



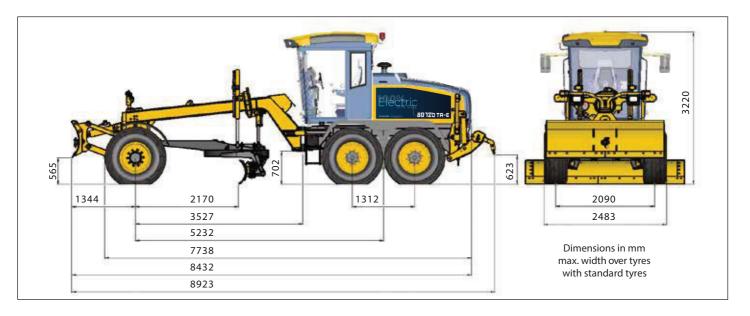
## **Motor Grader**



# **BG 120 TA-E**

Powered by II NULLUTSLIPP AS







#### E-motor Data

Engine make and type:

Siemens Electrical engine 110kW / 600Nm (software limited)

Battery capacity: 325kWh/350V/925Ah

On-board charger: 40kW

Charging time:

2 hours @ CCS2 fast-charge 20-80% 7 hours @ CEE 400V / 63 A 10-100% 13 hours @ Type 2 400V / 32A 10-100%

Working time duration of grader:

Work and load dependable, approximum 8 hours.



#### Operating Weight

Total weight approx. 15500 kg
On rear wheels approx. 11500 kg
On front wheels approx. 4000 kg

Weights shown include cab, all operating fluids, rear ripper (width 2120 mm), 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 115) with freely selectable microprocessor controlled hydrostatic front axle drive. Power train is controlled appropriate to tyre traction.



#### Rear Axle Drive System (T type)

Hydrodynamic rear axle drive with 6-speed Ergopower transmission (make ZF 6 WG 115) and torque converter.



### Speeds (all wheel drive and rear axle drive systems)

Forward	km/h
1.	5.0
2.	7.0
3.	12.0
4.	19.0
5.	28.0
6.	40.0
Reverse	
1.	6.0
2.	14.0
3.	32.0
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.



#### **Tandems**

Drive via roller chains.

Torsion-proof box sections.

Height 545 mm
Width 178 mm
Thickness of walls 20/20 mm
Wheel base 1312 mm
Oscillation ±15°
Ground clearance 350 mm



#### Wheels & Tyres

Tyre size 455/70 R24 radial Rim size 13.00 x 24





#### Brakes

#### Service brake

Dual-circuit, power-boosted, 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

Oscillation15° up and downSteering angle45°Wheel lean±17°Ground clearance580 mm

Non driven with wheel lean (T type)

Stable welded steel beam with wheel lean.

Driven with wheel lean (TA type)

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	6350 mm
Minimum turning radius with dozer blade	7000 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 hox section

Minimum dimensions of box section 240 x 240 mm Plate thickness 20/12 mm

Rear: Fully welded rear frame

Dimensions (solid main bars) 430 x 60 mm

Hydraulic articulated frame steering (left & right) 30°



#### 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.

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Diameter	1348 mm
Tooth width	78 mm
Height	130 mm
Distance blade/front axle	2170 mm



#### Circle Drive

Hydraulically driven worm gear transmission. Circle drive system fully protected against impact damage by an overload clutch.

Rotation 360°



#### Drawbar

A-shaped fully welded construction.

Dimensions (solid sections) 30 x 170 mm



#### Moldboard (standard)

 $\begin{array}{lll} \mbox{Moldboard (11 ft)} & 3355 \times 505 \times 15 \mbox{ mm (11' x 19,9" x 0,6")} \\ \mbox{Blade material} & \mbox{High carbon steel} \\ \mbox{Blade pull (at a friction factor of 0.8)} & \mbox{BG 120 T-6} & 78.8 \mbox{ kN} \\ \mbox{BG 120 TA-6} & 98.8 \mbox{ kN} \end{array}$ 



#### Blade Range

Reach outside tyres without articulation (RH&LH), blade resting on levelled surface 2050 mm / 1200 mm Reach outside tyres with articulation (RH&LH), blade resting on levelled surface 2530 mm / 1680 mm Circle shift 1140 mm Blade side shift 1000 mm Blade tilt range 40°-80° Bank sloping angle (RH&LH) 90° Lift above ground 495 mm Cut below ground 365 mm Distance blade/front axle 2420 mm

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



#### **Capacities**

E-motor transmission	8.0 litres
Hydraulic oil	170.0 litres
Ergopower transmission	32.0 litres
Axle drive rear	13.5 litres
Planetary gears and brakes	4 x 4.0 litres
Tandem case (2 x 18 litres)	36.0 litres
Circle drive	6.0 litres
Coolant	28.0 litres



#### Light Equipment

2 head lights 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 plus every 2 working lights at the top and bottom at the front of the cab, 2 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)

Lighting as LED design

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 (10 ft) 3050 x 505 x 15 mm (10' x 19,9" x 0,6") Moldboard (12 ft) 3660 x 505 x 15 mm (12' x 19,9" x 0,6") Cover plate for upper guide rail of moldboard

Moldboard extension, left or right (1 ft) 305 mm

Adjustable moldboard corner shoes, left or right Float position for both moldboard lift cylinders

Wheels and tyres

Tyre size 13.00-24 diagonal Rim size 10.00 x 24 Tyre size 405/70 R24 radial Rim size 13.00 x 24 Other tyres on request

Front dozer blade with position indicator

Width/Height 2490 x 780 mm
Cut below ground 150 mm
Lift above ground 565 mm
Weight 840 kg

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

Width 2120 mm
Ripping depth 260 mm
Lift about ground 450 mm
Weight 610 kg

Counter weight (push-pull block), in front 556 kg
Mudguards on front wheels
Mudguards on rear wheels

Protective covers for transmission in different versions

Central lubricating unit

Biological Oil in hydraulic system

Articulation angle indicator

Fuel tank pump with automatic switch-off

Special paint

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





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Edition 10/22 Technical data are subject to alteration.