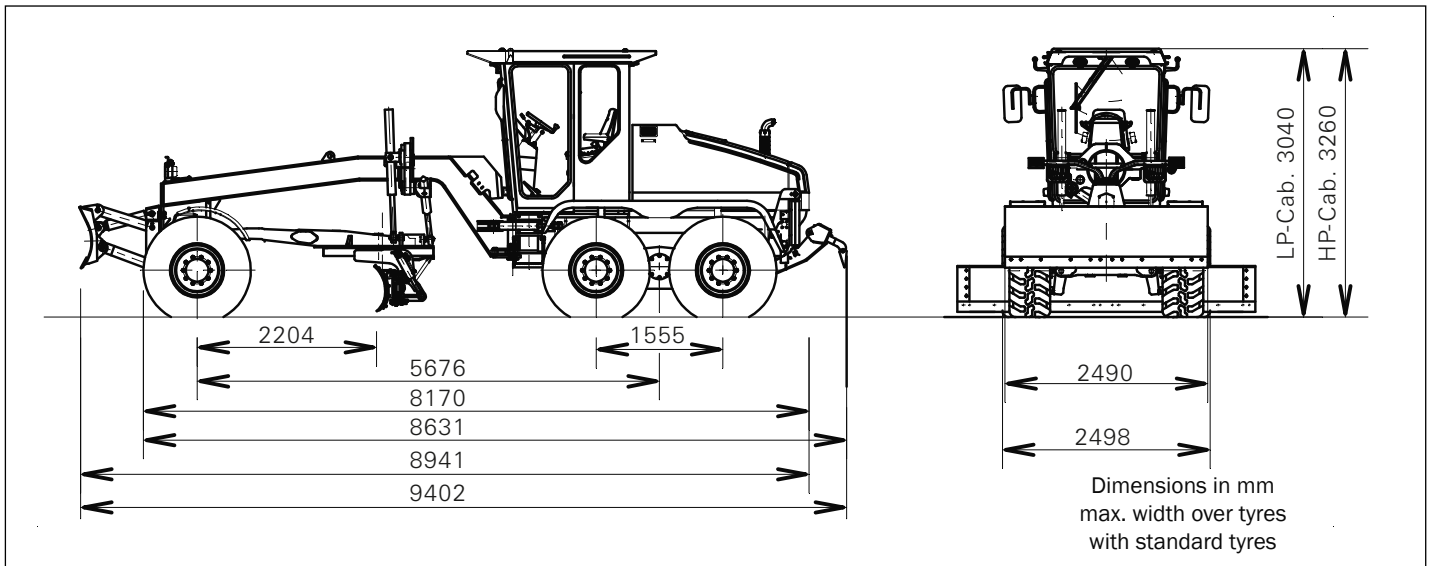




# Motor Grader

**BG 160 T-5 (6x4) / BG 160 TA-5 (6x6)**



### Engine Data

|                                  |   |
|----------------------------------|---|
| Make/Model                       | CUMMINS/diesel engine   |
| Emission Certification           | EU Stage IIIB / U.S. EPA Tier 4(i) / JMLIT2012                      |
| Type                             | 4 cycle, direct injection, turbo charged, water-cooled, intercooled |
| Rated net horsepower (SAE J1995) | at 2200 rpm, 129 kW/175 HP  |
| No. of cylinder                  | in line 6   |
| Bore & stroke                    | 107 x 124 mm  |
| Displacement                     | 6.7 litres  |

Engine equipped with a dual element, dry type air cleaner with dust ejector. 24 V starting and electrical system. 70 Amp alternator and 24 V starter with 3.7 kW (5.0 HP). 2 batteries 74 Ah each.



### Speeds

(all wheel drive and rear axle drive systems)

|    | Forward | km/h |
|----|---------|------|
| 1. |         | 4.3  |
| 2. |         | 6.7  |
| 3. |         | 11.0 |
| 4. |         | 17.2 |
| 5. |         | 25.0 |
| 6. |         | 40.0 |
|    | Reverse |      |
| 1. |         | 4.3  |
| 2. |         | 11.0 |
| 3. |         | 25.0 |

Acoustic back up alarm in reverse driving



### Operating Weight

|                 |                  |
|-----------------|------------------|
| Total weight    | approx. 16000 kg |
| On rear wheels  | approx. 11000 kg |
| On front wheels | approx. 5000 kg  |

Weights shown include cab, all operating fluids, 4-teeth rear ripper, front dozer blade



### Rear Axle

Oscillating tandem axle with axle insert.  
Operator controlled wet multiple disc lock/unlock differential.  
Multi-disc brakes in all four wheel hubs.  
Parking brake at powershift transmission.



### Tandems

Drive via roller chains.  
Torsion-proof box section.

|                    |         |
|--------------------|---------|
| Height             | 550 mm  |
| Width              | 184 mm  |
| Thickness of walls | 20 mm   |
| Wheel base         | 1555 mm |
| Oscillation        | ± 15°   |
| Ground clearance   | 435 mm  |



### All Wheel Drive System

Hydrodynamic rear axle drive with 6-speed Ergopower transmission and torque converter (make ZF 6 WG) with freely selectable micro-processor controlled hydrostatic front 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) and torque converter.



### Wheels & Tyres

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



## 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, acting on power shift, 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 | 546 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 and radial piston engines in wheel hubs, pulling power on surface conditions. Electronically adjustable (infinitely variable), possibility to fit in the hydraulic differential lock.



