heaped (SAE 2:1) *22 m³*

Articulated Dumper 6X6 ADT 40D



ENGINE

6 in-line cylinder Diesel cycle, electronically-controlled direct injection, pump injectors, variable geometry turbocharger with intercooler.
 Emissions: EPA - CARB - OFF ROAD TIER 3
 Make and type: IVECO CURSOR 13
 Bore x stroke: 135x150 mm
 Total displacement: 12800 cm³
 Max power: 335 KW (455 HP) @ 2100 rpm
 Max torque: 2000 Nm @ 1185 rpm
 Integrated engine brake: Iveco Turbo Brake
 Air filter: dry, with double cartridge
 Cold start - 25° C



PERFORMANCE

With standard 29.5R25 tyres

gear	gear ratio	speed (km/h)
1	5,350	5,9
2	3,455	9,1
3	2,206	14,3
4	1,421	22,2
5	0,969	32,6
6	0,624	50,6
1 st RG	5,350	5,9
2 nd RG	2,206	14,3
3 rd RG	0,969	32,6



TRANSMISSION

Automatic ERGOPOWER ZF 6WG 310 transmission with 6 gears forward and 3 reverse.
 ECO (energy saving) and POWER (performance boosting) selectable modes.
 Hydraulic torque converter, multiplication ratio(stall torque): 1: 1,84
 Lock-up in all gears.
 Torque to front axle: 33,3%
 Torque to rear axles: 66,7%
 Hydraulic retarder max. braking power 242 kW @ 2100 rpm.
 Integrated and lockable transfer box.
 Integrated front differential with limited slip.



AXLES

Permanent 6x6 drive configuration, 2nd and 3rd axle ZF MT-D3105.
 Double reduction: central by bevel gear and final by planetary gears in wheel hubs. Lockable rear interaxle..
 Central reduction ratio: 1 : 3,5
 Final reduction ratio: 1 : 6,353
 Total reduction ratio: 1 : 22,24
 Floating front axle with outboard planetary reduction gearing (1:6) and gearbox integrated differential.



TYRES

Rim: 25x22x3"
 Tyres: 29,5 R25 Triangle TB 516
Optional: 29,5 R25 Michelin



STEERING

Complies with ISO 5010, SAE J 1511
 Hydraulic steering (ORBITROL) with flow amplifier integrated by two double-acting cylinders operating on the articulating hitch.
 Variable displacement pump.
 Pump flow: 331 l/min. @ 2300 rpm
 Max. operating pressure: 250 bars (25 Mpa)
 Radial piston emergency pump flanged to gearbox and ground driven
 Adjustable steering column/steering wheel.
 Steering angle: ± 45°



BRAKES

Independent circuit complying with ISO 3450.
 Oil-cooled wet multiple disc brakes, with engine powered gear pump and with two pressure accumulators.
 Overall braking surface: 5900 cm²
 Parking brake: pneumatically controlled disc on rear tandem.
 Electronic integrated Engine Brake and hydraulic retarder engagement when the accelerator pedal is released (exclusive Astra system).
 Max braking force 396 kW @ 2100 rpm.



SUSPENSIONS

Front: semi-independent, with "A" frame and PANHARD crossbar
 Hydro-pneumatic suspension cylinders (oil-nitrogen).
Rear: semi-independent rocker type, connected to axles by flexible joints and integrated with central reaction bars on axles.
Optional: front suspension inflation kit.



ELECTRICAL SYSTEM

Two batteries: 12 V / 170 Ah
 Voltage: 24 V
 Alternator: 90 A
 Starter: 5 kW
 All wires are coded, covered and fastened to the chassis.
 CAN bus Simple-Mux system allowing the communication between engine control unit (ECU), gearbox and Body Computer.
 New cluster with high definition multifunctional color display.
 New Black Box able to manage 140 records for each memory area.
Optional: Rear view camera with cluster integrated display.



HYDRAULIC SYSTEM

4 pumps, circuit: "load sensing" system with variable displacement pump flanged to gearbox for steering and tipping. One engine-driven pump for brake actuation, connected in series with 2 pumps for brake cooling with displacement electronic control. (Exclusive Astra System)



BODY

Walls and bottom in high abrasion strength steel (Hardox 400).

Bottom thickness: 15 mm 0.590 in

Side wall thickness: 12 mm 0.472 in

Front wall thickness: 10 mm 0.934 in

Lifting by two double-acting hydraulic cylinders with sections installed inside chassis members.

