The powerful Komatsu SA12V140 engine provides fuel-efficient operation.

Roomy, quiet cab with high-capacity air conditioner substantially reduces operator fatigue.

Large bucket capacity and ample dumping clearance/reach make the WA900 an excellent worker's partner with 105 metric tons dump trucks.

Exclusive "Dual Speed Hydraulic System Plus" ensures shortened cycle time.

Kick-down switch on the boom control lever improves pile penetration and scooping operations.

Electrically controlled transmission enables light-finger tip control of all direction/gear shift changes.

Tilttable steering wheel and adjustable seat provide operator comfort and efficiency.

Komatsu viscous damping cab mounts reduce vibration and noise.

Adjustment-free service brake accounts for higher performance and reduced downtime.

High-quality components are used for superior reliability and availability.
The Answer for Higher Reliability and
Productivity

Proven Power
The world-proven Komatsu 12-cylinder, direct-injection turbo-charged SA12V140 engine has all the capability needed for today's tough operations.

Flywheel horsepower
637 kW 853 HP @ 2,000 RPM

Reliable Power Train
The engine, torque converter and transmission as well as the hydraulic equipment and electrical parts undergo strict quality control checks for enhanced reliability and durability.

Durable Bucket
Komatsu buckets are manufactured using high-tensile strength steel with replaceable welded wear plates for extended bucket life. Additional strength has been added to the bucket bottom corners, side edges and spill guard ends for increased durability.

Bucket capacities
13.0 m³ (17 cu. yd)

Large Dumping Clearance
The WA900-3 was designed with ample dumping clearance for dump truck matching.

High Breakout Force
Komatsu wheel loaders have high-tensile steel Z-bar loader linkages for maximum rigidity and maximum breakout force. Sealed loader linkage pins extend greasing intervals.

Excellent Stability
The WA900-3 has the widest tread in its class 3,350mm (11') and a long 5,450mm (17'11'') wheelbase, for maximum machine stability.

Shortened Cycle Time
- Since the implement requires relatively little hydraulic oil during excavation and scooping, the variable displacement pump's output is reduced. Power freed by reducing the pump load is translated into driving force. As a result, the machine's pushing force increases, which bolsters excavating efficiency.
- During dump approach and other boom-up operations, the variable displacement pump's output is greatly increased. This raises boom speed and reduces cycle times.
- By sensing the engine speed, the system allows the machine to quickly accelerate at low speeds. Also, at low engine speeds the output to the implement is reduced, serving as a control to reduce the load on the engine. (Between 800 rpm and 1,100 rpm, the angle of the swash plate in the loader pump and the swash pump is varied depending on engine speed, causing pump output to vary between 50% and 100% of maximum.)

Excavation and scooping
- Switch pump flow decreases
- Hydraulic flow to implement reduced
- Power to tires increased 15%

Low engine speeds or raising the boom
- Switch pump flow increases
- Hydraulic flow to implement increased 12%
- Power to tires reduced

All hydraulic flow from the switch pump is transferred to the implement. However, at low engine speeds the output volume is controlled to prevent the implement from moving at the rate of the engine rotation.

Power to the tires is reduced only for the amount of the switch pump's driving power.
Focus on Operator Comfort and

Easy to Use Joystick Steering (Optional)
A joystick steering system has been incorporated to allow steering and forward/reverse selection to be affected by wrist and finger control without the operator having to move his arm from the rest. The boom lever hold and kick-down switches change to up-shift and down-shift switches respectively.

Faster Pile-Penetration & Scooping
A kick-down switch down-shifts the transmission from forward 2nd to 1st gear, for increased rim pull and hence improved bucket filling. When the direction control lever is set to reverse, it automatically up-shifts from 1st gear to 2nd, to reduce cycle time.

Ergonomically-Designed Controls
All controls are ergonomically designed to minimize operator fatigue. The steering wheel and instrument panel are similar to those of a car. The bucket and boom controls have PPC valves and short-stroke levers, to reduce operator effort. With the electrically-controlled transmission, direction and gearshift control levers can be finger-operated while holding the steering wheel with the same hand, allowing instant, positive direction and gearshift changes.

