BUCKET CAPACITY
2.7–4.0 m³
3.5–5.2 yd³

Photo may include optional equipment.
WA380-5 Wheel Loader

**WALK-AROUND**

**Excellent Operator Environment**
- Automatic transmission with selectable modes
- Low-noise designed cab (option)
- Electrically controlled transmission lever
- Fingertip control levers
- Pillar-less large ROPS/FOPS cab (option)
- Easy entry/exit, rear-hinged doors
- Telescopic/tilt steering column

See pages 8 and 9.

**High Productivity & Low Fuel Consumption**
- Powerful engine
- Ultra-low fuel consumption
- Dual-mode engine power select system
- Transmission mode select system
- Dual speed hydraulic system
- Superior dumping clearance and reach
- Long wheelbase and 40 degree articulation

See page 4.

**Increased Reliability**
- Reliable Komatsu designed and manufactured components
- Sturdy main frame
- Maintenance-free, fully hydraulic, wet disc service and parking brakes
- All hydraulic hoses use flat face O-ring seals

See page 6.

- Cathion electrodeposition process is used to apply primer paint
- Powder coating process is used to apply on main structure
- Sealed DT connectors for electrical connections

**Harmony with Environment**
- Meets EPA Tier II and EU second emission regulations
- Low spectator noise
- Low fuel consumption

**Easy Maintenance**
- “EMMS” (Equipment Management Monitoring System)
- Reversible radiator fan
- Swing-out aftercooler and oil coolers

See page 7.

- Prolonged engine oil change interval
- Ground check for windshield washer tank and coolant tank
- Easy access, gull-wing type engine side doors

**WA380-5 Wheel Loader**

**NET HORSEPOWER**
140 kW 187 HP @ 2000 rpm

**OPERATING WEIGHT**
16160–16420 kg
35,626–36,200 lb

**BUCKET CAPACITY**
2.7 – 4.0 m³
3.5 – 5.2 yd³

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**GALEO**

Based upon the expertise, technology and success which Komatsu has accumulated over 80 years, the new brand was born to provide customers all over the world a fresh image of the innovative technology and great value of Komatsu equipment. The new brand name is GALEO. High productivity, environment-friendly, safety and benefiting from cutting-edge technology, GALEO will contribute to our environment in the 21st century.

**Genuine Answer for Land and Environment Optimization**

Photo may include optional equipment.
High Productivity and Low Fuel Consumption

Powerful Engine
The high pressure fuel injection in the SAA6D114E-2 engine provides optimum combustion of fuel at both low and high speed/power applications. This engine also provides fast throttle response to match the machine’s powerful rim pull and fast hydraulic response.

140 kW, 187 HP
This engine meets EPA Tier II emission regulations and EU second emission regulations.

Low Fuel Consumption
The fuel consumption is reduced greatly because of the low-noise, high-torque engine and the large-capacity torque converter with maximum efficiency in the low-speed range.

Reduction of Fuel Consumption: 15% (compared with Dash 3 technology)

Dual-Mode Select System
This wheel loader offers two selectable operating modes—Normal and Power. The operator can adjust the machine’s performance by flipping a switch.

● Normal Mode: This mode provides maximum fuel efficiency for most of general loading.

● Power Mode: This mode provides maximum power output for hard digging operation or hill climb.

Transmission Mode Select System
This operator controlled system allows the operator to select manual shifting or three levels of automatic shifting (low, medium, and high).

● Manual: Transmission is fixed to gear speed selected with gear shift lever.

● Auto. L: This mode provides smooth gear change and low fuel consumption since gear shifting is performed at relatively low engine speeds, suitable for general excavating and loading.

● Auto. M: Gear is shifted at medium engine speeds between those of L and H modes.

● Auto. H: This mode provides large rim pull and short cycle time since gear shifting is performed at relatively high engine speeds, suitable for load and carry operation on uphill.

New Dual-Speed Hydraulic System
Komatsu’s dual-speed hydraulic system increases operational efficiency by matching the hydraulic demands to work conditions.

Oil from the switch pump is completely returned to the tank when digging and breaking out, therefore, hydraulic flow to the loader is reduced and pressure is increased. This reduces horsepower demand from the engine and makes the operation more efficient. Kick-down switch signal also controls the oil flow. This new technology is greater productivity at the lowest operating cost.

Maximum Dumping Clearance and Reach
The long lift arms provide high dumping clearances and maximum dumping reach. The operator can even level loads on the body of a dump truck easily and efficiently.

