



Zettelmeyer Wheel Dozer ZD 5002



*Dozer with
universal application range*

- **Powerful diesel engine** with large performance reserves. Low emissions, economical fuel consumption.
- **Hydrodynamic drive** with 6-speed powershift transmission, **high drawbar pull** in all applications.
- **Optimum traction** due to limited slip differentials and **supplementary 100% differential locks** in both axles.
- **Energy saving Load-Sensing System** for steering and working hydraulics.
- **Outside mounted dozer blade** for maximum pushing power.
- **Purpose designed cab-comfort** for extra performance.
- Audio-visual warning system for monitoring the main operating systems.

- **Engine performance**
SAE J1995 216/ 290 kW/hp
- **Operating weight**
26,2 t (57761 lb)
- **Standard blade width**
4,0 m (13' 1" ft in)

Zettelmeyer



ENGINE

Engine: in-line 6-cylinder, 6-stroke, direct injection diesel engine, with turbocharging, after cooled.

Three-stage filter cleaning:

1. Pre-cleaner with automatic exhaust ejector
2. Dry-type air filter with indicator in driver's cab
3. Safety filter

aMake	Cummins	Cummins		
Type	LTA 10-C290	LTA 10-C290		
Gross power @	2100	r/min	(35	r/s)
SAE J1995	216	kW	(290	hp)
Net power @	2100	r/min	(35	r/s)
SAE J1349	206	kW	(280	hp)
DIN 70020 / 6271	206	kW	(280	hp)
Max. torque	1300	r/min	(22	r/s)
SAE J1349 netto	1180	Nm	(221	lbf ft)
DIN 70020 / 6271	1180	Nm	(221	lbf ft)
No. cylinders	6			
Cubic capacity	10,2	l	(195	in ³)
Bore	125	mm	(4' 9"	in)
Stroke	136	mm	(5' 3"	in)

Electrical System

Rated voltage	24	V		
Battery voltage	2 x 12	V		
Battery capacity	2 x 143	Ah		
Alternator rating	1820/65	W/A		
Starter motor output	7,5	kW	(10	hp)



DRIVETRAIN

Transmission: six gear countershaft transmission, full power shift under load and when changing direction (forward/reverse), with torque converter.

Axles: all-wheel drive by two rigid axles, both with outboard mounted planetary drives.

Differential lock: limited slip differentials and hydraulically operated 100% differential locks in both axles.

Frame: solid front and rear frames. Oscillating rear axle.

Oscillation at wheel, max.	425	mm	(1' 5"	ft in)
Track	2237	mm	(7' 4"	ft in)
Angle of oscillation	± 12	°		

Standard tires	Size	29.5 R25
	Rim	25.00 - 25/3,5

Speed, max.				
1. gear, forward/reverse	4,8/4,8	km/h	(3,0/3,0	mile/h)
2. gear, forward/reverse	7,5/11,5	km/h	(4,6/7,0	mile/h)
3. gear, forward/reverse	11,5/25,0	km/h	(7,1/15,5	mile/h)
4. gear, forward/reverse	17,5/-	km/h	(10,8/--	mile/h)
5. gear, forward/reverse	25,0/-	km/h	(15,5/--	mile/h)
6. gear, forward/reverse	35,0/-	km/h	(22,4/--	mile/h)

Pushing power, max.	26,2	kN	(5890	lbf)
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BRAKING SYSTEM

Service brake: reliable dual circuit braking system, acting upon all four wheels.

Hydraulically actuated oil-immersed multi-disc brakes hub mounted on all four wheels.

Parking brake: spring applied oil released disc brake mounted at the transmission output shaft.



HYDRAULIC SYSTEM

Load-sensing hydraulic system with self-controlling power distribution.

Hydraulic control valve: double acting control valve three spool system.

1. Lifting and Lowering function
2. Regulatory function for digging angle
3. Tilting function

Hydraulic oil filter: main stream filter cartridge with a 10 µm filtration in the return.

The filters can be replaced without emptying the tank.

