Bronze alloy guides on blade and circle provide long service life.

A simple blade suspension system allows good forward visibility.

Stable work equipment speeds are unaffected by engine speed.

The advanced monitoring system delivers self-diagnostics and can provide historical diagnostic information.

Excellent visibility to the rear. Front and rear glass is angled to prevent dust build up.

A wide working range is accomplished through unsurpassed blade geometry.

Model shown may include optional equipment.

Brakes are hydraulically operated wet type multiple-disc and maintenance free. No air system.

The lock-up torque converter provides smooth power for grading and speed for roading or snow removal.

Wheel spin is reduced with the manual lock/unlock differential (optional).

Building on technology and expertise Komatsu has accumulated since its establishment in 1921, GALEO presents customers worldwide with a strong, distinctive image of technological innovation and exceptional value. The GALEO brand will be employed for Komatsu’s full lineup of advanced construction and mining equipment. Designed with high productivity, safety and environmental considerations in mind, the machines in this line reflect Komatsu’s commitment to contributing to the creation of better world.

Genuine Answers for Land and Environment Optimization

High performance engine Komatsu SAA6D114E turbocharged and air to air aftercooled diesel provides 149 kW 200 HP for demanding applications.

Access to all necessary engine maintenance items is easy with wide hinged compartment doors.

NET HORSEPOWER
149 kW 200 HP

OPERATING WEIGHT
14870 kg 32,780 lb

BLADE LENGTH
3.71 m 12 ft

GD675-3 Motor Grader

Walk-Around
Converter Drive: Designed to Provide Power and Performance on the Job Site

Komatsu Power Shift Transmission
is designed and built specifically for Komatsu graders. The transmission provides on-the-go, full power shifting as well as inching capability and automatic shifting in the higher ranges.

Lock-up Torque Converter
or direct drive the operator chooses the optimum transmission set-up for the job at hand. If power for tough grading or low speed fine control is required, the operator can select the torque converter mode. With the torque converter, the operator has tremendous tractive effort. More importantly, is the fine control at low speed without shifting or using an inching pedal. Torque converter drive is available in gears 1-4. If high transport speed or high speed for snow removal is needed, the operator can select direct drive. The operator has the best of both worlds, torque converter or direct drive, at his fingertips.

Gear Selections
Eight forward speeds and four reverse speeds give the operator a wide operating range. With four gear selections below 9.7km/h (6mph), the operator can precisely match working speeds to match the demand. The result is less hydraulic system heat, quick response and lower fuel consumption. The bottom line is greater efficiency.

Komatsu graders boast the industry’s most versatile moldboard geometry. Save time and money when pulling ditches by throwing the windrow to the right, not into the roadway—without narrowing the road bed. No extra machines or crew are needed to pick up the window. It’s made possible by Komatsu’s extraordinary reach. Plus, there is generous clearance between the heel of the blade and main frame, even with the toe sharply angled down.

Extra-long lift cylinders let the moldboard reach 815 mm (2’8”) below grade.

Blade Angle A long wheel base allows the operator to obtain an aggressive moldboard single. This large blade angle permits material to roll more freely along the blade, which reduces power requirements. This is particularly helpful in dry or clay soil and snow and ice removal.

Rugged Construction The A-frame drawbar u-shape welded construction. A one-piece forged circle is built to stand up to high stress loads. To reduce wear, teeth are induction hardened in the front 180° of the circle. For maximum support, the circle is secured to the drawbar by six support shoes.

Replaceable Metal Wear Inserts Replaceable metal wear inserts are located between the drawbar and circle and support shoes and circle. This wear system helps keep components tight for fine grading and allows easy replacement. Komatsu also uses replaceable metal wear items in the following areas:
• Circle and moldboard tip bracket bearings
• Moldboard slide rail

Cylinder Socket Dust Seals Cylinder sockets have dust seals to prevent dust from entering inside the sockets causing wear.

Optional Protection Systems
• Blade Lift Accumulators absorb shocks when the moldboard contacts immovable objects. This option is especially useful in rough grading and rocky areas. It provides precise control while allowing relief from vertical impact loads.
• Circle Drive Slip Clutch protects the drawbar, circle and moldboard from horizontal shocks when an object is hit near the toe or heel of the blade. This option is most useful in applications where hidden objects are frequently encountered.
Excellent Visibility

Exceptional visibility helps improve operator confidence and productivity in all grader applications. Well positioned blade linkage provide an unobstructed view of the moldboard and front tires. Tapered engine hood provide good visibility to the rear of the machine, especially to the rear ripper.

