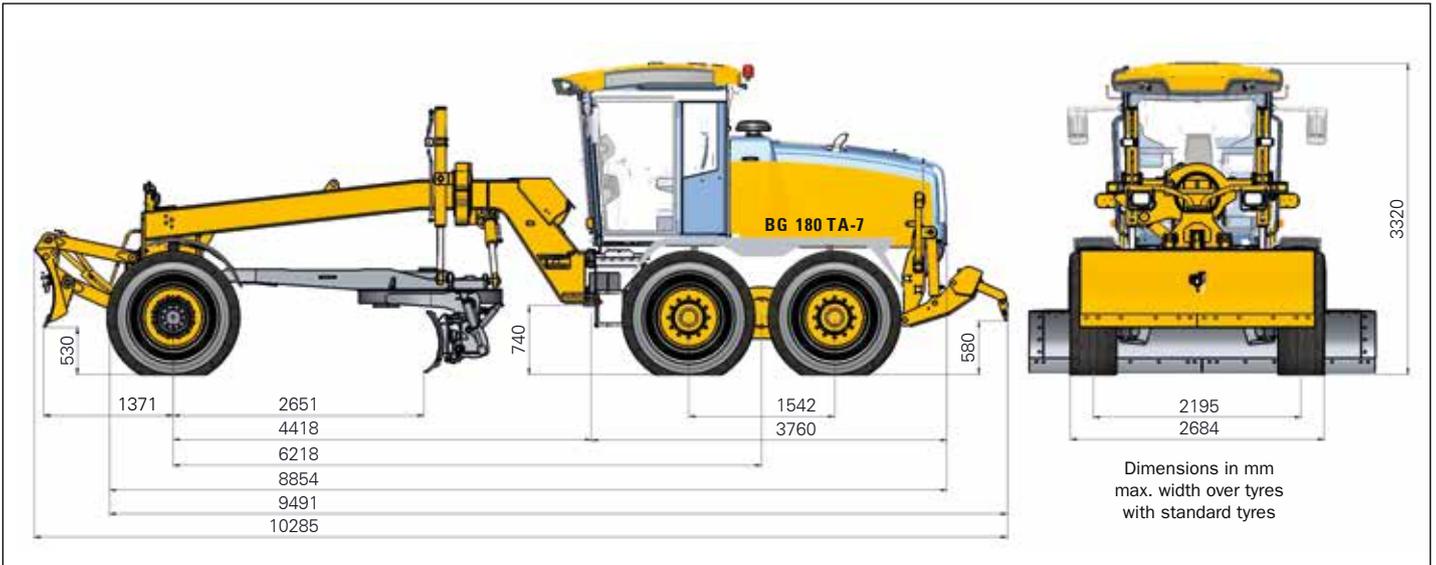




Motor Grader

BG 180 T-7 (6x4) / BG 180 TA-7 (6x6)



Engine Data

Make/Model	PERKINS/diesel engine 1206J-E70TA with DOC, DPF, SCR technology (DEF/AUS 32/AdBlue)
Emission standard	EU Stage 5 / U.S. EPA Tier 4 Final
Type	water-cooled, four-stroke cycle, direct injection, turbocharged and intercooled
Rated horsepower	(ISO 14396:2002) at 2200 rpm 151 kW/205 HP
Rated Torque (max.)	870 Nm at 1400 rpm
No. of cylinder	in line 6
Bore & stroke	105 x 135 mm
Displacement	7,01 litres

Engine equipped with dry air filter with safety cartridge and dust ejector. Electronic controlled viscose radiator fan. 24 volt starting and electrical system. 85 amp alternator and 24 volt starter with 5,5 kW (7,5 HP). 2 batteries 74 Ah each.



Operating Weight

Total weight	approx. 19000 kg
On rear wheels	approx. 13500 kg
On front wheels	approx. 5500 kg

Weights shown include cab, all operating fluids, medium heavy rear ripper, front dozer blade.



