

4206D

CONSTRUCTION
SCRAPER TRACTOR
4X4 MKVI



- Gross Power: 315 kW (422 hp)
- Gross Torque: 2 000 Nm (1,549 lbft)
- Gross Combined Mass: 153 376 kg (205,628 lbs)

BELL

4206D

CONSTRUCTION
SCRAPER TRACTOR
4X4 MKVI

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 lbft) @ 1 080 rpm SAE J1349
Net Torque	1 974 Nm (1,453 lbft) @ 1 080 rpm
Displacement	11,95 litres (730 cu.in)
Fuel tank capacity	485 l (128 US gal)
Certification	Tier3/Stage3a (Tier 2 for non regulated countries)

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 Three inline helical gears, 50/50 torque split
--------	---

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)
Auxiliary Brake	Automatic exhaust brake and Engine Valve Brake (EVB)

WHEELS

Tyre	Size	875/65R29
	Type	Radial Earthmover
Optional	Size	73x50 32PR
	Type	Log Stomper

SUSPENSION

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

HYDRAULIC SYSTEM

Pump Type	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
Application	Variable displacement, loadsensing piston Steering, scraper operation, hydraulic brake charging and cooling fan drive
Flow:	300 l/min (79.26 US gal/min)
Pressure:	

HYDRAULIC SYSTEM

(continued)	
Filter	10 micron
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)
-----------------	--

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.
Lock to lock turns	+ - 42 degrees 4.7

OPERATING WEIGHTS

Front	14 000 kg (30,867 lbs)
Rear	6 976 kg (15,379 lbs)
Gross Weight	20 976 kg (46,148 lbs)
GCM	153 376 kg (205,628 lbs)
	(When used in combination with Terra Titan S4412B Scraper)

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 • HVAC climate control system with filtered and ducted air • Air horn • Electrical relays and circuit breakers • Ashtray • Drinks holder • Cooled/heated lunchbox • Wheel spanner set
-----	---

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
• Tow recovery cable

4206D

CONSTRUCTION
SCRAPER TRACTOR
4X4 MKVI

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

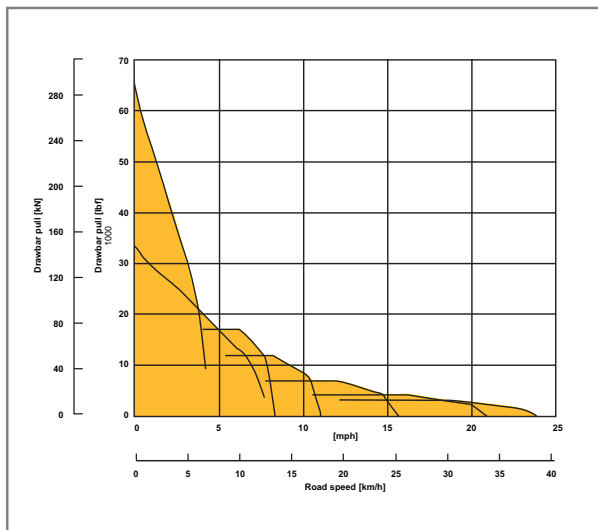
Other Ground driven emergency steering
Tow recovery cable
• Fleetmatic Satellite Monitoring System

OPTIONAL EQUIPMENT

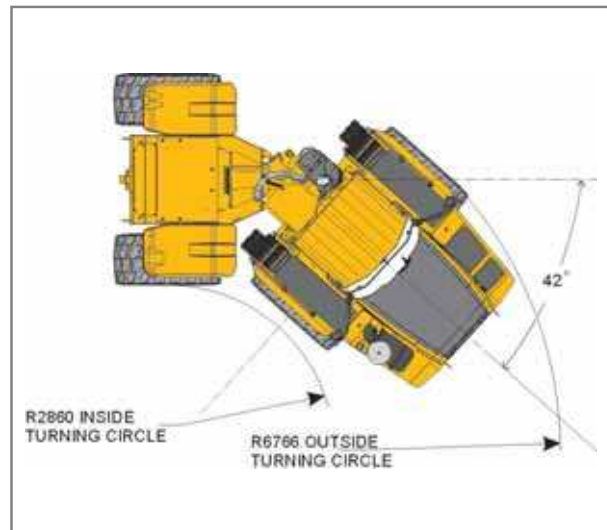
- (Factory and field installed)
- Electrically adjustable rearview mirrors
 - Retractable sun visor
 - Tyre pressure monitoring
 - Fleetmatic product packages
 - 29.5R25 radial earthmover tyres
 - Groeneveld central lubrication system
 - Flashing beacon
 - Work lights
 - Artic reverse light
 - Electrical 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
 - CD/FM Radio

Provision for: Wiggins quick fueling system

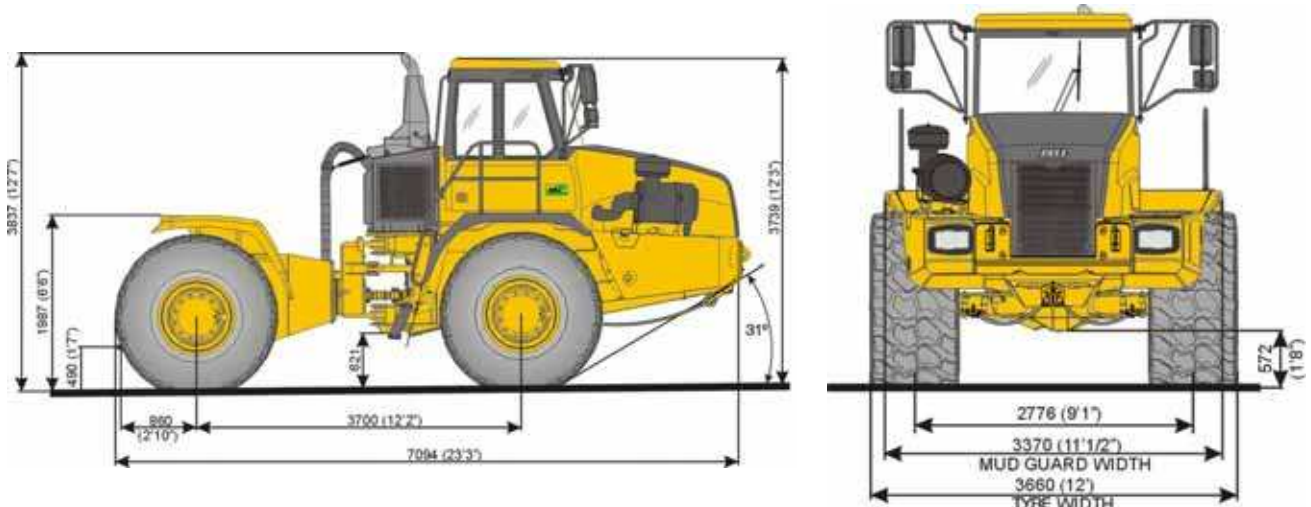
DRAWBAR PULL GRAPH



TURNING RADIUS



DIMENSIONS



Dimension shows with standard tyre sizes

4206D

CONSTRUCTION
SCRAPER TRACTOR
4X4 MKVI





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 INTERNATIONAL : Tel: +27 (0) 35 907 9431


 Tel: +27 11 928 9700

 Tel: +49 6631 911 30

 Tel: +33 555 89 23 56

 Tel: +34 918 796 019

 Tel: +7 495 771 20 27

 Tel: +44 1283 712 862

E-mail: sales@bellequipment.com • www.bellequipment.com

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**

BELL