

- **Engine** Iveco Cursor 13 **TIER 3**
- **Power** 335kW (455 HP)
- **Transmission** Automatic
- **G.V.W.** 66.000 kg
- **Payload** 37.000 kg (40 Sht)
- **Body struck** 17 m³
- **Body heaped (SAE 2:1)** 22 m³

ADT 40C

Articulated Dumper 6x6

**ENGLISH
03-2007**



ENGINE

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

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 drive 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%

Optional:

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, 2nd and 3rd axle ZF MT-D3105.

Double reduction: central with bevel gear and epicyclic 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

Total reduction ratio: 1 : 22,24

Floating front axle with epicyclic gears in wheel hubs (1:6) and differential built-in gearbox.



TYRES

Interchangeable wheels with steel web 25x22x3"

Tubeless radial tyres 29,5 R25 Michelin/Bridgestone/Continental

Optional: 850/65 R25 Michelin, 800/65 R29 Goodyear



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 flow: 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.

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 on axles.

Optional: front suspension inflation kit.



ELECTRICAL SYSTEM

Two batteries: 12 V / 170 Ah

Voltage: 24 V

Alternator: 90 A

Starter engine: 5 kW

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

CAN bus Multiplex system which allows the communication between engine's central system, change and Body Computer.

Dash with multifunctional integrated graphic display.



HYDRAULIC SYSTEM

Hydraulic circuit fitting 2 pumps. Hydraulic "load sensing" system with variable displacement pump flanged to gearbox for steering and tipping. One pump operated by the engine for brakes' starting.



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 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 22.2 yd³
 heaped (SAE 2:1): 22 m³ 28.7 yd³

Automatic body tipper control system.

Optional:

- Body heater
- Extra body side walls
- Tailgate
- Reinforced rock body



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

22points 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 | 4.960 | 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 (70 kg)



CAB

Complies with ROPS SAE J 1040, ISO 3471 / FOPS SAE J231, ISO 3449.

Stainless steel, soundproofed and centrally mounted.

- Sound advisor reverse gear;
- Automatic climate control with pollen filter;
- Motor bonnet and cab with hydraulic overturn;
- Athermic glasses;
- Side mudguards with gullwing action for supplementary servicing;
- Door with glazing in the lower part to give maximum visibility;
- Overturn on LEFT-side to facilitate the operations of extraordinary maintenance;
- Central driver's seat with universal adjustment and pneumatic suspension;
- Instructor's seat;
- Cab suspension system with oil-rubber cab mounts;
- Standard instruments and accessories;
- Windscreen sun screen.

Optional:

- RDS radio;
- Electrical bonnet tipping system;
- Fire-Extinguisher;
- Rotary light on cab;
- Working lamps;
- Refrigerator;
- Remote-controlled heated rear view mirrors;
- Side window wipers;
- Reverse gear videocamera.



INSTRUMENTS

Onboard computer for managing all vehicle operational data (levels, overheat warning lights, unit anomalies, etc.).
 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. Patent-pending exclusive ASTRA system.

