

- **Engine** Iveco Cursor 13
- **Power** 340kW (463 HP)
- **Transmission** Automatic
- **G.V.W.** 65.000 kg
- **Payload** 36.000 kg (40 Sht)
- **Body struck** 17 m³
- **Body heaped (SAE 2:1)** 22 m³

ADT 40

Articulated Dumper 6x6

ENGLISH
09-2004



ENGINE

6-cylinder in-line Diesel cycle, electronically-controlled direct injection, pump injectors, turbocharger with intercooler, variable geometry turbine

Emissions: EURO3 / EPA - CARB - OFF ROAD TIER 2

Make and type: IVECO CURSOR 13

Bore x stroke: 135x150 mm (5.31" x 5.30")

Total displacement: 12800 cm³

Maximum power: 340 kW (463 CV) @ 2000 rpm

Maximum torque: 2000 Nm @ 1000 rpm

Integrated engine brake: Iveco Turbo Brake

Low temperature starting system -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 power-shift transmission with 6 gears forward and 3 reverse.

Hydraulic torque converter, multiplication ratio(stall torque): 1: 1.84

Lock-up clutch in all gears.

Torque to front axle: 33.3%

Torque to rear axles: 66.7%

Hydraulic retarder max. braking power 242 kW @ 2100 rpm.

Helical splitter lockable from driver's seat.

ECO (energy saving) and POWER (performance boosting) selectable modes.

Front integrated self-locking differential.



AXLES

permanent 6x6 drive configuration, ZF MT-D3105 stiff intermediate and rear axles.

Double reduction: central with bevel gear and epiciclical gears in wheel hubs

Central axle with differential operator selectable from the cab electronic coupling.

Central reduction ratio: 1 : 3.5

Final reduction ratio: 1 : 6.353

Overall reduction ratio: 1 : 22.24

Floating front axle with epiciclical gears in wheel hubs (1:6.353) and differential built-in gearbox.



PNEUMATICS

Interchangeable wheels with steel web 25x22x3"

Tubeless radial tyres 29.5 R 25



STEERING

Complies with ISO 5010, SAE J 53

Hydrostatic steering (orbitrol) with Q-amp system by two double-acting cylinders. Variable displacement axial piston pump. Variable displacement axial piston pump.

Pump delivery: 331 l/min @ 2300 rpm

Max. working pressure: 250 bars (25 Mpa)

Radial piston emergency pump flanged to gearbox operated by transmission.

Steering column/steering wheel.

Adjustable steering angle: ± 45°



BRAKES

Independent circuit complies with ISO 3450/SAE J 1473

Multiple plate wet disc brakes on all axles with hydraulic command with gear pump powered by the engine and by two pressure accumulators.

Overall braking surface: 5900 cm²

Pneumatically controlled disc parking brake on rear tandem propeller shaft.

Integrated electronically controlled auxiliary braking system with **exhaust brake** and hydraulic retarder and possibility of automatic operation when accelerator pedal is released (exclusive Astra system).

Braking force max. 396 kW @ 2100 rpm.



SUSPENSIONS

Front: semi-independent, "A" mount with PANHARD crossbar Hydro-pneumatic suspension cylinders (oil-nitrogen).

Rear: semi-independent rocker type, connected to axles by flexible joints with central reaction bars installed on axles.

Optional: front suspension inflation kit.



ELECTRICAL SYSTEM

Two batteries: 12 V / 170 Ah

Voltage: 24 V

Alternator: 90 A

Starter motor: 5 kW

All wires are number coded, protected by sheaths and fastened to the chassis.

CAN bus Multiplex system for engine ECU, transmission ECO and Body Computer communication.

Dash with multifunctional integrated graphic display.



HYDRAULIC SYSTEM

Hydraulic circuit fitting 5 pumps. Hydraulic "load sensing" system with variable displacement pump flanged to gearbox for steering and tipping. Two pumps operated by engine, one for controlling engine cooling fan and one for actuating braking. The latter pump operates two pumps in series for circulating brake cooling oil. Electronically controlled flow. Patent-pending exclusive ASTRA system.