Dumping Clearance: 2885 mm 9’6”
Dumping Reach: 1210 mm 4’0”
(3.3 m³ 4.3 yd³ bucket with B.O.C.)

Long Wheelbase/Articulation Angle of 40˚
The widest tread in class and the long wheelbase provide improved machine stability in both longitudinal and lateral directions. Since the articulation angle is 40˚, the operator can work efficiently even in the tightest job sites.

<table>
<thead>
<tr>
<th>Tread</th>
<th>2160 mm 7’1”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheelbase</td>
<td>3300 mm 10’10”</td>
</tr>
<tr>
<td>Minimum turning radius (center of outside tire)</td>
<td>5620 mm 18’5”</td>
</tr>
</tbody>
</table>
EMMS (Equipment Management Monitoring System)
Monitor is mounted in front of the operator for easy view, allowing the operator to easily check gauges and warning lights.

A specially designed two-spoke steering wheel allows the operator to easily see the instrument panel.

Maintenance Control and Troubleshooting Functions
- Action code display function. If the loader has any troubles, the monitor displays action details on the character display at the center bottom of the monitor.
- Monitor function. Controller monitors engine oil level, pressure, coolant temperature, air cleaner clogging, etc. If controller finds abnormalities, all of these are displayed on LCD.
- Replacement time notice function. Monitor informs replacement time of oil and filters on LCD when it reaches replacement intervals.
- Trouble data memory function. Monitor stores abnormalities for effective troubleshooting.

Reversible Cooling Fan and Swing-out Cooler Elements
If the machine is operating in adverse conditions, the operator can reverse the hydraulic cooling fan from inside the cab by turning on a switch on the control panel. The coolers can also swing out for easy cleaning.

Gull-wing Type Engine Side Doors Open Wide
The operator can open and close each gull-wing type engine side door easily with the assistance of a gas spring to perform daily service checks from the ground.

Lengthened Maintenance Interval
Lengthened engine oil replacement interval: 250 H → 500 H
Lengthened drive shaft greasing interval: 1,000 H → 4,000 H

Komatsu Components
Komatsu manufactures the engine, torque converter, transmission, hydraulic units, electric parts, and even each bolt on this wheel loader. Komatsu loaders are manufactured with an integrated production system under a strict quality control system.

Wet multi-disc brakes and fully hydraulic braking system mean lower maintenance costs and higher reliability. Wet disc brakes are fully sealed. Contaminants are kept out, reducing wear and resulting maintenance. Brakes require no adjustments for wear, meaning even lower maintenance. The new parking brake is also an adjustment-free, wet multi-disc for high reliability and long life.

Added reliability is designed into the braking system by the use of two independent hydraulic circuits. Provides hydraulic backup should one of the circuits fail.

Fully hydraulic brakes mean no air system to bleed, or the condensation of water in the system that can lead to contamination, corrosion, and freezing.

High-rigidity Frames
The front and rear frames have high rigidity to bear twisting and bending loads applied repeatedly to the loader body. Both upper and lower center pivot bearings are tapered roller bearings having high durability. The structure is similar to those of large-sized loaders and the reinforced loader linkage also ensures high rigidity.

Flat Face-to-Face O-Ring Seals
Flat face-to-face O-ring seals are used to securely seal all hydraulic hose connections and to prevent oil leakage. In addition, buffer rings are installed to the head side of the all-hydraulic cylinders to lower the load on the rod seals and maximize the reliability.

Cathion Electrodeposition Primer Paint/Powder Coating Final Paint
Cathion electrodeposition paint is applied as a primer paint and powder coating is applied as topcoat to the exterior metal sheet parts. This process results in a beautiful rust-free machine, even in the most severe environments. Some external parts are made of plastic providing long life and high impact resistance.

Sealed DT Connectors
Main harnesses and controller connectors are equipped with sealed DT connectors providing high reliability, water resistance and dust resistance.
Easy Operation

Automatic Transmission with ECMV
Automatic transmission with ECMV automatically selects the proper gear speed based on travel speed, engine speed, and other travel conditions. The ECMV (Electronically Controlled Modulation Valve) system engages the clutch smoothly to prevent lags and shocks when shifting. This system provides efficient machine operation and a comfortable ride.

Kick-down switch: Consider this valuable feature for added productivity. With the touch of a finger, the kick-down switch automatically downshifts from second to first when beginning the digging cycle. It automatically upshifts from first to second when the direction control lever is placed in reverse. This results in increased rim pull for better bucket penetration and reduced cycle times for higher productivity.