Quiet Cab (Optional)

With the doors closed, the quiet environment keeps the operator alert and focused. Extra leg and foot room create a spacious, open cab. The cab includes built-in storage space for personal items such as a lunch box, coffee cup, and a hook for a coat.

Low Effort

Pedals, hydraulic controls, and transmission shifter reduce operator strain and fatigue. Pedals are angled and raised off the cab floor to make them easy to reach.

Easy-to-Read Gauges

Electronic monitoring system checks important machine systems and provides the operator with three levels of warning.

Adjustable Control Console

The control console is adjustable backward and forward to facilitate entry and exit from the cab. The steering wheel also tilts to the operators preference. There are handrails on both sides of the cab so the operator need not grasp the steering wheel when entering the cab.

Optional Air Conditioner

Well-positioned air conditioning vents keep the operator comfortable through a wide range of outside conditions. In warm weather, the operator can get cold air flow towards his/her back even when the front lower window is opened.
Superior Serviceability

Easy Access to Service Areas
- Large hinged doors are standard and provide easy access to the engine and radiator service points. Spin-on oil filters can be changed quickly.
- Lubrication points for articulation joint are remote-mounted.
- Fuse panel is located in the operator compartment. Circuits and fuse sizes are clearly identified.
- Tandem oil check point is conveniently located at the end of the tandem.
- Service meter is located on the left side of the steering console, offering a clear view from the ground.

Power Train Components
Features a modular design so you can remove the engine, transmission or final drives independently for quick service.

Message Center
The message center monitors the transmission and engine function with computer sensors. There are six modes available with ability to scroll through mode selections.

Maintenance-Free Oil Disc Brakes
Komatsu designs and builds multiple-disc brakes that are completely sealed and adjustment-free. The brakes are oil bathed, hydraulically actuated and spring-released and are located at each tandem wheel to eliminate brake loads on the power train and to speed up servicing. A fully hydraulic brake system eliminates all problems associated with air systems. The large braking surface provides dependable braking capability and long life before rebuild.

Friendly Environment
The rubber mounted engine and transmission transmit less engine noise and vibration to the operator and extend component life.

**Maintenance Features**

**Power Plant Components**
- Twin air induction, turbocharged, direct injection, 4-cylinder diesel engine, 270 HP rated at 1900 rpm
- Peak power: 270 HP @ 1900 rpm
- Gross horse power: Wrench tightness...

**Engine**
- Model: Komatsu SAA6D114E
- Type: Water-cooled, 4-cylinder, direct injection
- Aspiration: Turbocharged and air to air aftercooled
- Number of cylinders: 6
- Bore: 114 mm
- Stroke: 135 mm
- Piston displacement: 8.27 fl mcb
- Gross horse power: Gear 1-3... 57 kW @ 1900 rpm
- Net flywheel horsepower: Gear 1-3... 57 kW @ 1900 rpm
- Net flywheel horsepower: Gear 4-8... 108 kW @ 1900 rpm

**Torque Converter**
- Maximum torque converter displacement: 200 HP @ 1900 rpm
- Maximum torque converter mph: 70.5 mph
- Maximum transmission range: 71 mph

**Transmission**
- Full power shift transmission with integral free wheeling stator torque converter and lock-up
- Speeds (at rated engine speed):
  - Gear 1-3...
  - Gear 4-8...

**Tandem Drive**
- Oscillating welded box section...
- Sprocket drive chain, single strand...
- Side plate thickness...
- Wheel axle spacing...
- Tandem oscillation...

**Frame**
- Section, welded unit...
- Linear weight per length...
- Minimum...
- Maximum...

**Specifications**

**Features**
- Maintenance-Free Oil Disc Brakes
- Friendly Environment
- Message Center
- Power Train Components

**Front Axle**
- Axle steer, heat treated, full floating axle, spiral bevel gear reduction.
- Tires...
- Bearing...
- Front and rear...

**Rear Axle**
- Left and right...
- Tandem...
- Parking brake...

**Wheels, Front and Rear**
- Tires...
- Bearings...

**STEERING**
- Hydraulic power steering providing stopped engine steering meeting SAE J1511.
- Minimum turning radius...
- Maximum steering range...

**Brakes**
- Service brake...
- Parking brake...

**Maintenance**
- Monthly maintenance...
- Service interval...
- Maintenance record...
- Access points...
- Maintenance check...

**Frame**
- Section, welded unit...
- Linear weight per length...
- Minimum...
- Maximum...
**DIMENSIONS**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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<td>2600 mm</td>
<td>2070 mm</td>
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<td>5’0”</td>
<td>8’6”</td>
<td>6’7”</td>
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**DRAWBAR**

A shaped, U section press formed and welded construction for maximum strength with a replaceable drawbar ball.