## Steering

|  |         |
|--|---------|
| Hydraulic power steering                   |         |
| Minimum turning radius without dozer blade | 6900 mm |
| Minimum turning radius with dozer blade    | 7650 mm |
| Steering angle                             | 45°     |



## Frame

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

### Front: Fully welded box section

|                                   |              |
|-----------------------------------|--------------|
| Minimum dimensions of box section | 270 x 270 mm |
| Plate thickness                   | 20 mm        |

### Rear: Fully welded box section

|   |             |
|---|-------------|
| Dimensions (solid main bars)                        | 250 x 80 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.

|                 |         |
|-----------------|---------|
| Circle diameter | 1348 mm |
| Tool width      | 78 mm   |
| Height          | 130 mm  |



## Circle Drive

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

|          |      |
|----------|------|
| Rotation | 360° |
|----------|------|



## Drawbar

Y-shaped fully welded construction.

|                             |             |
|-----------------------------|-------------|
| Dimensions (solid sections) | 30 x 175 mm |
|-----------------------------|-------------|



## Moldboard (standard)

|  |   |
|--|---|
| Moldboard (12 ft)                        | 3660 x 580 x 20 mm (12' x 22,8" x 0,8") |
| Blade material                           | High carbon steel                       |
| Blade pull (at a friction factor of 0.8) |   |

|             |        |
|-------------|--------|
| BG 160 T-5  | 80 kN  |
| BG 160 TA-5 | 105 kN |



## Blade Range

|  |                 |
|--|-----------------|
| Reach outside tyres without articulation (RH&LH) blade resting on levelled surface | 2220 mm/1780 mm |
| Reach outside tyres with articulation (RH&LH), blade resting on levelled surface   | 3050 mm/2610 mm |
| Blade side shift   | 1250 mm         |
| Blade tilt range   | 35°-76°         |
| Bank sloping angle (RH&LH)   | 90°             |
| Lift above ground  | 480 mm          |
| Cut below ground   | 520 mm          |
| Distance blade/front axle  | 2204 mm         |

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



## Operator's Platform

|            |         |
|------------|---------|
| Dimensions |         |
| Width      | 1150 mm |
| Depth      | 1400 mm |

Available with various options as listed under "Optional equipment", moldboard control acc. to EURO standard.



## Capacities

|                             |              |
|-----------------------------|--------------|
| Fuel                        | 300.0 litres |
| Hydraulic oil               | 170.0 litres |
| Engine oil                  | 19.0 litres  |
| Ergopower transmission      | 34.0 litres  |
| Axle drive rear             | 13.5 litres  |
| Planetary gears and brakes  | 16.0 litres  |
| Tandem case (2 x 21 litres) | 42.0 litres  |
| Circle drive                | 6.0 litres   |
| Coolant                     | 33.0 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  |
| Oil flow, max.     | 132l/min |



## Optional Equipment

### Cab, standard, tiltable

Integrated ROPS/FOPS cab mounted on isolators to limit vibration and noise entering the cab. 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 left and right with lockable intermediate positions, fresh air heating with pre-filter, air circulation. Adjustable, mechanical spring mounted driver's seat with safety belt. One inside mirror and two folding outside mirrors.

Front window washer.

Wipers front and rear.

Blinds front and rear.

|                        |                       |
|------------------------|-----------------------|
| Height / Width / Depth | 1980 / 1470 / 1700 mm |
|------------------------|-----------------------|

### Cab, low-profile, tiltable

|                        |                       |
|------------------------|-----------------------|
| Height / Width / Depth | 1760 / 1470 / 1700 mm |
|------------------------|-----------------------|

Air-cushioned driver's seat

Recording speedometer

Cooling box

Stereo radio with CD-Player

Sliding side windows

Protective grids for lights and cabin

|                   |   |
|-------------------|---|
| Moldboard (14 ft) | 4267 x 580 x 20 mm (14' x 22,8" x 0,8") |
|-------------------|---|

Cover plate for upper guide rail of moldboard

Adjustable moldboard corner shoes, left or right

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

Float position for both moldboard lift cylinders

Electric fuel pump with automatic switch-off

Towing device, tiltable

Front dozer blade with position indicator, parallel guided

|                |               |
|----------------|---------------|
| Width / Height | 2490 x 703 mm |
|----------------|---------------|

|                  |        |
|------------------|--------|
| Cut below ground | 250 mm |
|------------------|--------|

|                   |        |
|-------------------|--------|
| Lift above ground | 605 mm |
|-------------------|--------|

|        |        |
|--------|--------|
| Weight | 691 kg |
|--------|--------|

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

|               |         |
|---------------|---------|
| Ripping width | 2120 mm |
|---------------|---------|

|               |        |
|---------------|--------|
| Ripping depth | 285 mm |
|---------------|--------|

|                   |        |
|-------------------|--------|
| Lift above ground | 580 mm |
|-------------------|--------|

|        |        |
|--------|--------|
| Weight | 610 kg |
|--------|--------|

### Rear ripper with depth indicator, medium heavy, 4 teeth (max. 7)

|               |         |
|---------------|---------|
| Ripping width | 2120 mm |
|---------------|---------|

|               |        |
|---------------|--------|
| Ripping depth | 420 mm |
|---------------|--------|

|                   |        |
|-------------------|--------|
| Lift above ground | 560 mm |
|-------------------|--------|

|        |        |
|--------|--------|
| Weight | 804 kg |
|--------|--------|

|                           |        |
|---------------------------|--------|
| Push-Pull block, in front | 556 kg |
|---------------------------|--------|

|           |                 |
|-----------|-----------------|
| Mudguards | on front wheels |
|-----------|-----------------|

|           |                |
|-----------|----------------|
| Mudguards | on rear wheels |
|-----------|----------------|

Protective cover for powershift transmission

Ergopower transmission with torque converter and lock-up clutch

Fuel tank pump with automatic switch-off

Speed limitation at 25 km/h possible



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Technical data are subject to alteration.