Elastic pads between body and chassis.

Tipping angle: 70°

Tipping time: 11 sec

Lowering time: 13 sec

Automatic body tipping control system.

Capacity:

struck: 17 m³ 22.2 yd³

heaped (SAE 2:1): 22 m³ 28.7 yd³

Optional:

Reinforced "semi-rock" body; "Extra Heavy Duty" body for extreme applications; body extensions; body heating kit; rear tailgate; body front spillguard.



INSTRUMENTS PANEL

On-board computer with digital/analogic instrumentation and performance/fault messages to manage all vehicle operating information (levels, warning lights, etc.). Advanced vehicle diagnostic system: management and storage of engine, transmission, steering system, brakes, body tipping and pneumatic system data.

Trip Computer to analyse vehicle productivity.

External level gauges on fuel, hydraulic oil and brake cooling oil tanks.

Optional:

Electronically controlled transmission and brake oil warm-up system for quick start-up in cold weather (exclusive ASTRA system).



GREASING SYSTEM

Automatic programmable and central greasing system with grease gauge on dashboard.



WEIGHT kg

	TARE (*)		PAYLOAD		TOTAL WEIGHT (G.V.W.)	
	Kg	lb	Kg	lb	Kg	lb
Front axle	14.340	31.614	4.960	10.935	19.300	42.549
Rear axles (tandem)	14.660	32.320	32.040	70.636	46.700	102.956
Total	29.000	63.934	37.000	81.570	66.000	145.505

*Tare includes fuel, lubricants and driver (75 kg)



CAB

Complies with ROPS ISO 3471 / FOPS ISO 3449 level II.

Stainless steel, soundproof and centrally installed, suspended through oil-rubber pads;

Reverse gear buzzer;

Automatic climate control with anti-pollen filter;

Hydraulic engine hood and cab tipping system;

Athermic glasses;

Side mudguards with gullwing opening for maintenance;

Door with glazing in the lower part to give maximum visibility;

Tilting cab on the LEFT-side to facilitate extraordinary maintenance activities;

Fully adjustable air suspension central operator seat with safety belts;

Instructor seat with belts;

Windscreen sunvisor.

Optional:

RDS radio;

Electrical engine hood tipping system;

Fire-Extinguisher; Yellow rotating beacon;

Work lights on top of the cab;

Refrigerator;

Remote-controlled heated rear view mirrors;

Side window wipers;

Rear view camera.



CHASSIS

Front and rear chassis made of high strength steel (ST 52.3) with extruded (non-welded) rectangular side members linked by bracing crossmembers.

Oscillating hitch: two rows ball bearing with double lip sealing.



FLUID CAPACITIES

Refer to the use and maintenance manual for fluids specifications.