Comfortable Operator's Seat
The operator’s seat has a reclining/air suspension design with headrest to support the operator comfortably during long operation. Also, it is easy to adjust seat height with air suspension.
Smooth Electronic Automatic Transmission (Optional)
With the electronic automatic transmission, you can always enjoy the optimum speed for the machine traveling conditions. Clutch engagement during gear shifting is so smooth that time lag and shock are small and ride comfort is ensured. When ascending or descending a slope or while operating, the automatic transmission can easily be set to the standard manual transmission by using the manual switch.

Stair Light
The stair light, which illuminates the rear access stairs for about a minute, is operated by pushing a switch inside the cab, regardless of ignition key position.

Roomy, Quiet Cab With Power Windows
The cab is large, with a comfortably spacious interior and power windows. Also, a wide viewing angle is guaranteed because the cab is pillar-less. By adopting a high-capacity air conditioner, Komatsu ensures operator comfort, no matter the exterior conditions. Other features designed with operators in mind include a lunchbox storage space.

Tiltable Steering Column & One-Glance Monitors
The steering column can be easily tilted-adjusted to the most comfortable position with one lever. Together with the two-spoke design, this guarantees better vision of the monitors.

Low Vibration & Noise
The cab rests on Komatsu viscous damping mounts (rubber and silicon oil) to reduce vibration and noise. All hydraulic equipment is mounted on high-resistance rubber to further reduce vibration and noise.

Simple Checks, Easy Maintenance
The main monitor and the maintenance monitor (EDGE II) are neatly arranged on the instrument panel for a quick, clear reading of machine functions at all times. The main monitor also has a diagnostic function.

High-Quality Paint
Most exterior plates are treated with a cathodic electro-deposition undercoat and melamine baked final paint for rust resistance and longer service life.

Maintenance-Free Braking System
Service brakes employ two hydraulically-actuated independent circuits for increased safety and are adjustment-free, fully-sealed, wet disc units, preventing intrusion of dirt and dust. Since the brake system does not use air, it provides many features such as absence of condensation, dependable braking even in cold conditions, no need for drainage, and rust free piping. What's more, charging time after engine starting is drastically shortened and pedal depressing effort is reduced.

Auto-Greasing System (optional)
The periodic lubrication points, except for drive shaft, are greased automatically according to a preset amount and interval. Quick-change grease ceners make replacement easy and clean.
## SPECIFICATIONS

### ENGINE
- **Model**: Komatsu SA12V140
- **Type**: Water-cooled, 4-cycle
- **Aspiration**: Turbocharged
- **No. of cylinders**: 12
- **Bore × stroke**: 140 mm × 155 mm, 5.5" × 6.3"
- **Piston displacement**: 36.5 ltr., 1,881 cu.in
- **Performance**:
  - **Flywheel horsepower**: 527 kW, 850 HP (SAE-J1349)
  - **Rated RPM**: 2,000 RPM
  - **Fuel system**: Direct injection
  - **Governor**: Mechanical, all-speed control
  - **Lubrication system**: Gear pump, pressurized lubrication
  - **Filter**: Full-flow type
  - **Air cleaner**: Dry type with automatic dust ejector and pre-cleaner, cyclone with vacuum

### TRANSMISSION
- **Torque converter**:
  - **Type**: 3-element, single-stage, single-phase
- **Transmission**:
  - **Type**: Full-powershift, planetary gear type
- **Travel speed: km/h MPH**
  - Measured with 45/65-45-58R tires
  - **1st**: 7.0, 4.3
  - **2nd**: 12.3, 7.6
  - **3rd**: 28.0, 17.4
- **Forward**: 7.1, 4.4
  - **Reverse**: 12.4, 7.7
  - **28.3, 17.6

### AXLES & FINAL DRIVES
- **Drive system**: Four-wheel drive
- **Front**: Fixed, full-floating
- **Rear**: Center-pin support, full-floating ± 11° oscillation
- **Reduction gear**: Spiral bevel gear
- **Differential gear**: Straight bevel gear
- **Final reduction gear**: Planetary gear, single reduction, oil bath

### BRAKES
- **Service brakes**: 4-wheel, systematic brake for front/rear wheels
- **Parking brake**: Dry-disc type, hydraulic released, spring applied on front axle input shaft
- **Emergency brake**: Uses parking brake