BODY

Walls and bottom in high abrasion strength steel
 Hardness: HB 400
 Yield index: 1000 N/ mm²
 UTS: 1250 N/ mm²
 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 4 telescopic sections installed inside inside chassis members.
 Flexible mounts between body and chassis.
 Tipping angle: 70°
 Tipping time: 11 sec
 Lowering time: 13 sec
 Tipping control potentiometer angle sensor.
 Capacity:
 struck: 17 m³ 22.24 yd³
 heaped (SAE 2:1): 22 m³ 28.77 yd³
Optional:
 Body heater
 Extra body side walls
 Mechanical opening rear wall
 Reinforced rock body
 Automatic body tipper control system



CHASSIS

Both front and rear chassis are made of high strength steel (ST 52.3) extruded (non-welded) rectangular tubular side members and linked by bracing crossmembers.
 Chasses joined by fifth-wheel type articulated joint with double ball crown and double lip seal ball joints.



GREASING SYSTEM

The 12 points in front unit + 14 points in rear unit subject to wear are connected to an automatic programmable centralised greasing system with lubricant gauge in cab.



WEIGHT kg

	TARE (*)		PAYLOAD		TOTAL WEIGHT (G.V.W.)	
	Kg	lb	Kg	lb	Kg	lb
Front axle	14.340	31.614	4.660	10.274	19.000	41.888
Rear axles (tandem)	14.660	32.320	31.340	69.093	46.000	101.412
Total	29.000	63.934	36.000	79.366	65.000	143.300

* Tare includes fuel, lubricants and driver (70 kg)



CAB

Complies with ROPS SAE J 1040, ISO 3471 / FOPS SAE J231, ISO 3449.
 Stainless steel, soundproofed and centrally mounted.
 Left-hand tipping for easy supplementary servicing.
 Central universally adjustable air ride drive seat.
 Instructor's seat.
 Cab suspension system with oil-rubber cab mounts.
 Automatic air-conditioning control system with pollen filter.
 Hydraulic tipping engine bonnet.
 Tinted windows.
 Door with lower glazing for maximum visibility.
 Standard instruments and accessories.
 Side mudguards with gullwing action for supplementary servicing.
Optional:
 RDS radio
 Rearview video camera
 Rotating beacon
 Remote-controlled heated rear view mirrors
 Electrical bonnet/cab tipping system
 Side window wipers



