

4206D

CONSTRUCTION
SCRAPER
TRACTOR



key features

- **Gross Power** 315 kW (422 hp)
- **Gross Torque** 2 000 Nm (1,473 lbft)
- **Gross Weight** 22 140 kg (48,810 lbs)



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ENGINE

Configuration	Mercedes Benz OM501LA V-6
Aspiration	Turbocharged and intercooled
Cooling System	Liquid cooled with single pass radiator as well as charge air cooler
Gross power	315 kW (422 hp) @ 1 800 rpm SAE J1349
Net Power	308 kW (413 hp) @ 1 800 rpm
Gross torque	2 000 Nm (1,473 lbf) @ 1 080 rpm SAE J1349
Net Torque	1 974 Nm (1,453 lbf) @ 1 080 rpm
Displacement	11,95 litres (730 cu.in)
Fuel tank capacity	485 ℓ (128 US gal)

TRANSMISSION

Layout	Allison HD 4060
Gear layout	Engine mounted box with rear output Constant meshing planetary gears, clutch operated
Gears	6 Forward, 1 Reverse
Clutch type	Hydraulically operated multi-disc
Control type	Electronic
Torque converter layout	Hydrodynamic, with lock-up in all gears
Vehicle speeds	1st 2nd 3rd 4th 5th 6th R
km/h	7,6 14,0 18,7 26,7 36,2 39,0 5,6
mph	4,7 8,7 11,6 16,6 22,5 24,2 3,5

TRANSFER CASE

Layout	VGR 17000
Output differential	Three in-line helical gears Interaxle differential, pneumatically lockable whilst stationary or on the move.

AXLES

Differential type	Bell 25 tonne Spiral bevel type with Controlled Traction Differentials (CTD)
Final drive type	Outboard heavy duty planetary
Housing type	Steel fabricated

BRAKING SYSTEM

SERVICE BRAKE	Dual circuit, full hydraulic actuation ventilated dry disc brakes
Maximum brake force	134 kN (30,124 lbf)
PARK & EMERGENCY	Spring applied, air released driveline-mounted disc.
Maximum brake force	440 kN (98,920 lbf)
Auxilliary Brake	Automatic exhaust brake and Engine Valve Brake (EVB)

WHEELS

Tyre	875/65R29
Size Type	Radial Earthmover

SUSPENSION

Front type	Semi-independent leading A-frame supported by nitrogen/oil struts
Rear type	Solid mounted

HYDRAULIC SYSTEM

	Full load sensing system serving the prioritized steering, scraper and brake functions. A ground-driven, load sensing emergency steering pump is integrated into the main system
Pump Type	Variable displacement, loadsensing piston
Application	Steering, scraper operation, hydraulic brake charging and cooling fan drive
Flow:	300 ℓ/min (79,26 US gal/min)
Pressure:	20 MPa (2,900 psi)

HYDRAULIC SYSTEM

(continued)	
Scraper Configurations	2 Scrapers: 3 controls per scraper 3 Scrapers: 2 controls per scraper

Hydraulic Control Valve - Scrapers

The Control Valve is a stackable multi-section, load sensing, pressure compensated, proportional directional valve with port relief valves in the down ports. The valve consists of 6 sections. Coupling is done via 12 female quick couplers situated on the rear of the machine.

Electro Hydr. controls - Scrapers

Parker Hydraulics IQAN System. Fully programmable. Hydraulic Flow Rates can be adjusted on Display Module.