Engine oil and filter: 35 l 9.2 US Gals

Transmission oil and filter: 35,5 l 9.4 US Gals

Cooling system: 47 l 12.4 US Gals

Fuel tank: 400 l 105.7 US Gals

Front differential: 14 l 3.7 US Gals

Intermediate axle: 34 l 9.0 US Gals

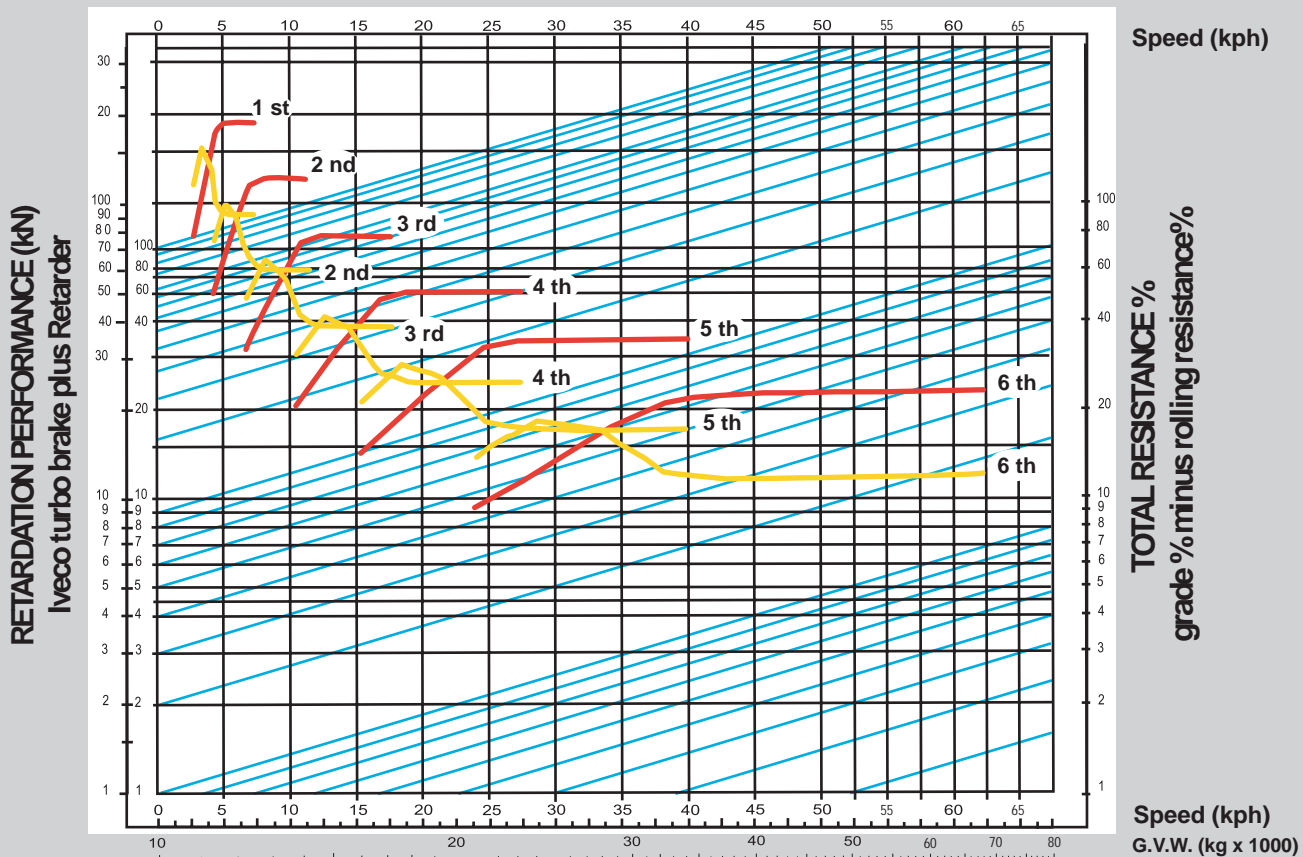
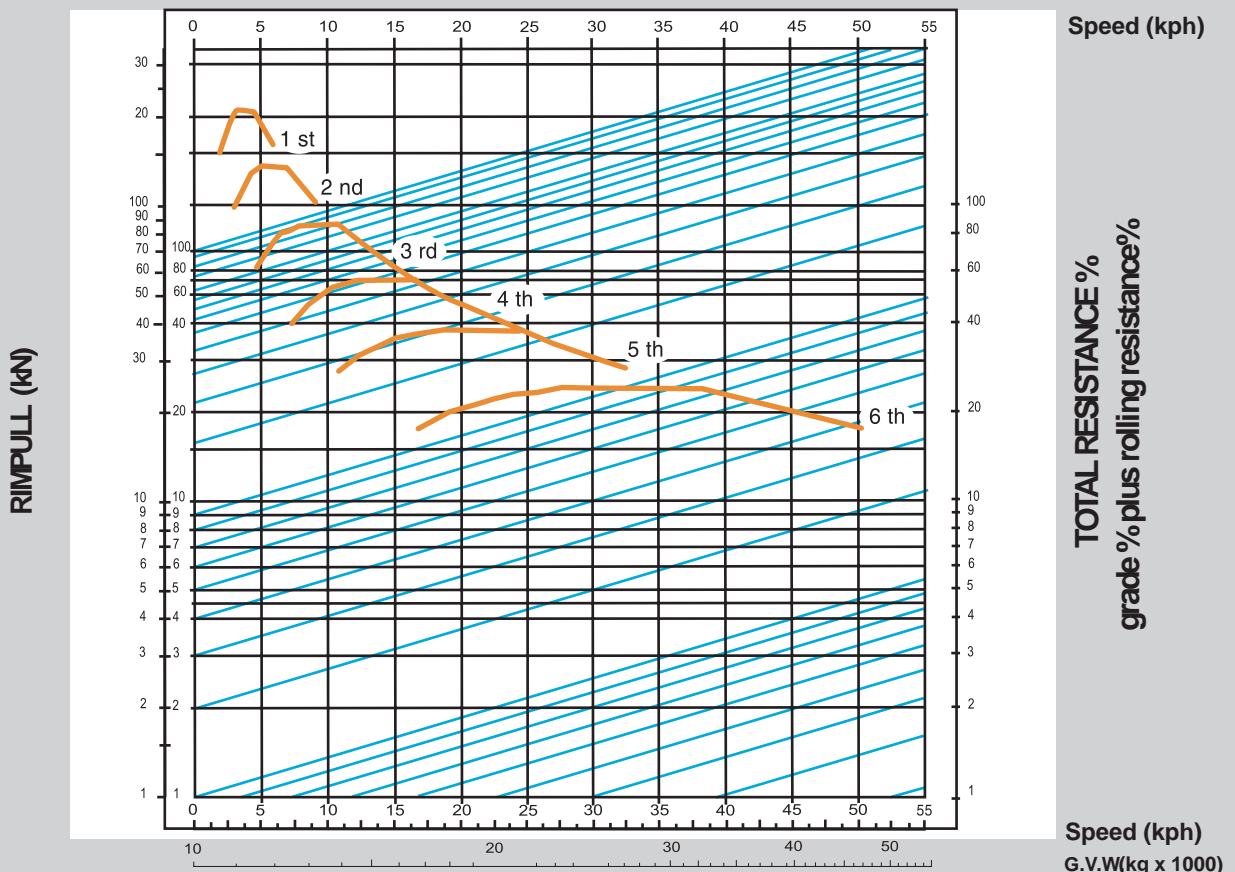
Rear axle: 33 l 8.7 US Gals