Hold switch: Auto shift is selected and if the operator turns on this switch when the lever is at the 3rd or 4th gear speed position, the transmission is fixed to that gear speed.

Electronically Controlled Transmission Lever

Variable Transmission Cut-off
The operator can adjust the transmission cut-off connected to the left brake pedal with the switch near the operator’s seat to set the brake/cut-off point for easier operation and higher operating performance in variable operating conditions.

- High cut-off pressure for digging operations.
- Low cut-off pressure for truck-loading operations.

Telescopic/Tilt Steering Column
The operator can tilt and telescope the steering column to provide a comfortable working position.

Fingertip Work Equipment Control Lever
New PPC control levers are used for the work equipment. The operator can easily operate the work equipment with fingertip control, reducing operator fatigue and increasing controllability. The PPC control lever column can be tilted forward or rearward and the wrist rest can be adjusted up or down to provide the operator with a variety of comfortable operating positions.

Comfortable Operation

Low-noise Design
Operator noise: 72 dB(A)
Dynamic noise (outside): 110 dB(A)
The large cab is mounted with Komatsu’s unique ROPS/FOPS viscous mounts. The low-noise engine, hydraulically driven fan, and hydraulic pumps are mounted with rubber cushions, and the cab sealing is improved to provide a quiet, low-vibration, dustproof with pressurizing, and comfortable operating environment. Also, spectator noise is lowest in this class.

Rear-hinged Full Open Cab Door
The cab door hinges are installed to the rear side of the cab providing a large opening angle for the operator to enter and exit. The steps are designed like a staircase, so that the operator can get on and off the cab easily.

Emergency Brake
If the brake oil pressure drops, the warning lamp flashes and the warning buzzer sounds intermittently. If the brake pressure drops lower, the parking brake is applied providing a double safety system.

Pillar-less Large Cab (Optional)
A wide pillar-less flat glass provides excellent front visibility. The wiper arm covers a large area to provide great visibility even on rainy days.

The cab area is the largest in its class providing maximum space for the operator.
**ENGINE**

- Model: Komatsu SAA6D114E-2
- Type: Water-cooled, 4-cycle
- Minimum turning radius at the center of outside tire: 7'1"

**HYDRAULIC SYSTEM**

- Hydraulic pump: 94 l/min 24.8 U.S. gal/min at rated rpm
- Relief valve setting: 160 kgf/cm² (2,275 psi)
- Hydraulic cylinders: Double-acting, piston type
- Number of cylinders: 2
- Bore x stroke: 80 mm x 442 mm (3.1" x 17.4")

**TRANSMISSION**

- Torque converter: 3-element, single-stage, single-phase
- Gear pump: 24.8 U.S. gal/min at rated rpm
- Full-flow type

**AXLES AND FINAL DRIVES**

- Gear pump, force-lubrication
- Full-flow type

**SERVICE REFILL CAPACITIES**

- Cooling system: 36 ltr 9.5 U.S. gal
- Fuel tank: 300 ltr (79.3 U.S. gal)
- Engine: 32 ltr 8.5 U.S. gal
- Hydraulic cylinder: 120 ltr 43.1 U.S. gal
- Axle (each front and rear): 48 ltr 10.0 U.S. gal
- Torque converter and transmission: 54 ltr 14.3 U.S. gal

**DIMENSIONS**

- Measured with 20.5-25 tires

**BRAKES**

- Service brakes: Hydraulically actuated, wet disc brakes active on all wheels
- Parking brake: Wet disc brakes
- Emergency brake: Parking brake is commonly used

**SPECIFICATIONS**

- **Wheels:**
  - 2160 mm (7'1'')
  - Width over tires: 2996 mm (9'10'')
  - Wheelbase: 3330 mm (11'0'')
  - Hinge pin height, max. height: 4030 mm (13'3'')
  - Hinge pin height, carry position: 520 mm (1'8'')
  - Ground clearance: 340 mm (1'1'')
  - Hitch height: 1085 mm (3'7'')
  - Overall height, top of the stack: 2855 mm (9'9'')
  - Overall height, ROPS cab: 3215 mm (10'7'')

**STEERING SYSTEM**

- **BRAKES**
  - Service brakes: Hydraulically actuated, wet disc brakes active on all wheels
  - Parking brake: Wet disc brakes
  - Emergency brake: Parking brake is commonly used

**CONTROL VALVE**

- 2-spool type

**RESERVES**

- 31" x 1074" (WA380-5)
- 20.5-25-16PR (L3) tires

**BUCKET SELECTION GUIDE**

- Light Material Bucket with BOC (Scooping and loading of light material)
- General Purpose Bucket with BOC (Loading and excavating of soil, sand and variety of other commonly handled material)
- Excavating Bucket with BOC (Loading and excavating of blasted rock)
- Excavating Bucket with Teeth (Loading and excavating of blasted rock)

*At the end of this document.*

All dimensions, weights, and performance values based on SAE J732c and J742b standards.