PNEUMATIC SYSTEM

System pressure	Air drier with heater and integral unloader valve, serving park brake and auxiliary functions 810 kPa (117 psi)
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ELECTRICAL SYSTEM

Voltage	24 V
Battery type	Two maintenance free permanently sealed
Battery capacity	2 x 105 Ah (optional 2 extra batteries)
Alternator rating	28 V 100 A

STEERING SYSTEM

Angle	Hydrostatically actuated by two double acting cylinders, with ground-driven emergency steering pump. +/- 42 degrees
Lock to lock turns	4,7

OPERATING WEIGHTS

Front	14 540 kg (32,055 lbs)
Rear	7 600 kg (16,755 lbs)
Gross Weight	22 140 kg (48,810 lbs)

STANDARD EQUIPMENT

Cab	ROPS/FOPS certification • Handrails on fenders • Tilt cab for service access • Gas strut supported door • Tinted safety glass • Sliding windows • Rearview mirrors- regular and wide angle • Sun visor • Wiper/washer with intermittent control • Rear window wiper/washer • Tilt and telescoping steering wheel • Adjustable, air suspension seat with retractable seat belt, rotated by 15 degrees • Fold-away trainer seat with retractable seat belt • HVAC climate control system with filtered and ducted air • Air horn • Overhead console for FM and 2-way radio, compartments for storage, electrical relays and circuit breakers • Ashtray • Drinks holder • Cooled/heated lunchbox • Wheel spanner set
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MDU Features • Trip timer • Trip distance • Diagnostics • Intermittent wiper timing control • Speedo calibration for alternative tyre sizes • Metric /Imperial unit selection • Warning lights with audible buzzer

4206D CONSTRUCTION SCRAPER TRACTOR

STANDARD EQUIPMENT (continued)

Analogue Gauges • Engine coolant temperature • Engine oil pressure • System air pressure • Transmission oil temperature • Fuel • Speedometer

LCD Display • Transmission gear selection • Tachometer • Battery voltage • Hourmeter • Odometer

Brakes Vented dry disc calipers on front and rear axles
Fully hydraulically actuated
Spring applied air release park brake on rear driveshaft

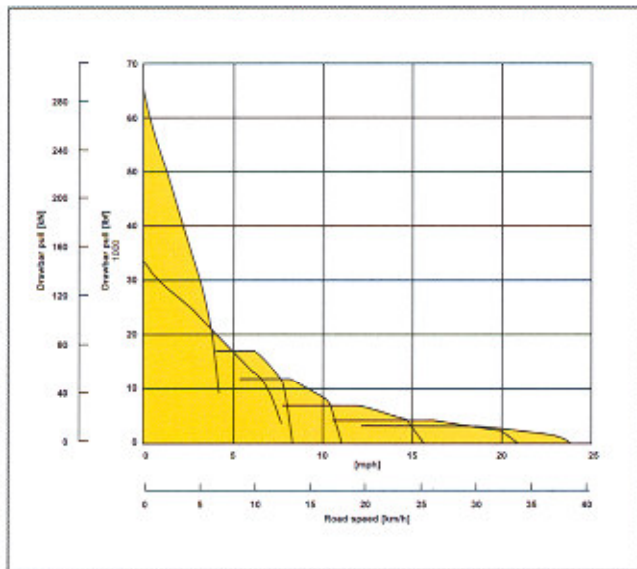
Other Ground driven emergency steering
Tow recovery cable

OPTIONAL EQUIPMENT

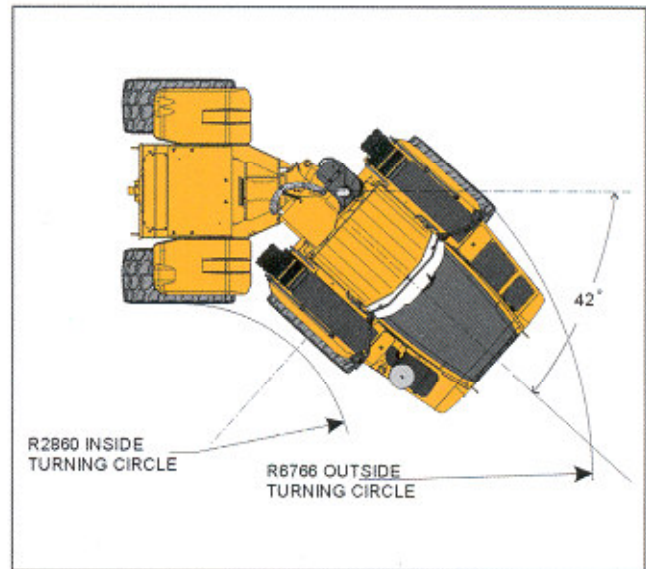
(Factory and field installed)
29.5R25 radial earthmover tyres
Groeneveld central lubrication system
Flashing beacon
Work lights
Artic reverse light
Electrical horn
2 extra batteries
Fuel filter heating element
Electric adjust and heated mirrors (one per side)
Dual circuit oil immersed multidisc brakes on front and rear axles with remote multidisc brake cooler