### STEERING SYSTEM
- **Type**: Articulated type, full-hydraulic power steering
- **Steering angle**: 40° each direction
- **Minimum turning radius at the center of outside tire**: 9,200 mm, 30° 2"

### HYDRAULIC SYSTEM
- **Hydraulic system**:
  - **Hydraulic pump**: Piston pump
  - **Capacity**: 307 ltr./min., 81 U.S. gal/min. at 1400 RPM
  - **Relief valve setting**: 350 kg/cm², 4,977 PSI
  - **Hydraulic cylinders**:
    - **Type**: Double-acting, piston type
    - **No. of cylinders**: 2
    - **Bore × stroke**: 150 mm × 503 mm
  - **Loader control**:
    - **Hydraulic pump**: Piston pump
    - **Capacity**: 405 ltr./min., 107 U.S. gal/min. at 1400 RPM
  - **Relief valve setting**: 350 kg/cm², 4,977 PSI
  - **Switch pump**: Piston pump
  - **Capacity**: 405 ltr./min., 107 U.S. gal/min. at 1400 RPM
  - **Hydraulic cylinders**:
    - **Type**: Double-acting, piston type
    - **No. of cylinders**: 2
    - **Bore × stroke**: 2-260 mm × 1,368 mm
    - **Bucket cylinder**: 1-300 mm × 906 mm
  - **Control valve**:
    - **Boom**: Spool type
    - **Control positions**:
      - **Boom**: Raise, hold lower end float
      - **Bucket**: Tilt-back, hold and dump
  - **Hydraulic cycle time (rated load in bucket)**:
    - **Raise**: 11.2 sec.
    - **Dump**: 2.8 sec.
    - **Lower (Empty)**: 4.8 sec.

### ROPS & CAB
- **Structure complies with ISO 3471 and SAE J1040c ROPS (Roll-Over Protective Structure) standards, as well as ISO 3449 FOPS (Falling Object Protective Structure) standards. The cab is mounted on viscous mount and well insulated.**

### SERVICE REFILL CAPACITIES
- **Cooling system**: 301 ltr., 79.5 U.S. gal
- **Fuel tank**: 1,430 ltr., 377.8 U.S. gal
- **Engine**: 132 ltr., 34.0 U.S. gal
- **Hydraulic system**: 725 ltr., 191.5 U.S. gal
- **Axle (each front and rear)**: 360 ltr., 95.1 U.S. gal
- **Torque converter and transmission**: 140 ltr., 37 U.S. gal

### TIRES
- **Front and rear 45/65-45-58PR(L-5)**
BUCKET SELECTION

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Capacity Needed</th>
<th>Capacity Changed</th>
<th>Operating weight kg lb</th>
<th>Static tipping load kg lb</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Capacity</td>
<td>Tires/Buckets</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>45/65-45-58PR (L-5)</td>
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<td>(46365)</td>
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<td>223,850</td>
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<td>66,140</td>
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<td>145,310</td>
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<td></td>
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<td>58,200</td>
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</tr>
</tbody>
</table>

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, steel cab, ROPS canopy, air conditioner, lip type teeth and operator. Machine stability and operating weight are affected by counterweights, or ballast, tire size, and other attachments. Use either either counterweight or ballast, not both. Apply the following weight changes to operating weight and static tipping load.

WEIGHT CHANGES

<table>
<thead>
<tr>
<th>Change in operating weight</th>
<th>Change in tipping load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove ROPS canopy</td>
<td>-1,385 kg -3,055 lb</td>
</tr>
<tr>
<td>Remove steel cab</td>
<td>-430 kg -950 lb</td>
</tr>
<tr>
<td>Straight</td>
<td>-1,220 kg -2,600 lb</td>
</tr>
<tr>
<td>Full turn</td>
<td>-1,100 kg -2,000 lb</td>
</tr>
</tbody>
</table>