All-Wheel Drive System (TA Type)

Hydrodynamic rear axle drive with 6-speed Ergopower transmission and torque converter (make ZF 6 WG 160) with freely selectable microprocessor controlled hydrostatic axle drive. Power train is controlled appropriate to tyre traction.



Rear Axle Drive System

Hydrodynamic rear axle drive with 6-speed Ergopower transmission (make ZF 6 WG 160) and torque converter.



Speeds

(All-Wheel Drive and Rear Axle Drive Systems)

Forward	km/h
1.	5.3
2.	8.5
3.	13.1
4.	19.7
5.	28.2
6.	40.0
Reverse	
1.	5.6
2.	13.8
3.	29.5

Acoustic back-up alarm in reverse driving



Rear Axle

Oscillating tandem axle with axle insert.

No-Spin differential.

Multi-disc brakes in all four wheel hubs.

Parking brake at powershift transmission.

Clearance at differential 475 mm

Clearance at protection cover of diesel tank 430 mm



Tandems

Drive via roller chains.

Torsion-proof box sections.

Height 550 mm

Width 194 mm

Thickness of walls 30 mm

Wheel base 1542 mm

Oscillation $\pm 15^\circ$

Ground clearance 390 mm



Wheels & Tyres (standard)

Tyre size 17.5 R25 radial

Rim size 14.00 x 25/1.3



Brakes

Service brake

Dual-circuit, power-assisted, multi-disc oil-bath type, effective on four wheels. Includes reserve power and operator warning system.

Parking brake

Independent electrically operated brake, acting on rear axle. Hydraulic spring accumulated single disc type.



Front Axle

2 types are available

Oscillation	15° up and down
Steering angle	45°
Wheel lean	±17°
Ground clearance	570 mm

Non driven with wheel lean (T version)

Stable welded steel beam with wheel lean.

Driven with wheel lean (TA version)

Stable welded steel beam with wheel lean.

Radial piston engines in wheel hubs.

Pulling power electronically adjustable (infinitely variable depending on surface conditions.).

Possibility to fit in the hydraulic differential lock.



Steering

Hydraulic power steering	
Minimum turning radius without dozer blade	7800 mm
Minimum turning radius with dozer blade	8550 mm
Steering angle	45°



Frame

Front and rear frame sections are connected with an adjustment free articulation pin.

Front: Fully welded rear box section.

Minimum dimensions of box section	300 x 310 mm
Plate thickness	20 mm

Rear: Fully welded rear frame

Dimensions (solid main bars)	430 x 80 mm
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Hydraulic articulated frame steering (right & left)	30°
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Circle (closed version)

Hardened teeth, machine-cut on inside of circle for maximum strength and minimum wear. The circle is held positively in place by an adjustment free roller bearing.

Diameter	1510 mm
Tooth width	83 mm
Height	130 mm



Circle Drive

Hydraulically driven crank drive, moveable by hydraulic cylinders. Circle drive system fully protected against impact damage by an overload clutch.

Rotation	360°
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Drawbar

A-shaped fully welded construction.

Dimensions (solid sections)	40 x 210 mm
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Moldboard (standard)

Moldboard (12 ft)	3660 x 660 x 20 mm (12' x 26,0" x 0,8")
Blade material	High carbon steel
Blade pull (at a friction factor of 0.8)	BG 180 T-7 98 kN BG 180 TA-7 123 kN



Blade Range

Reach outside tyres without articulation (RH&LH), blade resting on levelled surface	2485 mm / 1920 mm
Reach outside tyres with articulation (RH&LH), blade resting on levelled surface	3335 mm / 2770 mm
Blade side shift	1250 mm
Blade tilt range	31°- 74°
Bank sloping angle (RH&LH)	90°
Lift above ground	420 mm
Cut below ground	430 mm
Distance blade/front axle	2651 mm

All blade movements and positions can be controlled from the operator's seat.