INSTRUMENTS

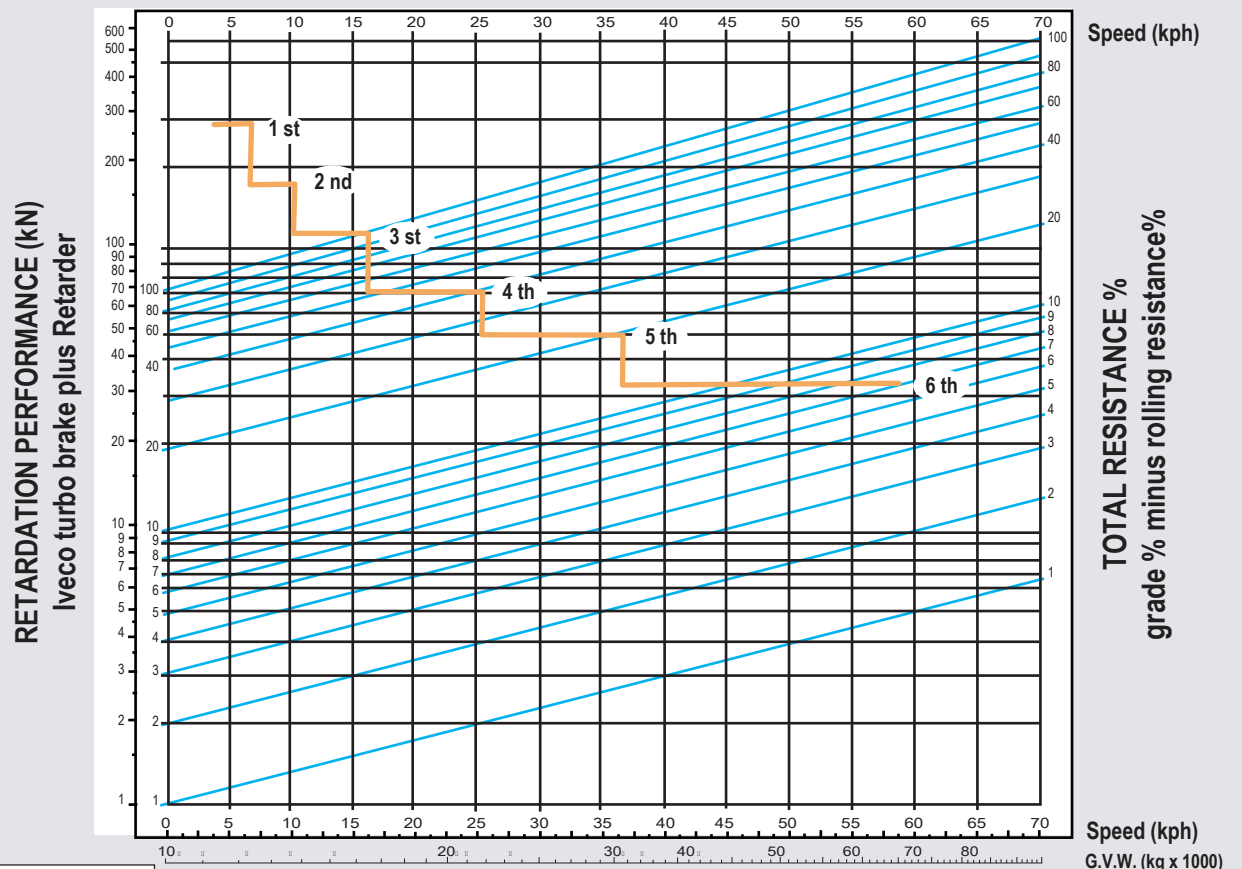
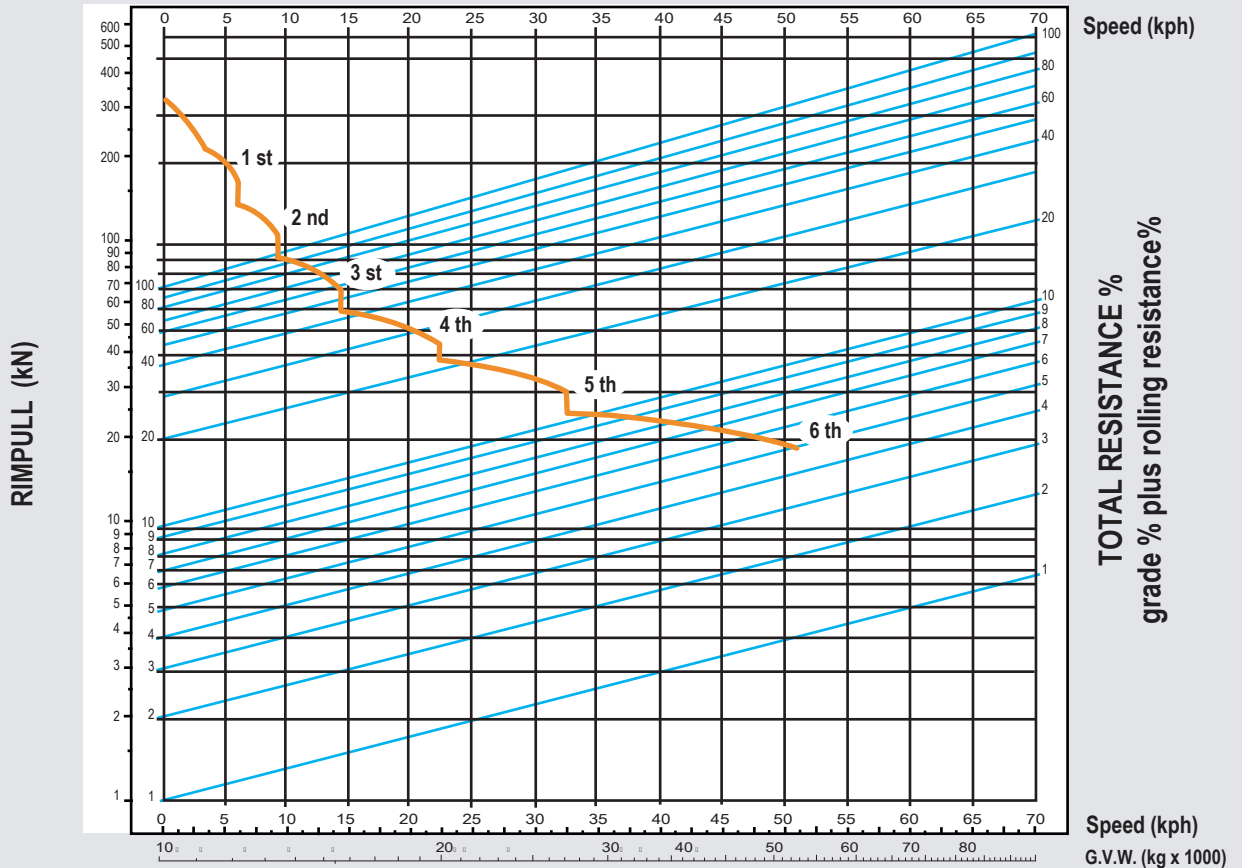
Onboard computer for managing all vehicle operational data (levels, overheat warning lights, unit anomalies, etc.)
 External level gauges on fuel, hydraulic oil and brake cooling oil tanks
Optional:
 Electronically controlled transmission and brake oil warm-up system for quick start-up in cold weather. Trip Computer. Patent-pending exclusive ASTRA system