STANDARD EQUIPMENT

Engine and cooling system: Starter, Alternator, Preheater, Corrosion resistor
Electrical components: Headlights(2), Rear working lights(2), Brake lamps or tail lamps, Turn indicators (front and rear), Electric display/monitoring system/star light
Gauges: Fuel level, Coolant temperature, Torque converter oil temperature, Speedometer, Service meter
Pilot lamps: Engine preheating, Working light on, Turn indicator on, Parking brake applied, Transmission shift-off
Monitor lights: Engine oil level, Brake oil level, Coolant level
Caution lamps: Battery charging. Fuel level, Transmission oil filter clogging, Air cleaner filter clogging
Caution lamps with alarm: Engine oil pressure, Coolant level, Coolant temperature, Torque converter oil temperature, Parking and neutral, Brake oil pressure
Others: Sight gauges (hydraulic reservoir level, transmission oil level, brake oil level), Dust indicator Emergency brake, 45/65-45-58PR (L-5) tubeless tires, Bucket positioner, Boom kickout, Air suspension seal

OPTIONAL EQUIPMENT

Front working lights(2), Side working lights(2), Air conditioner, Heater and defroster, Car radio, Sun visor, Fire extinguisher, Vandalism protection kit, Emergency steering, Yellow rotating lamp, Backup alarm, Underframe mirror, Power-train underguard, Ashtray and cigarette lighter. Rear under view mirror, Room mirror, Seal belt, Fenders, Bucket teeth (weld-on tip type), Bucket corner teeth, Sweeper wing, 1.5m² (15 cu. yd) spade nose rock bucket for high-lift boom, High-lift boom, Counterweight for high-lift boom, ROPS canopy, Steel cab includes front wiper, windshield washer and power window, Fast fill fuel system, Auto-greasing kit, Joystick steering, Automatic transmission, Coat bucket, Auto-greasing system

Specifications with High-Lift Boom

<table>
<thead>
<tr>
<th>Specifications with High-Lift Boom</th>
<th>Spade Nose with teeth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bucket capacity</td>
<td>11.5 m²</td>
</tr>
<tr>
<td>Rated Load</td>
<td>2300 kg</td>
</tr>
<tr>
<td>Bucket width</td>
<td>5.045 (4.760) mm</td>
</tr>
<tr>
<td>Dumping Clearance (teeth)</td>
<td>5.635 (5.255) mm</td>
</tr>
<tr>
<td>Dumping Reach (teeth)</td>
<td>2.00 (2.235) mm</td>
</tr>
<tr>
<td>Tire Size</td>
<td>45/65-45-58PR (L-5)</td>
</tr>
</tbody>
</table>
DIMENSIONS

(Unit:mm ft. in)

45/65-45 tires

Tread 3,350 11' 6"
Width over tires 4,585 15' 1"
A Wheelbase 5,450 17' 11"
B Hinge pin height, max. height 6,050 22' 10"
C Hinge pin height, carry position 830 2' 7"
D Ground clearance 550 1' 10"
E Hitch height 1,330 4' 3"
F Overall height, top of the stack 5,080 16' 8"
G Overall height, ROPS canopy 5,275 17' 4"

Measured with 45/65-45 tires

<table>
<thead>
<tr>
<th>Buckets</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>H. Dumping clearance, max. height and 45° dump angle (edge)*</td>
<td>4,640 15' 3&quot;</td>
</tr>
<tr>
<td>J. Reach at max. height and 45° dump angle (edge)*</td>
<td>2,450 8'</td>
</tr>
<tr>
<td>Reach at 2130 mm (7') cut edge clearance and 45° dump angle (edge)</td>
<td>3,660 12'</td>
</tr>
<tr>
<td>Reach with arm horizontal and bucket level (edge)</td>
<td>4,640 15' 3&quot;</td>
</tr>
<tr>
<td>K. Operating height (fully raised)</td>
<td>9,080 31' 9&quot;</td>
</tr>
<tr>
<td>L. Overall length (with teeth)</td>
<td>14,270 46' 10&quot;</td>
</tr>
<tr>
<td>Loader clearance circle (bucket at carry, outside corner of bucket)</td>
<td>22,060 72' 2&quot;</td>
</tr>
<tr>
<td>Digging depth (at teeth)</td>
<td>165 6.5'</td>
</tr>
<tr>
<td>10</td>
<td>645 21' 6&quot;</td>
</tr>
</tbody>
</table>

*At the end of teeth

This specification sheet may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.