Hydraulic pump				
Flow	149	l/min	(39,4	US gal/min)
@ engine rpm	2100	r/min	(35	r/s)
Relief valve pressure	15	MPa	(2610	psi)
Lift time	2,9	sec.		



STEERING

Articulated frame steering with 40° steering angle to both sides.

Steering pump: axial piston pump with pressure compensation control.

Steering cylinder: 2 double acting steering cylinders

Steering				
Angle of articulation	± 40	°		
Steering pump				
Flow	149	l/min	(39,4	US gal/min)
@ engine rpm	2100	r/min	(35	r/s)
Relief valve pressure	15	MPa	(2610	psi)



SERVICE FILL CAPACITIES

Engine	26,5	l	(7,0	US gal)
Fuel tank	415,0	l	(109,6	US gal)
Front axle, total	51,0	l	(13,4	US gal)
Rear axle,	54,0	l	(14,2	US gal)
Transmission	21,0	l	(5,5	US gal)
Hydraulic tank,				
incl. hydraulic system	230,0	l	(60,7	US gal)

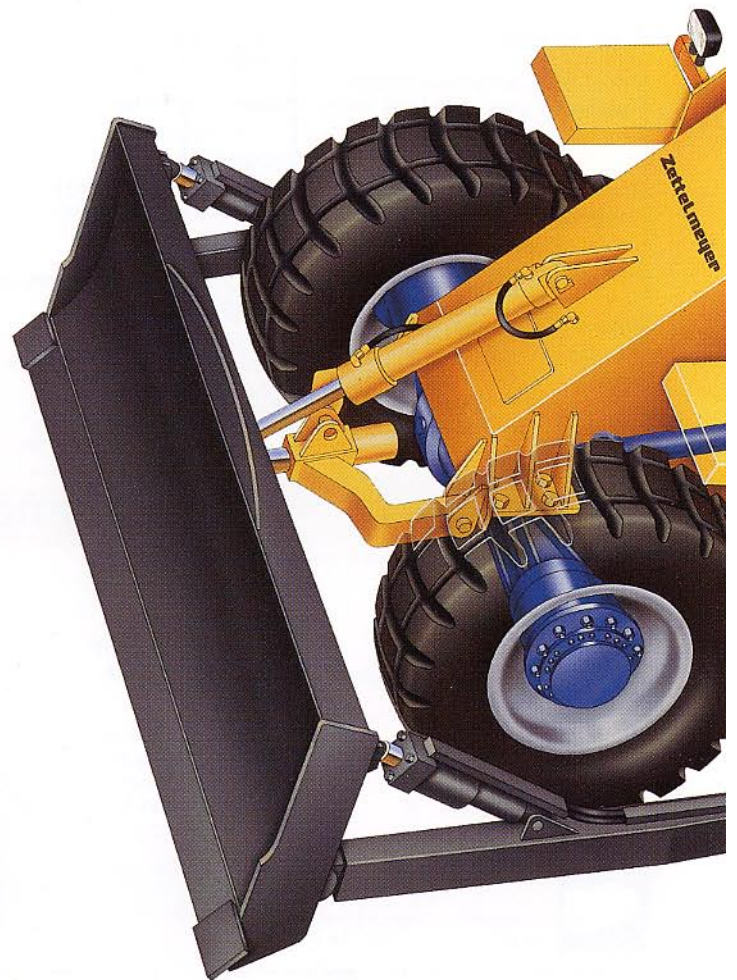


Power on four Wheels!

Wherever bulk material is to be transported or an area to be graded, the wheel dozer ZD 5002 proves what it's capable of! Its great strength will set a lot in motion!

Three types of blade can be delivered, so enabling you to equip the machine for your working conditions in the best possible way. Clearance work on mining sites, at power stations, in the realm of civil defence, for road building and in bush-clearing can be carried out quickly and smoothly.

It clears the way!



Wheel drive - super mobile!

High mobility is no problem for the large ZD 5002, expensive transport necessary for moving track machines is eliminated. A ZD 5002 travels on its own wheels to wherever you need it.

