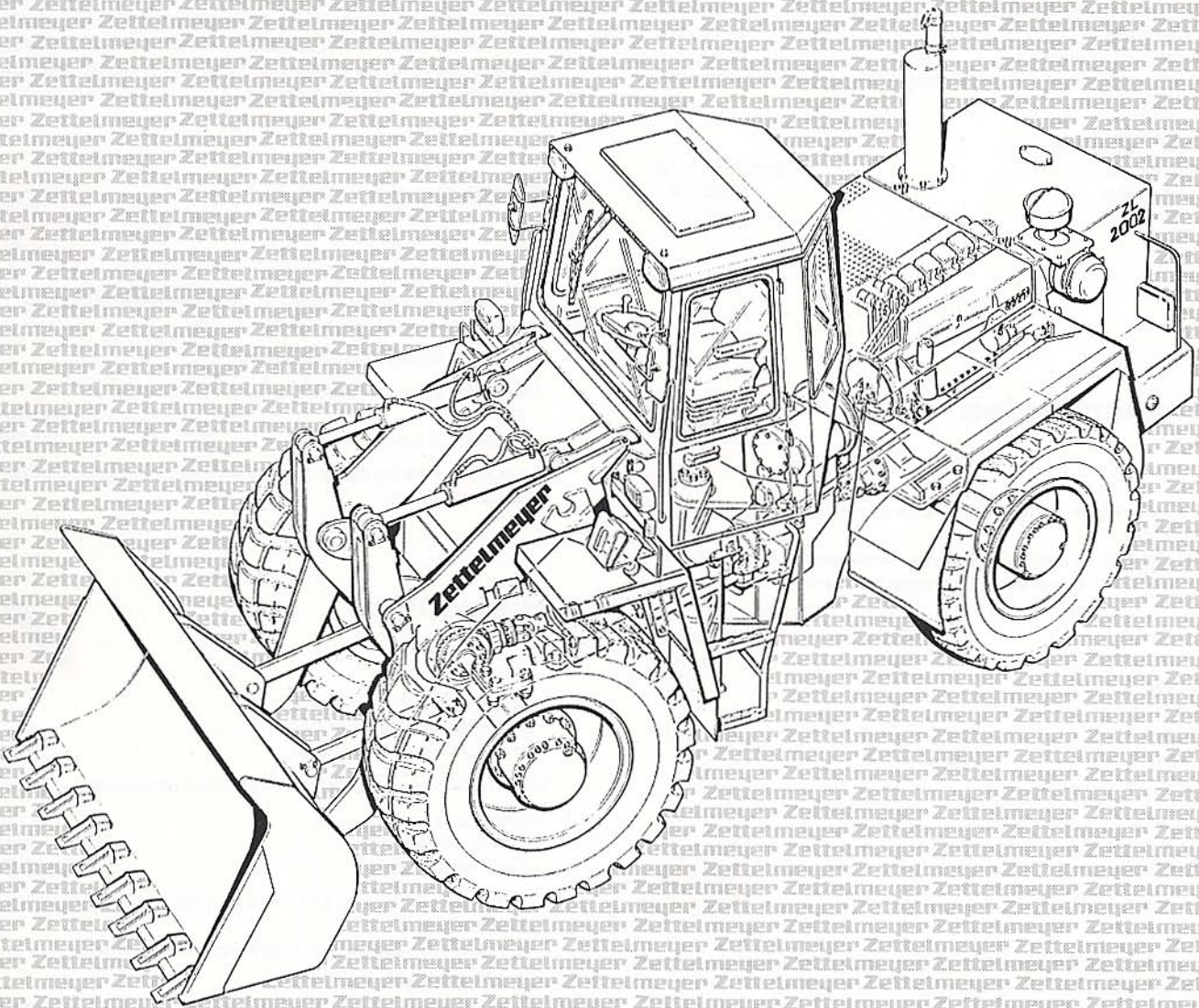


Wheel Loader — Technical Data



Basic Specifications

Operating Weights	13000 kg
Gross Power	122 kW / 166 PS
Maximum Speed	38 km/h
Tyres	20.5-25 16 PR
Bucket Capacities	2,5 m ³
Bucket Width	2600 mm

Wheel Loader ZL 2002

Engine



Make	Cummins
Type	6 BTA 5.9
Gross Power @ 2300 rev/min	131/178 kW/hp
Net Power @ 2300 rev/min Din 70020	122/166 kW/hp
Max. torque @ 1500 rev/min	610 Nm
No. cylinders/configuration	6/in-line
Bore/stroke	102/120 mm
Total displacement	5880 cm ³
Combustion system	turbocharged/aftercooled/direct injection
Cooling	water

Electrical system:

Batteries	2x12/110 V/Ah
Alternator	28/65 V/A
Starter	24/4 V/kW

Transmission



Full powershift countershaft transmission with integral torque converter.

