**CATERPILLAR 16m Motor Grader**



**Selected Dimensions**

|  |
| --- |
| Dimensions |
| A. Overall Length | 32.7 ft in | 9963 mm |
| B. Width Over Tires | 10.2 ft in | 3095 mm |
| C. Height to Top of Cab | 12.2 ft in | 3703 mm |
| D. Wheelbase | 22.9 ft in | 6985 mm |
| E. Rear Ground Clearance | 1.3 ft in | 407 mm |
| F. Front Ground Clearance | 2.3 ft in | 688 mm |
| G. Tandem Axle Wheelbase | 6 ft in | 1841 mm |
| H. Blade Base | 10.1 ft in | 3069 mm |

**Specification**

|  |
| --- |
| Engine |
| Make | Caterpillar |
| Model | C13 ACERT VHP |
| Net Power Gear 1-2 | 302 hp | 225 kw |
| Net Power Gear 3-4 | 312 hp | 232.7 kw |
| Power Measured @ | 2000 rpm |
| Net Power Gear 5-6 | 312 hp | 232.7 kw |
| Number of Cylinders | 6 |
| Net Power Gears 7-8 | 312 hp | 232.7 kw |
| Max Power | 312 hp | 232.7 kw |
| Net Torque Gears 7-8 | 1261.2 lb ft | 1710 Nm |
| Displacement | 763 cu in | 12.5 L |
| Operational |
| Std Operation Weight - Front Axle | 15679 lb | 7112 kg |
| Std Operation Weight - Rear Axle | 41773 lb | 18948 kg |
| Std Operation Weight - Total | 57452 lb | 26060 kg |
| Max Operation Weight - Front Axle | 24073 lb | 10919 kg |
| Max Operation Weight - Rear Axle | 54570 lb | 24753 kg |
| Max Operation Weight - Total | 78643 lb | 35672 kg |
| Fuel Capacity | 135 gal | 511 L |
| Cooling System Fluid Capacity | 12.3 gal | 46.5 L |
| Hydrauilc System Fluid Capacity | 30.1 gal | 114 L |
| Rear Diff/Final Drive Fluid Capacity | 30.1 gal | 114 L |
| Circle Gearbox Fluid Capacity | 2.1 gal | 8 L |
| Tandem Case Fluid Capacity (each) | 32.1 gal | 121.5 L |
| Tire Size | 18.00-25 12PR (G-2) |
| Transmission |
| Type | direct drive, power shift, countershaft |
| Number of Gears - Forward | 8 |
| Number of Gears - Reverse | 6 |
| Max Speed - Forward | 33.5 mph | 53.9 km/h |
| Max Speed - Reverse | 26.5 mph | 42.6 km/h |
| Steering |
| Articulation L/R | 20 degrees |
| Turning Radius | 29.2 ft in | 8.9 m |
| Front Axle |
| Wheel Lean | 18.2 degrees |
| Oscillation - Total | 32 degrees |
| Ground Clearance | 2.3 ft in | 688 mm |
| Hydraulic System |
| Pump Type | variable piston |
| Pump Flow | 74 gal/min | 280 L/min |
| Relief Valve Pressure | 3500 psi | 24150 kPa |
| Moldboard |
| Moldboard Width | 16 ft in | 4877 mm |
| Moldboard Height | 31 in | 787 mm |
| Moldboard Thickness | 1 in | 25 mm |
| Max Depth of Cut | 19.2 in | 488 mm |
| Side Shift Left | 25.6 in | 740 mm |
| Side Shift Right | 43.1 in | 1094 mm |
| Blade Pull at Max Weight | 49156 lb | 22297 kg |
| Blade Down Pressure | 42957.1 lb | 19485 kg |
| Circle |
| Diameter | 71.8 in | 1822 mm |
| Shift Left | 25.5 in | 647 mm |
| Shift Right | 23.5 in | 597 mm |
| Max Reach Outside Tires - Left | 90 in | 2282 mm |
| Max Reach Outside Tires - Right | 101.9 in | 2587 mm |
| Max Lift Above Ground | 15.6 in | 395 mm |
| Blade Tip Angle - Front | 40 degrees |
| Blade Tip Angle - Rear | 5 degrees |
| Dimensions |
| Height to Top of Cab | 12.2 ft in | 3703 mm |
| Overall Length | 32.7 ft in | 9963 mm |
| Width Over Tires | 10.2 ft in | 3095 mm |
| Wheelbase | 22.9 ft in | 6985 mm |
| Blade Base | 10.1 ft in | 3069 mm |
| Tandem Axle Wheelbase | 6 ft in | 1841 mm |
| Rear Ground Clearance | 1.3 ft in | 407 mm |
| Front Ground Clearance | 2.3 ft in | 688 mm |