Static tipping load and operating weight shown include lubricant, coolant, full fuel tank, ROPS cab, and operator. Machine stability and operating weight affected by counterweight, tire size, and other attachments.

Apply the following weight changes to operating weight and static tipping load.
### WEIGHT CHANGES

<table>
<thead>
<tr>
<th>Tires</th>
<th>Operating weight</th>
<th>Tipping load straight</th>
<th>Tipping load full turn</th>
<th>Width over tires</th>
<th>Ground clearance</th>
<th>Change in vertical dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>kg</td>
<td>lb</td>
<td>kg</td>
<td>lb</td>
<td>mm</td>
<td>ft m</td>
</tr>
<tr>
<td>20.5-25-16PR(L-3)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>2695</td>
<td>8'10&quot;</td>
</tr>
<tr>
<td>23.5-25-16PR(L-3)</td>
<td>+1080</td>
<td>+240</td>
<td>+740</td>
<td>+650</td>
<td>+1433</td>
<td>9'1&quot;</td>
</tr>
<tr>
<td>Remove ROPS cab</td>
<td>-660</td>
<td>-1'456</td>
<td>-650</td>
<td>-1'431</td>
<td>-628</td>
<td>-1'378</td>
</tr>
<tr>
<td>Install front compartment</td>
<td>+120</td>
<td>+265</td>
<td>+120</td>
<td>+265</td>
<td>+115</td>
<td>+254</td>
</tr>
<tr>
<td>Install additional counterweight</td>
<td>+325</td>
<td>+717</td>
<td>+860</td>
<td>+1'896</td>
<td>+715</td>
<td>+1'577</td>
</tr>
</tbody>
</table>

### STANDARD EQUIPMENT

- 2-spool valve for boom and bucket controls
- Alternator, 35 A
- Auto shift transmission with mode select system
- Back-up alarm
- Back-up lamp
- Batteries, 150 Ah/2 x 12 V
- Boom kick-out
- Bucket positioner
- Counterweight
- Directional signal
- Engine, Komatsu SAA6D114E-2 diesel
- Engine shut-off system, electric
- Hard water area arrangement (corrosion resistant)
- Hydraulic-driven fan with reverse rotation
- Lift cylinders and bucket cylinder
- Loader linkage with standard lift arm
- Main monitor panel with EMMS (Equipment Management Monitoring System)
- PPC fingertip control, two levers
- Radiator mask, lattice type
- Seat, suspension type with reclining
- Service brakes, wet disc type
- Steering wheel, tiltable
- Swing-out aftercooler and oil cooler
- Tires (20.5-25-16PR, L3 tubeless)
- Transmission, 4 forward and 4 reverse

### OPTIONAL EQUIPMENT

- 3-spool valve
- Additional counterweight
- Additional fuel filter
- Air conditioner
- Air conditioner side louver
- Alternator, 50 A
- AM/FM radio
- AM/FM stereo radio cassette
- Auto air conditioner
- Automatic greasing
- Battery disconnect switch
- Brake cooling system
- Bucket teeth (bolt-on type)
- Bucket teeth (tip type)
- Counterweight for log
- Cutting edge (bolt-on type)
- Deluxe suspension seat
- ECSS (Electronically Controlled Suspension System)
- Emergency steering (EMS)
- Engine pre-cleaner with extension
- EFC fingertip control lever with automatic lever and positioner
- Floormat
- Front fender
- Heater and defroster
- High lift arm
- Joystick steering
- Limited slip differential (FLR)
- Load meter, new type
- Log grapple
- Ordinary spare parts
- Power train guard
- Rear defroster (electric)
- Rear fender
- Rearview mirror
- Rear window washer and wiper
- Remote grease (lift arm pivot pin)
- ROPS/FOPS cab
- ROPS/FOPS canopy
- Seat belt
- Single lever, loader control
- Sun visor
- Tool kit
- Vandalism protection kit
- Water separator

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