Four speeds forward three reverse. Single lever control. Softshift feature for full-power direction change in 1st and 2nd gear.

	Speed	
	Forward km/h	Reverse km/h
1st gear	6.0	6.0
2nd gear	12.0	12.0
3rd gear	25.0	25.0
4th gear	38.0	—

Axles



Spiral bevel pinion and ring gear differentials. All wheel drive by two rigid axles. Oscillating rear axle with central greasing point. Limited slip differentials with outboard mounted planetary final drives in both axles.

Ground clearance	440 mm
Track	1864 mm
Oscillation at wheel, max.	390 mm
Angle of oscillation	±12°

Brakes



- Service brake: hydraulically actuated oil immersed multi-disc brakes hub mounted on all four wheels. Dual circuit for front and rear axles. Automatic transmission declutch with brake pedal depression.
- Parking brake: spring-applied oil released drum brake mounted at the transmission output shaft acting upon all four wheels.

Tyres



	Standard:	Optional:	Rim
	20.5-25 16 PR	20 -24 14 PR	17.00-25
		25/65 R 25	16.00 T - 24 SDC
		23.5-25 16 PR	19.5-25
			19.5-25

NOTE: Under certain job conditions, a specific tread pattern may be required or, the t-km/h capability of standard or optional tyres may be exceeded. We recommend that tyre manufacturers be consulted for optimum tyre selection.

Steering



Articulated frame steering with 40° steering angle to both sides. Hydrostatic load-sensing steering.

Two double-acting steering cylinders.

Axial piston pump with pressure-compensation control

Flow	0-70 litres/min
Relief valve pressure	155 bar

Emergency steering pump: transmission mounted ground driven radial piston pump.

Hydraulics



- Load-sensing-hydraulic system.
- Two double-acting tilt cylinders.
- Two double-acting lift cylinders.

Control valve-two spool system as standard equipment.

Tandem axial piston pump

Flow @ 2300 rev/min	230 litres/min
Relief valve pressure	230 bar

Common tank for working and steering hydraulics safeguarded by a breather valve.

Filters can be changed without having to drain the tank.

Automatic bucket leveller

Lift time (loaded)	6.0 sec
Lowering time (empty)	4.5 sec
Dump time	1.6 sec
Crowd time	1.3 sec
Gear pump for servo control and brake	
Flow @ 2300 rev/min	12,30 litres/min

Service Refill Capacities



Fuel tank	230.0 litres
Engine	16.0 litres
Hydraulic system incl. tank	170.0 litres
Front axle	26.0 litres
Rear axle	26.0 litres
Transmission	28.0 litres

Operating Data (in accordance with DIN or SAE standards resp.)