Provision for: FM and 2-way radios
Wiggins quick fueling system

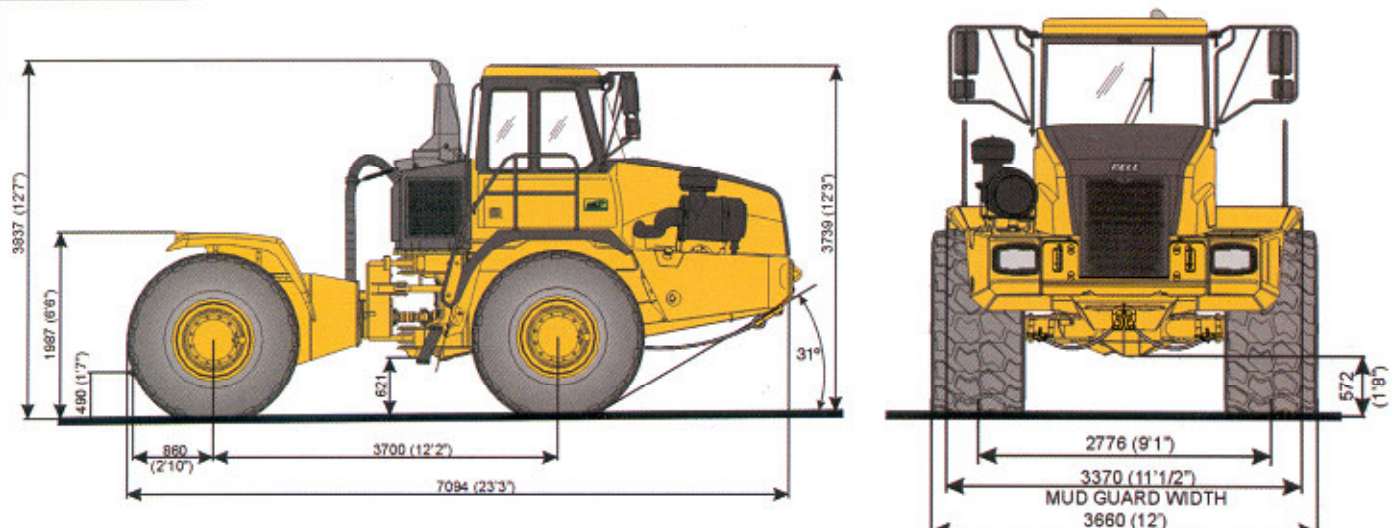
DRAWBAR PULL GRAPH



TURNING RADIUS



TURNING RADIUS



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What makes the 4206D the Ultimate Scraper Tractor...

- **True construction machine heritage.**
- **Heavy duty drivetrain, transmission and axles designed for 60 ton + gross weight application.**
- **Supreme driver comfort from a nitrogen over oil strut semi independent suspension system.**
- **Programmable Hydraulic Control System permitting fine tuning of the Scraper controls.**
- **Torque converter drive with lock up clutch provides torque multiplication while reducing drivetrain shock loads.**
- **Lock up clutch provides direct drive economy.**

BELL EQUIPMENT USA: Georgia • Tel: +1-912-966-2615 Fax: +1-912-964-1594
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All dimensions are shown in millimetres, unless otherwise stated between brackets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. Photographs featured in this brochure may include optional equipment.

**Strong Reliable Machines
Strong Reliable Support**