With integrated limited slip differentials and standard 100 % differential lock front and rear, the ZD 5002 knows no difficult terrain. The wet disc brakes are fully enclosed to protect them against environmental contamination.

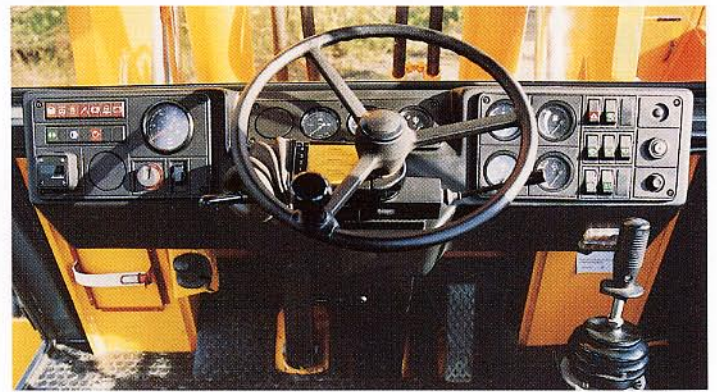
Maintenance costs on the drive-line for the rubber-tire dozer are kept to a minimum.

For Increased Operator Performance

A suitable ergonomic environment is of paramount importance for good operator performance. The ZD 5002's spacious, well-equipped cab offers a working environment as it should be:

Operator Comfort for Smooth Working Cycles

- spacious cab
- reliable heating system
- several means of ventilation
- individually adjustable seat
- clearly designed dashboard
- audio-visual warning system
- single lever control for blade functions.

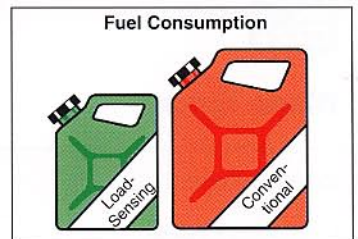


Load-Sensing - Cost-Saving Hydraulics

The ZD 5002 works transmission produces effectively and economically. The powerful hydrodynamic

excellent pushing power. Its six-gear, countershaft transmission makes it possible to match the speed to the ground conditions perfectly.

Load-sensing hydraulics help save costs: only the amount of oil which is actually needed is drawn into the system.



Fuel consumption is reduced by 15-20 % by the load-sensing system in comparison with conventional hydraulics.

Power Source with Added Performance

The ZD 5002 is equipped with a large-volume, water-cooled engine. Its high reserves of power make strong working cycles possible and secure the engine's longevity.

The Right Blade for every Application

Fitted with a suitable blade, the ZD 5002 becomes ideal for your application. You can choose between three blades, all of which move three ways (lift/lower, digging angle and tilt), controlled from the operator's seat.

Standard Blade

Straight blade for clearing rubble, fast digging and grading, e.g. of lines for road construction and also in bush-clearing.



Universal Blade

Blade with slight "u" form to transport light, loose material over short distances e.g. in every kind of earth-moving application.



Coal Blade

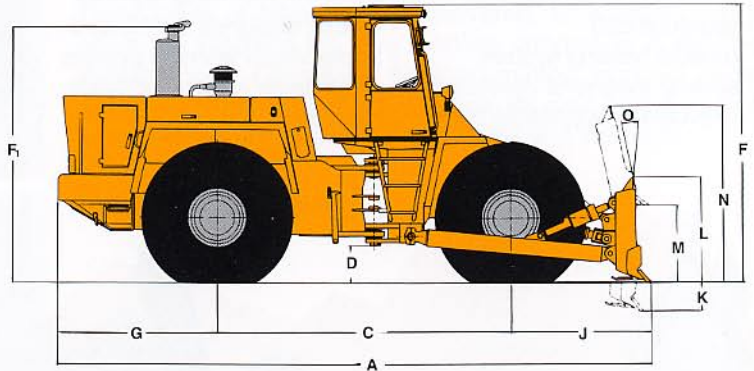
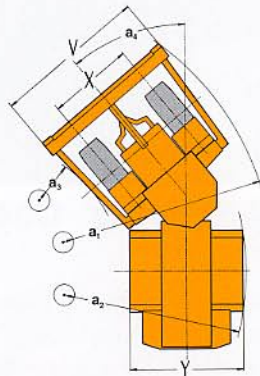
Strongly "u"-formed blade with especially high volume to transport light material over large distances e.g. in industry and in power stations.





