# STANDARD EQUIPMENT FOR BASE MACHINE
- Air cleaner, double element with dust indicator
- Alternator, 35 amperes/24V
- Batteries, 140 Ah x 12V
- Blower cooling fan
- Decelerator pedal
- Engine hood
- Fenders
- Lighting system, (includes 2 front, 1 rear)
- Mono-lever steering
- Muffler with curved exhaust pipe
- Radiator guard door, flat
- Radiator reserve tank
- Rear cover
- ROPS mounting brackets
- Starting motor, 7.5 kW/24V
- Seat, adjustable
- Track roller guard, end sections
- Track shoe assembly
- —Sealed and lubricated track
- 510 mm 20" single grouser shoe
- Wet, multiple-disc steering clutch/brake
- Photo may include optional equipment.

## OPTIONAL EQUIPMENT
- Air conditioner
- Backup alarm
- Cab
- Cab accessories
  —Cup holder
  —Rear view mirror
- Cooling fan, reversible
- Electronic instrument monitor panel
- Engine side covers, gull-wing
- Front pull hook
- Heater and defroster
- Hitch type drawbar
- Hydraulic for ripper
- Hydraulic for tilt dozer
- Intake pipe with precleaner
- Intake pipe with precleaner
- Light working, cab additional
- Locks, filter caps and covers
- Pressure check parts for power train
- Radiator core protective grid
- Rigid type drawbar
- ROPS canopy
- ROPS canopy with sweep
  —Seated with retractable
- Rear cover
- ROPS canopy for cab
  —Additional weight
  —340 kg 750 lb
  —Roof dimensions:
  ——Length: 1270 mm 4'2"
  ——Width: 1490 mm 4'11"
  ——Height from operator compartment floor: 1705 mm 5'7"

## HORSEPOWER
- Net: 149 kW 200 HP @ 1950 rpm

## OPERATING WEIGHT
- 20670 kg 45,570 lb

## STEEL CAB
- Additional weight 285 kg 630 lb
- All-weather, enclosed pressurized cab
- Dimensions:
  —Length: 1765 mm 5'9"
  —Width: 1720 mm 5'8"
  —Height: 1625 mm 5'4"
  —Height from floor to ceiling: 1515 mm 5'0"

## MULTI-SHANK RIPPER
- Additional weight (including hydraulic control unit): 1680 kg 3,700 lb
- Beam length: 2170 mm 7'1"
- Maximum digging depth: 595 mm 1'11"
- Maximum lift above ground: 640 mm 2'1"

## SHOES
<table>
<thead>
<tr>
<th>Shoe</th>
<th>Additional weight</th>
<th>Ground contact area</th>
</tr>
</thead>
<tbody>
<tr>
<td>560 mm 22.0&quot; single-grouser shoe</td>
<td>+120 kg +260 lb</td>
<td>33380 cm² 5.170 in²</td>
</tr>
<tr>
<td>610 mm 24.0&quot; single-grouser shoe</td>
<td>+230 kg +510 lb</td>
<td>36360 cm² 5.640 in²</td>
</tr>
<tr>
<td>660 mm 26.0&quot; single-grouser shoe</td>
<td>+360 kg +750 lb</td>
<td>39340 cm² 6.100 in²</td>
</tr>
</tbody>
</table>

## MATERIALS AND SPECIFICATIONS
Materials and specifications are subject to change without notice.

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Komatsu is a trademark of Komatsu Ltd. Japan.
**HORSEPOWER**
Net: 149 kW 200 HP @ 1950 rpm

**OPERATING WEIGHT**
20670 kg 45,570 lb

**BLADE CAPACITY (SAE)**
Straight Tilt Dozer:
4.4 m³ 5.8 yd³
Angle Dozer:
3.4 m³ 4.4 yd³

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**Electronic monitoring system** prevents minor problems from developing into major ones. (optional)

**Optional hexagonal, low noise cab** with viscous damping mounts provides unsurpassed operator comfort and visibility.

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**The Komatsu S6D125E-2 diesel engine** provides an output of **149 kW 200 HP** with excellent productivity.

Left hand **joystick** controls all tractor motion. Right hand joystick controls all blade movements.

**Gull-wing** engine side covers for easy and safer servicing. (optional)

High capacity **Straight tilt dozer** combined the highest power in its class with outstanding productivity.

**Blade tilt lines** completely protected.

**Komatsu Torqflow transmission** offers single lever control of speed (3 forward and 3 reverse) and directional changes.

Forward mounted **pivot shafts** isolate final drives from blade loads.

**Modular power train** for increased serviceability and durability.

**Wet, multiple-disc brakes** eliminates brake-band adjustments for maintenance-free operation.

**Bolt-on segmented sprocket teeth** for easy in-the-field replacement

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Photo may include optional equipment.
All steering, direction, and speed changes are made by a left-hand single joystick control. If the operator wants to move the machine forward and to the left, he simply moves the joystick forward and to the left. If he desires a gear change, he merely twists his wrist. The machine responds to the movement of the lever providing the operator with the feeling of natural control with Komatsu’s joystick.

**Low-noise design**
For smoother riding comfort, power train components and hydraulic control valves are mounted to the frame with rubber pads to soften vibration and shut out noise. Since the D85ESS employs joysticks, the walk-through operator compartment is uncluttered for smooth entry and exit. An adjustable seat with backrest is standard equipment.

**Three-stage height adjustable armrests**
Three-stage height adjustable armrests and relocated fuel control lever provide comfortable operation and increased leg space.