FLUID CAPACITIES

Refer to the use and maintenance manual for fluids specifications.
 Engine oil: 35 l 9.2 US Gals
 Gearbox oil: 35.5 l 9.4 US Gals
 Cooling circuit: 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 circuit: 300 l 79.3 US Gals
 Oil hub (per hub): 9 l 2.4 US Gals
 Brakes oil cooling: 100 l 26.4 US Gals

From intersection of Vehicle Weight with Total Resistance Line, read across the gear attainable and then, downwards, the maximum speed.

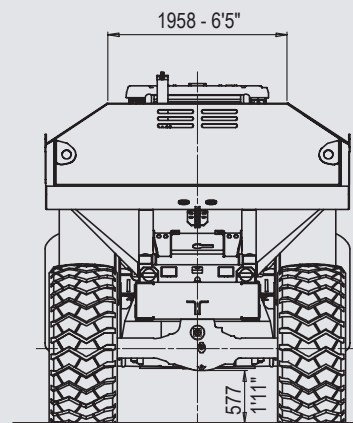
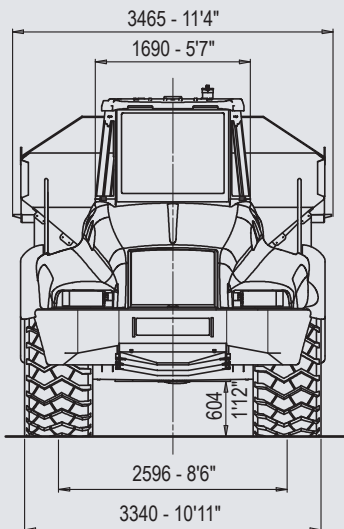
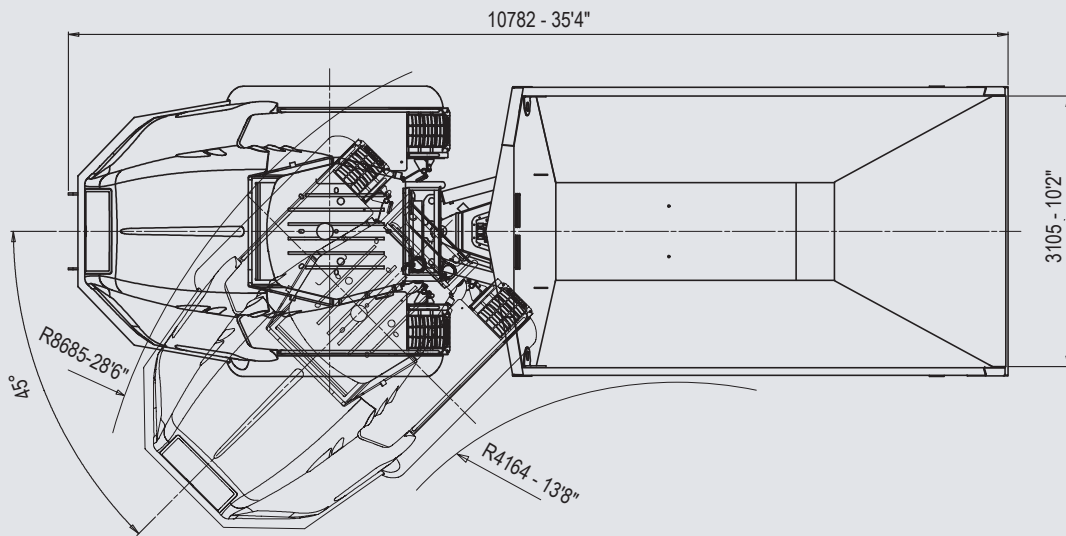
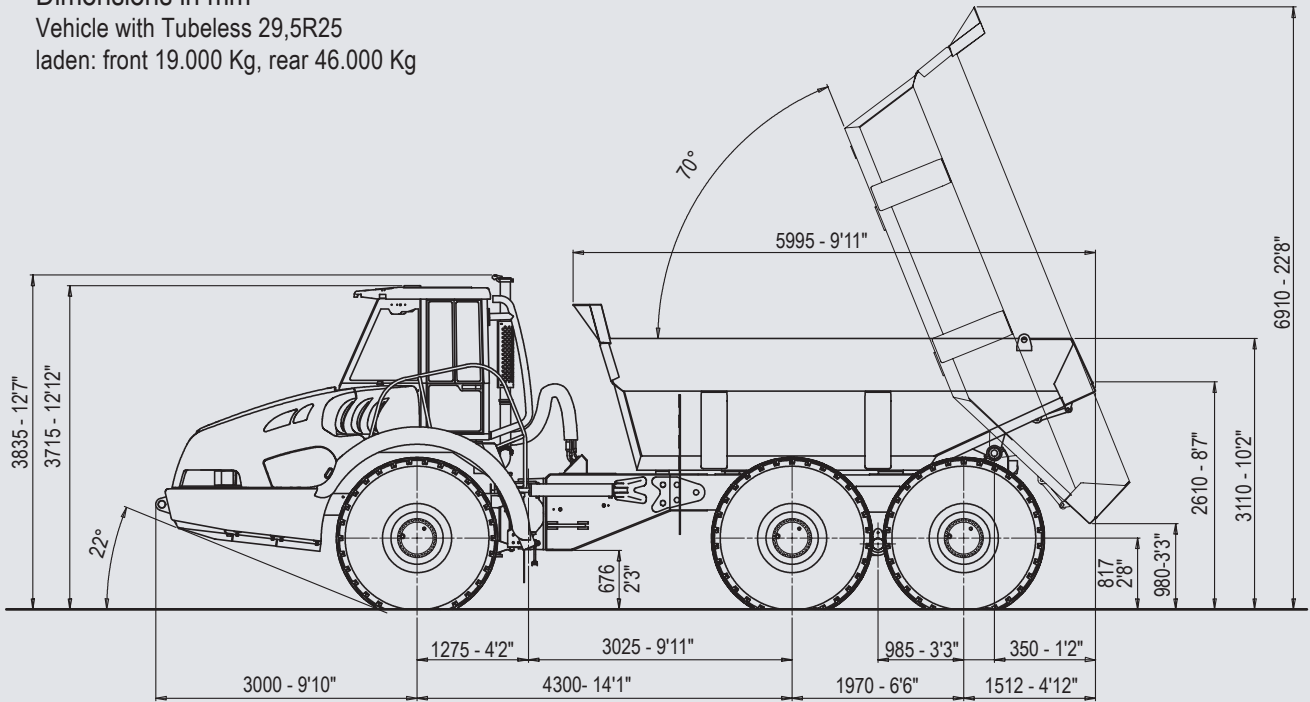


ROLL RESISTANCE		
Road surface Features	for each t G.V.W.	%
Black top-concrete	15kg □	1,5%
Hard packed soil	20kg □	2,0%
Mud on packed soil	40kg □	4,0%
Packed snow	25kg □	2,5%
Soft snow	45kg □	4,5%
Sand-gravel	100kg □	10,0%

Dimensions in mm

Vehicle with Tubeless 29,5R25

laden: front 19.000 Kg, rear 46.000 Kg





Articulated Dumper **ADT 40**



Features and equipment subject to change without notice

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