DIMENSIONS*

A	7440 mm	(24' 5" ft in)
C	3675 mm	(12' 1" ft in)
D	520 mm	(1' 8" ft in)
F	3516 mm	(11' 6" ft in)
F ₁	3200 mm	(10' 6" ft in)
G	2010 mm	(6' 7" ft in)
J	1755 mm	(5' 9" ft in)
K	350 mm	(1' 2" ft in)
M	970 mm	(3' 2" ft in)
N	2220 mm	(7' 3" ft in)
O	16	°
a ₂	6580 mm	(21' 7" ft in)
a ₃	3280 mm	(10' 9" ft in)
a ₄	40	°
V	4000 mm	(13' 1" ft in)
X	2237 mm	(7' 4" ft in)
Y	2980 mm	(9' 9" ft in)

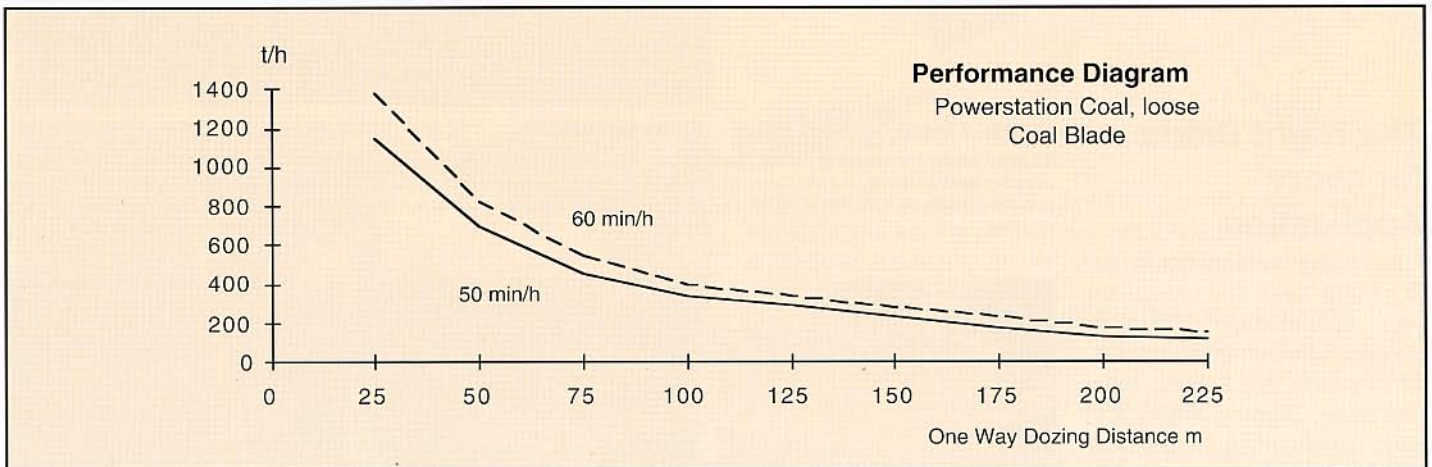


* measured with standard blade 4,0 m (13' 1") width, and 29.5 R25 tires.