**Hexagonal pressurized cab (optional)**
Air filters and a higher internal air pressure combine to prevent external dust from entering the cab. In addition, the cab’s hexagonal design provides excellent front, side, and rear visibility. The viscous damper cab suspension softens shocks for operator comfort and extends component life.

**Electronic monitoring system (optional)**
An electronic monitoring system prevents minor problems from developing into major ones. All meters and gauges are controlled by a microcomputer, which provides a wide indication range for an easier, more precise reading.

**Steering functions**
- **Forward and reverse**
- **Right and left steering**
- **First, to second, to third shifting**

**Blade functions**
- **Lifting and lowering**
- **Tilting**

**Benefits of CLSS**
- More precise and responsive operation due to the pressure compensation valve.
- Reduced fuel consumption by discharging only the required amount of oil from the pump.
- The work equipment moves smoothly for operations such as side-cutting even when priority is given to steering.

**Field-proven engine**
Powerful S6D125E-2 diesel engine provides a massive output of 149 kW (200 HP). The engine power is transmitted smoothly to the final drives via a high-efficiency torque converter.

**Modular designed power train units**
The modular design allows easy removal and installation of any individual unit for shorter downtime.

**Flat bottom frame**
A flat bottom frame, the monocoque track frames and forward-mounted pivot shafts provide good maneuverability in muddy terrain by preventing mud from building up under the frame.

**Sturdy design**
Because fewer components mean greater reliability, we’ve designed a simple hull frame made of a thick, single plate. Track frames have a large-section construction for maximum rigidity. Even the box-section construction of the blade back beam is reinforced, all with durability in mind.

**Easy-to-operate work equipment control lever**
With the Closed-center Load Sensing (CLSS) hydraulic system, blade lever stroke is directly proportional with blade speed, regardless of the load and travel speed. This results in superb, fine controllability.

**Benefits of CLSS**
- More precise and responsive operation due to the pressure compensation valve.
- Reduced fuel consumption by discharging only the required amount of oil from the pump.
- The work equipment moves smoothly for operations such as side-cutting even when priority is given to steering.

**Wet, multiple-disc brakes**
Eliminate brake-band adjustments for maintenance-free operation.

**Coolant reservoir**
A radiator coolant reservoir makes it easier to check the coolant level and eliminates frequent refilling.

**Oil pressure check ports (optional)**
Oil pressure check ports for the power train are centralized on the right hand side of the operator platform for easy access.

**Gull-wing engine side covers (optional)**
A gas-spring cylinder opens the gull-wing engine side covers widely, allowing the engine and auxiliary components to be easily checked.
**D85ESS-2A CRAWLER DOZER**

**SPECIFICATIONS**

**ENGINE**

- Torque: 981 N•m
- Bore: 125 mm x 150 mm
- Stroke: 4.92" x 5.91"
- Piston displacement: 11.04 ft³ 674 in³
- Governor: All-speed, mechanical
- Horsepower: ISG 3549 / SAE J1349

**TORQFLOW TRANSMISSION**

- Komatsu’s TORQFLOW transmission consists of a water-cooled, 3-element, 1-stage, 1-phase torque converter and a planetary gear.
- Double-disc clutch transmission which is hydraulically actuated and force-lubricated for optimum heat dissipation.
- Minimum turning radius: *As measured by track marks on ground.*

**TURFSHIELD ENGINE PROTECTION PLATE**

- Material: Rigid, quality steel plate
- Length: 1220 mm
- Width: 65 mm
- Thickness: 65 mm
- Weight: 3620 kg

**FINAL DRIVES**

- Double-reduction final drives of spur gear and planetary gears to minimize transmission of shocks to power train components.
- Segmented sprocket are bolt-on for easy in-the-field replacement.

**STEERING SYSTEM**

- Joystick controls for all directional movements. Pushing the joystick forward results in forward machine travel, while pulling it rearward reverses the machine. Simply tilt the joystick to the left to make a left turn. Tilt it to the right for a right turn.
- Wet, multi-disc steering clutches are hydraulically loaded and hydraulically released. Wet, multi-disc brakes are spring-actuated and hydraulically released.
- Steering brakes also function as service and parking brakes.

**UNDERCARRIAGE**

- Suspension: Oscillation with equalizer bar and forward mounted pivot shafts
- Track roller frame: Monocoque, large section, durable construction
- Track shoes: Lubricated tracks. Unique dust seals for preventing entry of foreign abrasives into pin-to-bushing clearances for extended service.
- Track tension is easily adjusted with a grease gun.
- Number of carrier rollers (each side): 8
- Number of track rollers (each side): 8
- Ground contact area: 30400 cm²

**HYDRAULIC SYSTEM**

- Closed-center load sensing system (CLSS) designed for precise and responsive control, and for efficient simultaneous operation.
- Hydraulic control units: All spool control valves externally mounted beside the hydraulic tank.

**COOLANT AND LUBRICANT CAPACITY (REFILL)**

- Coolant: 52 ltr 13.7 U.S. gal
- Fuel tank: 406 ltr 107.3 U.S. gal
- Engine oil: 30 ltr 10.0 U.S. gal
- Transmission, bevel gear, and steering system: 48 ltr 12.7 U.S. gal

**OPERATING WEIGHT**

- Tractor weight: Including rated capacity of lubricant, coolant, full fuel tank, operator and standard equipment. 115420 kg 34,000 lb
- Operating weight: Including angle dozer, multi-shank ripper, FRP canopy (optional), operator, standard equipment, and rated capacity of lubricant, coolant, and full fuel tank. 20670 kg 45,570 lb

**DIMENSIONS**

- Ground clearance: 400 mm 16"