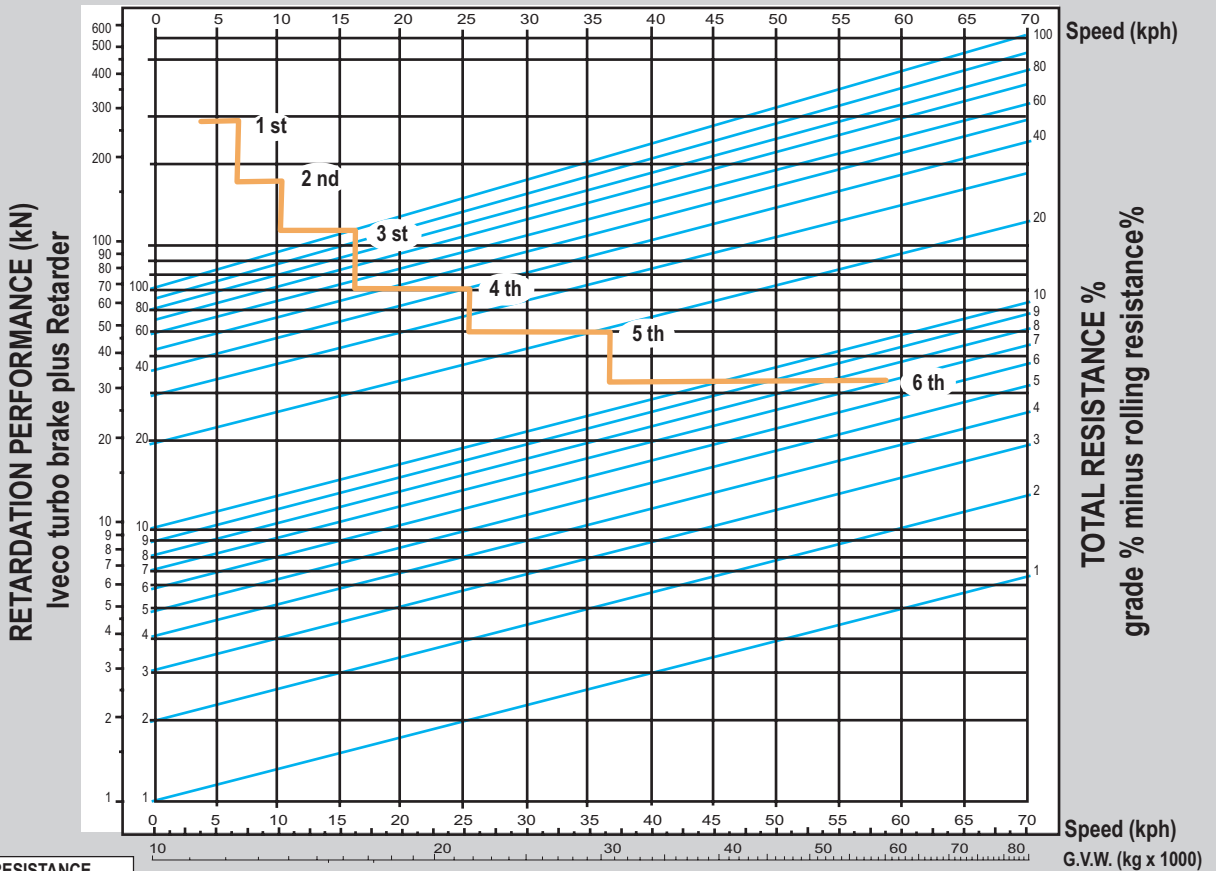
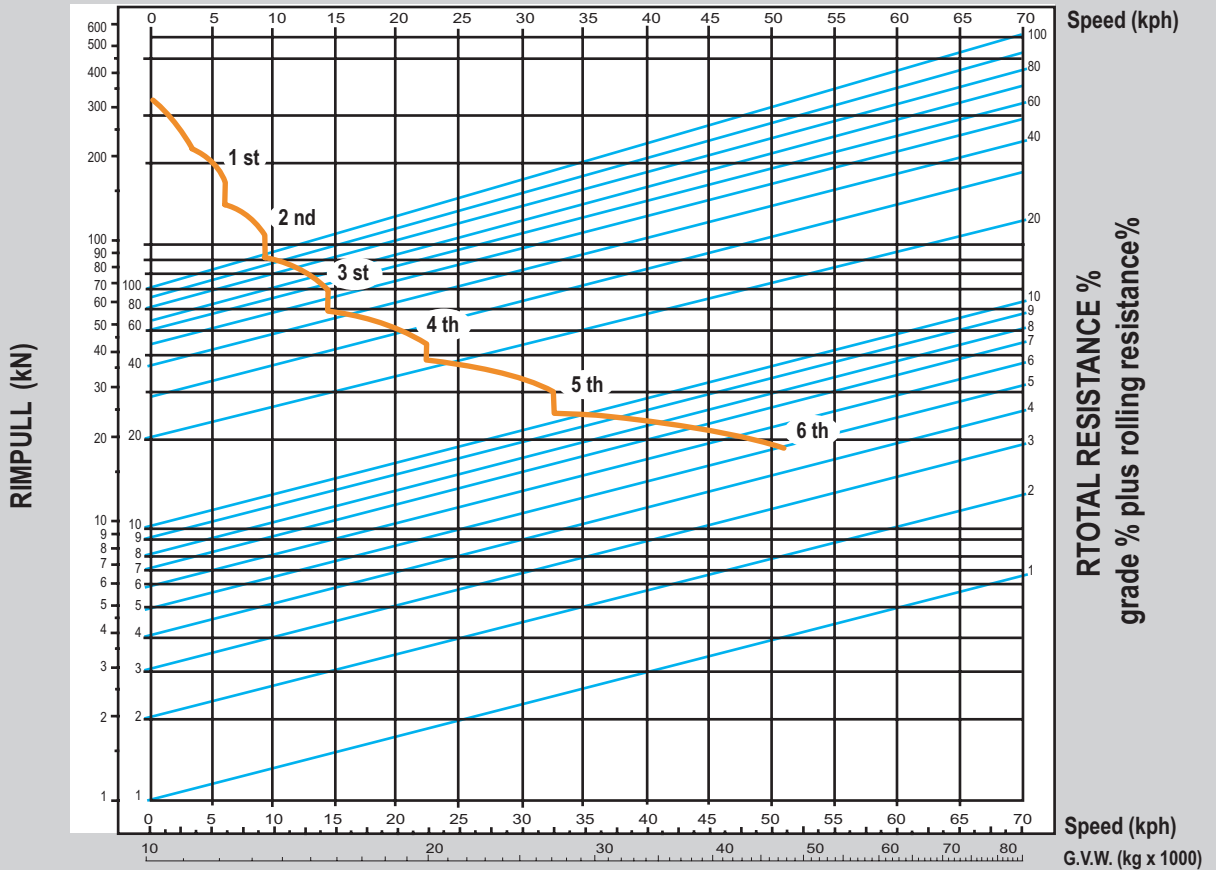


FLUID CAPACITIES

Refer to the use and maintenance manual for fluids specifications.

Engine oil and filter: 35 l 9.2 US Gals
 Transmission and filter: 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 tank: 240 l 63.4 US Gals
 Oil hub (per hub): 9 l 2.4 US Gals
 Brakes oil cooling: 90 l 23.7 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 | % |
| 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