OPERATING DATA

Blade Types		Standard Blade	Universal Blade	Coal Blade
Width of Blade	mm (ft in)	4000 (13' 1")	4600 (15' 1")	5000 (16' 5")
L Height of Blade	mm (ft in)	1330 (4' 4")	1330 (4' 4")	1530 (4' 5")
M Lift Height, max.	mm (ft in)	970 (3' 2")	970 (3' 2")	970 (3' 2")
K Digging Depth, max.	mm (ft in)	350 (1' 2")	350 (1' 2")	350 (1' 2")
A Total Length	mm (ft in)	7440 (24' 5")	7790 (25' 7")	8040 (26' 5")
Pitch Angle	°	± 8	± 8	± 8
Tilt Angle	°	± 12	± 12	± 12
a ₁ Turning Radius	mm (ft in)	7350 (24' 1")	7700 (25' 3")	7920 (26' 0")
Operating Weight	kg (lb)	26200 (57761)	26200 (57761)	26200 (57761)



STANDARD EQUIPMENT

Cab, exterior

Comfortable ROPS + FOPS cab: detachable 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 door
 Tinted safety glass (windscreen)
 Windscreen wiper, front and rear
 Windscreen washer, front and rear
 Hinge out upper door section
 Door stop
 Hinge out skylight
 External rear view mirrors

Cab, interior

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

 Sunroller
 Heater with defroster
 Cab ventilation
 Interior lighting

 Steering wheel spinner knob
 Tool Box
 Radio

Instrument panel

with symbols:
 Instrument lighting
 24 V power socket
 Horn
 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:
 Parking brake
 Service brake
 Emergency steering pump
 Hazard warning lights
 Cooling water level

 Central audio-visual alarm for:
 Engine temperature
 Engine oil pressure
 Transmission temperature
 Air filter restriction
 Service brake
 Hydraulic filter restriction

Exterior Lighting

Main head lights (Halogen): full/dipped beam/asymmetrical
 Parking lights
 Reversing lights
 Brake lights
 Direction indicators
 Hazard warning lights

Powertrain

Diesel engine with direct injection and turbocharging
 Cold start aid
 Pre-cleaner with exhaust ejector
 Dry-type air filter
 Alternator 65 A

 100% differential locks

 Tires 29.5 R25

Service and Maintenance

Tool kit

Working Equipment

Single lever control
 Working lights (front)

Carriage body

Fenders and service platforms
 Mudguards (front and rear)
 Lockable engine hood
 Lockable fuel tank cap
 Vertical exhaust
 Towing device

Safety

Hazard warning lights
 Emergency steering pump
 Towing device

 Sound insulation according to EC guidelines
 Safety equipment in accordance with stringent German code U.V.V. - VBG 40
 Certified for safe operation by German Excavation Trade Association

OPTIONAL EQUIPMENT

Cab

Air conditioning
 Heating independent of engine

Safety

Protective guards for
 Main head lights
 Working lights
 Rear lights
 Rotating beacon (yellow)
 Audible reverse alarm
 Complete system in accordance with German Road Traffic Regulations

Powertrain

Pre-heater
 Catalytic converter
 Extra fuel filter

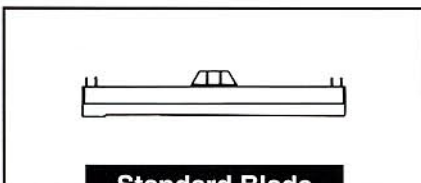
Service and Maintenance

Wheel nut wrench

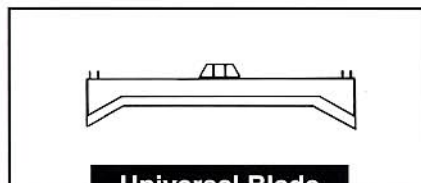
Working Equipment

Lifting eyes
 Working lights (rear)
 Winch
 Side crane
 Additional counterweight

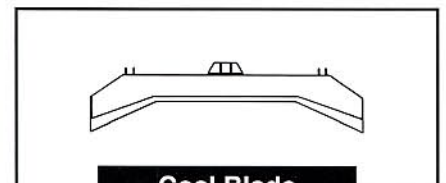
BLADE TYPES



Standard Blade



Universal Blade



Coal Blade

*Under our policy of continuous product improvement, we reserve the right to change specifications and design without prior notice.
 The illustrations do not necessarily show the standard version of the machine.*

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