- Drawbar frame: 210 x 25 mm 8.3” x 1”

**CIRCLE**

Single piece rolled ring forging. Six circle support shoes with replaceable wear surface. Circle teeth hardened.

- Diameter (outside): 1530 mm 50”
- Circle reversing control hydraulic rotation: 360°

**MOULDBOARD**

Hydraulic power shift fabricated from high carbon steel. Includes replaceable end bits. Cutting edge is through hardened.

- Dimensions: 3710 x 645 x 19 mm 12’2” x 2’1” x 0.75”
- Arc radius: 329 mm 11”
- Cutting edge: 152 x 16 mm 6” x 0.63”
- Replaceable/reversible end bits: 152 x 16 mm 6” x 0.63”

**HYDRAULICS**

Load-sensing closed center hydraulics with variable displacement piston pump. Short stroke/low effort direct acting control valves with preselected maximum flow setting to each function. Double acting anti-drift check valves on blade lift, tilt, circle shift, articulation, and leaning wheels.

- Output: 194 l/min 51 gal
- Standby pressure: 3.4 MPa 50 psi
- Maximum system pressure: 20.6 MPa 3000 psi

**MOTOR GRADER**

**INSTRUMENT**

Electric monitoring system with diagnostics:

- Gauges: Standard, articulation, engine coolant temperature, fuel level, hour meter, message center, torque converter oil temperature
- Optional: speedometer

- Warning lights: Standard, battery charge, engine oil pressure, heater signal, lift arm lock, parking brake, transmission electric circuit and torque converter oil temperature
- Optional: blade accumulator, blade float, differential lock, differential oil temperature, directional indicator, high beam, working lights

**CAPACITIES (REFILLING)**

- Fuel tank: 340 ltr 89.8 U.S. gal
- Cooling system: 45 ltr 11.9 U.S. gal
- Crankcase: 19 ltr 5.0 U.S. gal
- Torque converter and Transmission: 45 ltr 11.9 U.S. gal
- Final drive: 12 ltr 3.2 U.S. gal
- Tandem housing (each): 83 ltr 21.9 U.S. gal
- Hydraulic system: 45 ltr 11.9 U.S. gal
- Circle drive housing: Standard, 5 ltr 1.3 U.S. gal

**OPERATING WEIGHT (APPROXIMATE)**

Includes lubricants, coolant, full fuel tank, and operator.

- Total: 14,670 kg 32,780 lb
- On rear wheels: 10,640 kg 23,455 lb
- On front wheels: 4,030 kg 9,325 lb

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STANDARD EQUIPMENT

- Air cleaner, dual element, dry type, and service indicator
- Air intake extension
- Alarm, back-up
- Alternator, 60 amp
- Batteries, heavy-duty, 112 Ah
- Brakes, sealed oil disc brakes
- Console adjustable
- Control valve bank, 8-section
- Decelerator/accelerator pedal
- Electrical system, 24 volt
- Engine
  Komatsu SAA6D114E turbocharged and air to air aftercooled diesel
- Engine preheat
- Frame articulation
- Full hydraulic steering, leaning front wheels
- Hinged hood-sides for engine compartment
- Horn
- Hydraulic circle shift, blade shift, and blade lift
- Hydraulic system, load sensing closed center
- Lights, rear back-up, stop/tail
- Moldboard, 3710 x 645 x 19 mm
  12'2" x 2'1" x 0.75"
- Maximum moldboard angle position 90° right and left
- Overlay end bits
- Throttle, hand control
- Tilt steering wheel
- Tires, 14.00 x 24, 12PR-G2 with 10" rims, tubeless
- Transmission, full power shift with selectable torque converter or direct drive
- Monitoring system with diagnostics/message center
- Vandalism protection

OPTIONAL EQUIPMENT

- Accumulators, anti-shock for blade lift
- Air conditioner
- AM/FM radio with cassette
- Cab, deluxe enclosed ROPS/FOPS
- Canopy, ROPS/FOPS
- Circle slip clutch
- Defroster fan, front and rear
- Differential, lock/unlock with planetaries
- Dome light
- Hazard lights
- Headlights:
  —Front bar mounted with turn and hazard
- Moldboard 4319 x 645 x 19 mm
  14'2" x 2'1" x 0.75"
- Optional cutting edges
- Optional hydraulic control valves
- Optional paint
- Optional tires
- Outside convex mirrors
- Pusher block
- Ripper, rear mounted with holding valve
- Scarifier, forward mounted with holding valve
- Speedometer
- Suspension seat
- Tachometer
- Transmission guard
- Turn signals
- Windshield wipers, two lower, rear dual with washer
- Work lights