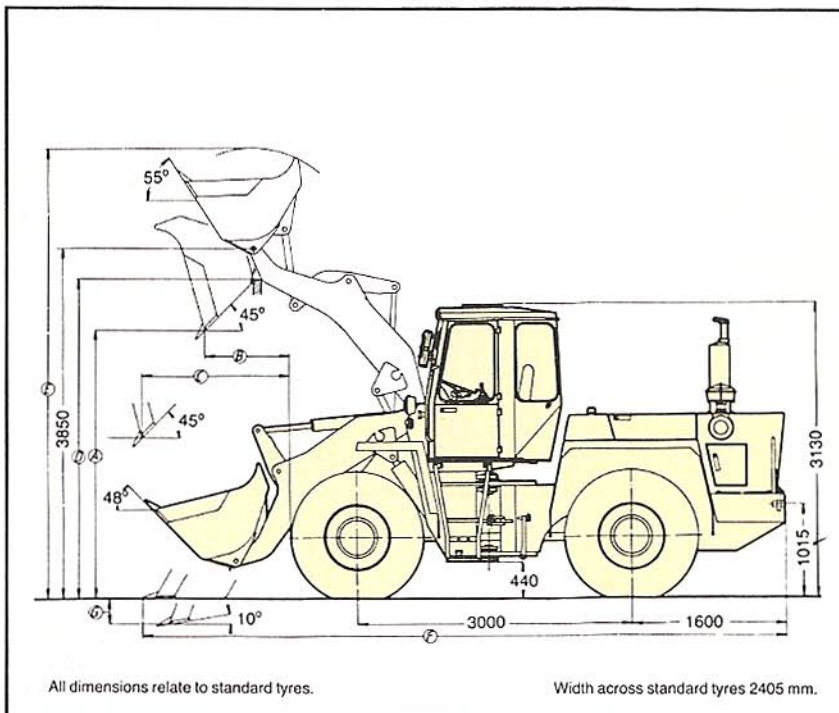
Buckets Dimensions and weights with standard tyres.	Bucket	Rock Bucket Spade Nose	Bucket	Bucket	Bucket	Bucket	4 in 1 Bucket	High-Tip Bucket Bucket	
Material density max.	t/m ³	2.2	1.9	1.8	1.6	1.2	0.8	2.0	1.1
Capacity, heaped	m ³	2.1	2.3	2.5	2.8	3.5	5.0	2.1	3.5
Capacity, struck	m ³	1.8	1.9	2.2	2.5	3.1	4.3	1.8	–
Bucket weight with teeth	kg	1000	1400	1000	1100	1350	1600	1300	1500
Bucket teeth		9	8	9	9	9	9	9	–
Tipping load, straight	kg	10700	10200	10780	10500	10200	9680	10000	9250
Tipping load at 40°	kg	9300	8900	9400	9200	8900	8460	8800	8000
Breakout force	daN	15300	11400	13850	12500	11000	9200	12300	8100
Hydraulic lifting capacity	daN	13300	12900	13450	12900	12400	12000	12600	11500
Operating weight	kg	13000	13400	13000	13100	13350	13600	13300	13500

Dimensions

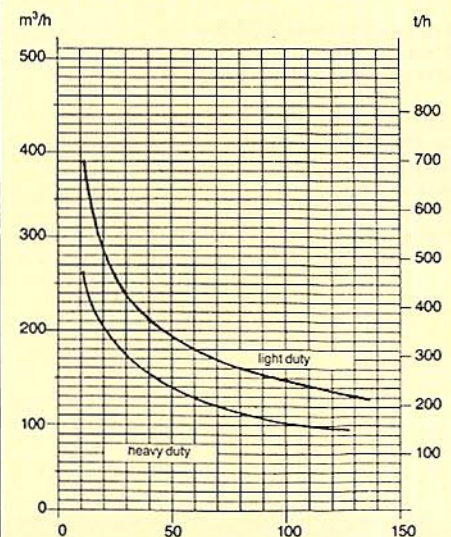


(A) Dump height	mm	3000	2800	2940	2870	2730	2590	2840	4470
(B) Reach at max. height	mm	1000	1235	1080	1150	1290	1435	1140	1580
(C) Reach max.	mm	1720	1980	1820	1890	2030	2175	1860	2800
(D) Load over height	mm	3560	3560	3560	3560	3560	3560	3560	4630
(E) Lift height max.	mm	5010	5080	5160	5160	5380	5630	5050	6175
(F) Total length	mm	7050	7330	7150	7250	7400	7650	7250	7860
(G) Digging depth at 10°	mm	300	350	310	320	370	390	350	–
Turning radius, outside bucket	mm	5830	5900	5850	5900	5950	6000	5900	6100
Bucket width	mm	2600	2600	2600	2600	2750	3000	2600	2600

All technical data relate to the standard version.



Production chart: 50 min/h
Bucket capacity: 2,5 m³
Filling: 90 %



One way hauling distance m

Standard Equipment

Comfort ROPS + FOPS Cab

Detachable walk-through cab with flexible mountings, located on the front frame for better sound and thermal insulation whilst providing excellent all-round visibility on the job.