Hydraulic tank: 240 l 63.4 US Gals

Hub oil (per hub): 9 l 2.4 US Gals

Brakes cooling oil: 90 l 23.7 US Gals

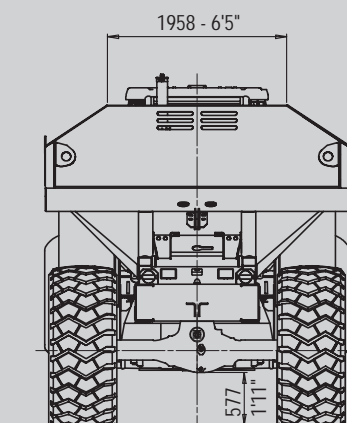
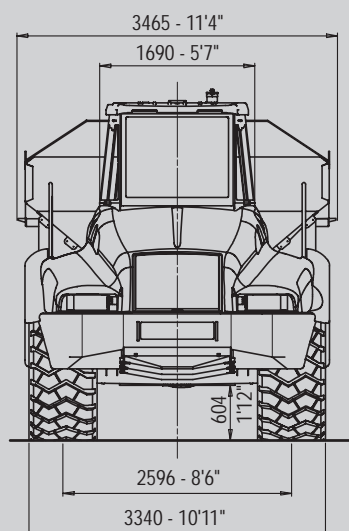
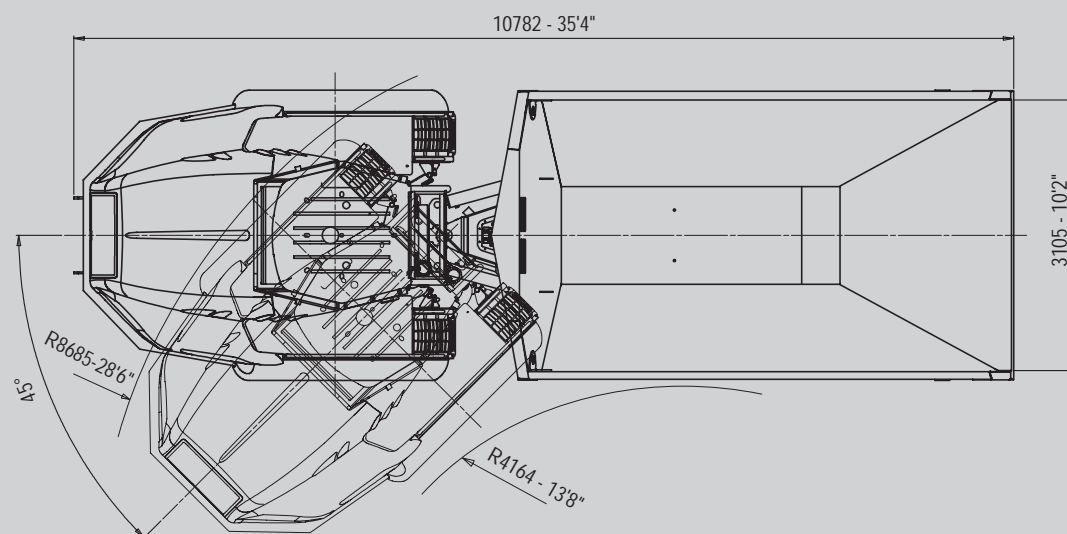
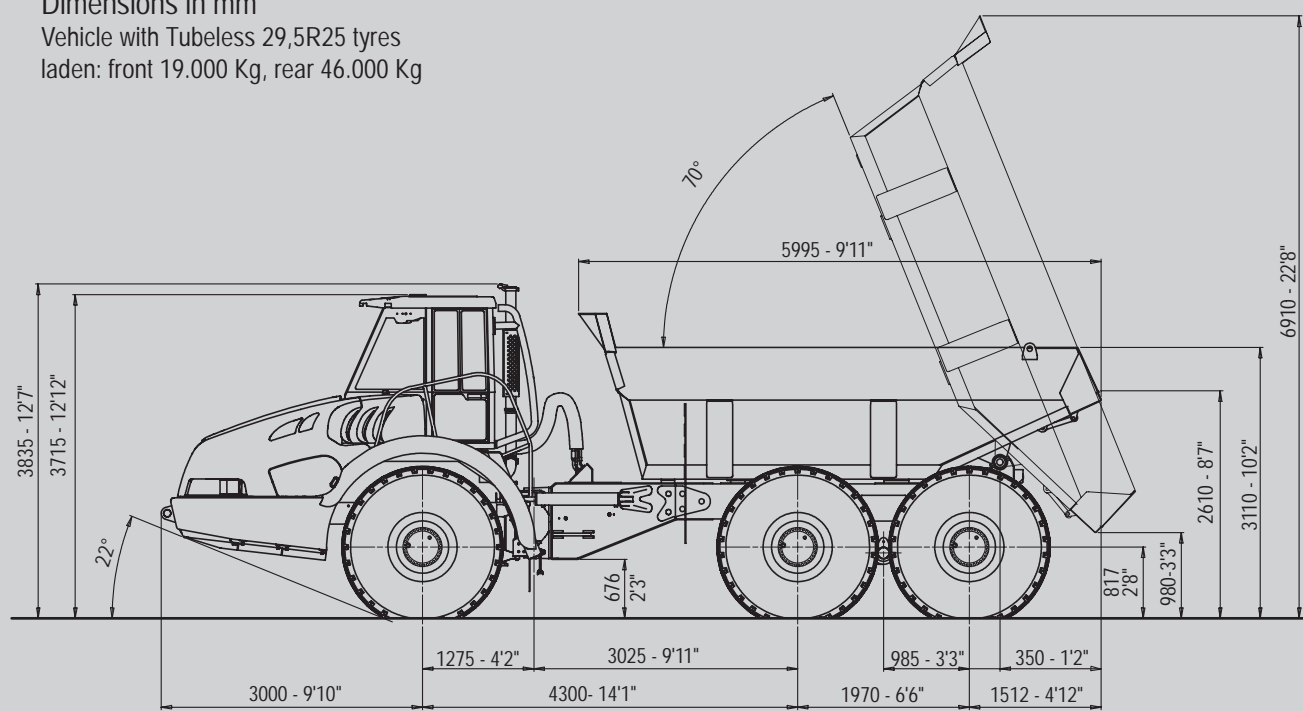
Cross the G.V.W. of the vehicle and the sloped line corresponding to the total resistance %, to determine on the left the corresponding gear and, coming down, the max. speed of the vehicle.



ROLL RESISTANCE		
Road surface Features	for each t G.V.W.	%
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%

Articulated Dumper ADT 40 D

Vehicle with Tubeless 29,5R25 tyres
laden: front 19.000 Kg, rear 46.000 Kg





Articulated Dumper **ADT 40D**



Features and equipment subject to change without notice

M.K.T.- 02.09- A3500

ASTRA Veicoli Industriali S.p.A.

Via Caorsana, 79
29100 Piacenza (Italy)
Tel. ++39-523.5431
Fax ++39 523.591773
www.astraspa.com

DEALER