Capacities

Diesel/total volume	365.0 litres
Diesel/usable	305.0 litres
Hydraulic oil	160.0 litres
Engine oil	16.0 litres
Ergopower transmission	34.0 litres
Axle drive rear	13.5 litres
Planetary gears and brakes	26.0 litres
Tandem case (2 x 21 litres)	42.0 litres
Coolant	44.0 litres
DEF (AUS 32/AdBlue)	24.0 litres



Light Equipment

2 headlights at the front, every 2 indicator lights (including hazard warning lights) at the front and rear, 2 rear lights, 2 brake lights, 1 backup light, every 2 LED working lights at the top and bottom at the front of the cab, 2 LED working lights at the top at the rear of the cab, and 2 tail lights on the sides.



Load-Sensing Hydraulics

The control valves of the working hydraulics may be actuated at a time and independent of each other. The load-sensing pump (axial piston pump) discharges only the required quantity of oil if a control valve is actuated. When hydraulic power is not required system pressure is only 24 bar and ensures low oil temperature und fuel saving.

Lock valves and brake valves prevent a cylinder drift under load.

Operating pressure 205 bar
max oil flow 132 l/min



Cabin (tiltable)

Integrated ROPS/FOPS cabin mounted on isolators to limit vibration and noise entering the cabin. Excellent all-round visibility. Roomy and comfortable. Adjustable steering pedestal with EURO control lever arrangement. Interior of cab fully lined, floor covering. Tinted safety glass windows.

Sliding doors and windows LH and RH.

Fresh air heating with pre-filter, air circulation, air conditioning (A/C). Adjustable, air-suspended driver's seat with safety belt. One inside mirror as well as two electrically operated adjustable and heatable outside rearview mirrors.

Wipers front and rear, with front window washer

Blinds front and rear.

Height / Width / Depth (cabin inside) 1620 / 1450 / 1480 mm



Optional Equipment

EP control panel (Joystick controls)

Auxiliary heating

Automatic climate control (A/C)

Recording speedometer

Cooling box

Stereo radio various (CD player, Bluetooth, DAB+)

Protective grids for cabin and lights

Moldboard (14 ft) 4267 x 660 x 20 mm (14'x 26,0" x 0,8")

Cover plate for upper guide rail of moldboard

Moldboard extensions, RH/LH (1 ft) 305 mm

Adjustable moldboard corner shoes, RH/LH

Float position for both moldboard lift cylinders

Towing device, tiltable, 12 V / 24 V

Wheels and tyres

Tyre size 14.00-24 diagonal
Rim size 14.00 x 24
Tyre size 17.5-25 diagonal
Rim size 14.00 x 24/1.3
Other tyres on request

Front dozer blade with position indicator

Width/Height 2490 x 780 mm
Cut below ground 170 mm
Lift above ground 530 mm
Weight 865 kg

V-scarifier between front axle and moldboard, 11 teeth

Ripping width 1310 mm
Ripping depth 240 mm
Lift above ground 300 mm
Weight 850 kg

Rear ripper with depth penetration indicator, 4 teeth (max. 7)

Ripping width 2120 mm
Ripping depth 420 mm
Lift above ground 560 mm
Weight 804 kg

Heavy-duty rear ripper with depth indicator, 6 teeth

Ripping width 2120 mm
Ripping depth 270 mm
Lift above ground 570 mm
Weight 1529 kg

Counter weight (push-pull block), in front 926 kg

Front dozer blade, articulated

Mudguards on front wheels

Mudguards on rear wheels

Protective cover of transmission in different versions

Central lubricating unit

Biological oil in hydraulic system

Electric fuel tank pump with automatic switch-off

Articulation angle indicator

Special paint

Ergopower transmission with torque converter and lock-up clutch

Beacon (orange)

Tool kit, wheel chocks, warning triangle, fire extinguisher, first aid kit

Automatic blade control

Various 2D / 3D / GPS systems

CE Certificate

Speed limitation at 20 km/h possible

Further options on request