Insulation and acoustic lining
Lockable doors

4-way adjustable driver's seat
Passenger's seat
Seat belts

Steering wheel spinner knob
Neutral start switch

Gauges:

Fuel gauge
Hour meter
Speedometer
Transmission temp. gauge
Transmission shift press. gauge
Hydraulic pressure gauge
Engine temperature gauge
Engine oil pressure gauge

Indicator lamps for:

Direction indicator
Main beam
Battery charging

Warning lights for:

Air filter restriction
Hydraulic filter restriction
Parking brake
Service brake
Emergency steering pump
Cooling water

Central audible alarm for:

Engine temperature
Engine oil pressure
Air filter restriction
Hydraulic filter restriction
Service brake

24 V power socket
Heater with defroster
Instrument lighting

Storage compartment in the door
Tool box (lockable)
Interior lighting

Tinted safety glass (windscreen)

Windscreen wiper front and rear
Windscreen washer
Hinge out upper door section
Hinge-out out skylight
Sliding window

General

Diesel engine with direct injection and turbocharging

Alternator 65A
Dry-type air filter
Cold start aid

Transmission declutch
Single lever control
Automatic bucket leveller
Front working floodlights

Fenders and service platforms
Hoodsides
Lockable engine hood
Vertical exhaust
Towing device

External rear view mirrors
Security kit
Reversing lights

Complete system in accordance with German Road Traffic Regulation

Sound insulation in accordance with stringent German Code U.V.V.-VBG 121

Safety equipment in accordance with stringent German Code U.V.V.-VBG 40

Certified for safe working by German Excavation Trade Association



Optional Equipment

Exhaust ejector

Dashboard cover
Air conditioning
Radio

Auxillary hydraulics, front
Extended lift arms
ZLS (suspension of lift frame)
Lifting eyes

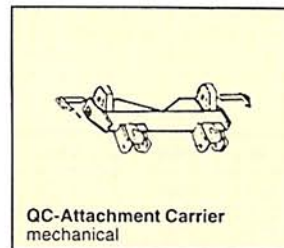
»QC« Quick-change attachment carrier, mechanical or hydraulic

Attachments:
Loading fork

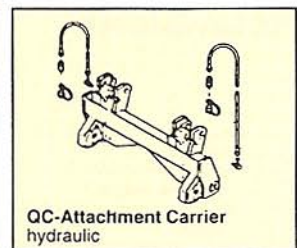
Tree transplanting bucket
Log grapple

Wide range of bucket sizes and types with or without teeth

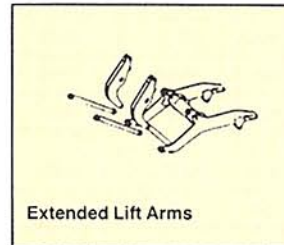
Silo bucket
Extra-wide bucket
Brick bucket
4 in 1 bucket
High-tip bucket
Side-tip bucket
Bolt-on cutting edge



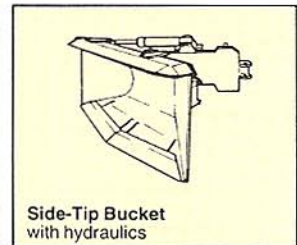
QC-Attachment Carrier mechanical



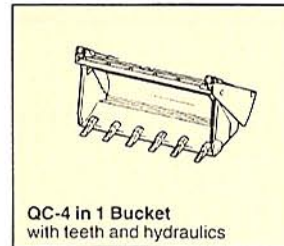
QC-Attachment Carrier hydraulic



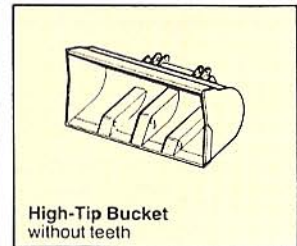
Extended Lift Arms



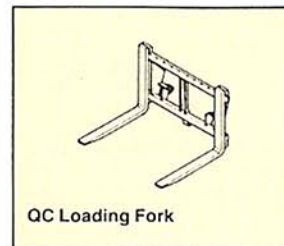
Side-Tip Bucket with hydraulics



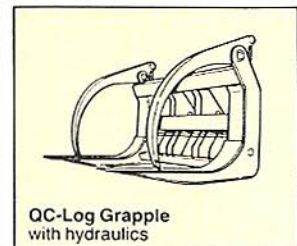
QC-4 in 1 Bucket with teeth and hydraulics



High-Tip Bucket without teeth



QC Loading Fork



QC-Log Grapple with hydraulics

