### ENGINE

- **Model:**
  - D65E-12: Komatsu S6D125E-2
  - D65P-12: Komatsu S6D125E-2

- **Type:** 4-stroke cycle, water-cooled, direct injection

- **Aspiration:**
  - D65E-12: Natural aspiration
  - D65P-12: Turbocharged

- **Number of cylinders:** 6

- **Bore:** 125 mm (4.92")

- **Stroke:** 150 mm (5.91")

- **Piston displacement:** 11.04 ltr (674 in³)

- **Net flywheel horsepower:***
  - D65E-12: 135 kW (180 HP) @ 1950 rpm
  - D65P-12: 142 kW (190 HP) @ 1950 rpm

- **Net maximum torque:***
  - D65E-12: 799 Nm (81.5 kg·m) 589 lb·ft @ 1100 rpm
  - D65P-12: 981 Nm (109 kg·m) 723 lb·ft @ 1200 rpm

- **Direct injection fuel system. AI-speed mechanical governor. Forced lubrication driven by gear pump. Full-flow for lub purification. Dry-type air cleaner with automatic dust evacuator and dust indicator. 7.5 kW/24V electrical starter motor. 35 A/24V alternator. 140 Ah/2 x 12V batteries.***

- *Net flywheel horsepower output for standard engine (SAE J1349) including air cleaner, alternator (not charging), water pump, lubricating oil pump, fuel pump, muffler, and fan.

### TORQFLOW TRANSMISSION

Komatsu’s TORQFLOW transmission consists of a water-cooled, 3-element, 1-stage, 1-phase torque converter and a planetary gear, multiple-disc clutch transmission which is hydraulically actuated and force-lubricated for optimum heat dissipation. Joystick control of gears (3 forward and 3 reverse) and directional steering changes. Gearshift lock lever and neutral safety switch prevent machine from accidental starts.

<table>
<thead>
<tr>
<th>Travel speed</th>
<th>Forward</th>
<th>Reverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>0-3.9 km/h</td>
<td>0-2.4 mph</td>
</tr>
<tr>
<td>2nd</td>
<td>0-6.8 km/h</td>
<td>0-4.2 mph</td>
</tr>
<tr>
<td>3rd</td>
<td>0-16.6 km/h</td>
<td>0-6.6 mph</td>
</tr>
</tbody>
</table>

### FINAL DRIVE

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

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, multiple-disc steering clutches are hydraulically loaded and hydraulically released. Wet, multiple-disc brakes are spring-actuated and hydraulically released. Steering brakes also function as service and parking brakes.

- Minimum turning radius:***
  - D65E-12: 3.2 m (10'6")
  - D65P-12: 3.6 m (12'0")

*As measured by track marks on ground.

### UNDERCARRIAGE

Suspension: Oscillation with equalizer bar and forward mounted pivot shafts

- Track roller frame: Monocouque, large section, durable construction
- Number of carrier rollers (each side): 2
- 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.

<table>
<thead>
<tr>
<th></th>
<th>D65E-12</th>
<th>D65P-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of track rollers (each side)</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Number of shoes (each side)</td>
<td>39</td>
<td>45</td>
</tr>
<tr>
<td>Grouser height (mm)</td>
<td>55.2 in</td>
<td>45.2 in</td>
</tr>
<tr>
<td>Shoe width (standard) (mm)</td>
<td>810.5 mm</td>
<td>915.0 mm</td>
</tr>
<tr>
<td>Ground contact area (cm²)</td>
<td>27285</td>
<td>60115</td>
</tr>
<tr>
<td>Ground pressure (Tractor) (kPa)</td>
<td>55.9</td>
<td>27.5</td>
</tr>
<tr>
<td>Ground pressure (Tractor) (kg/cm²)</td>
<td>8.11</td>
<td>0.28</td>
</tr>
<tr>
<td>Ground pressure (Tractor) (psi)</td>
<td>1208</td>
<td>398</td>
</tr>
<tr>
<td>Track gauge (mm)</td>
<td>1880</td>
<td>2575</td>
</tr>
<tr>
<td>Length of track on ground (mm ft)</td>
<td>6'2&quot;</td>
<td>8'9&quot;</td>
</tr>
</tbody>
</table>
COOLANT AND LUBRICANT
CAPACITY (REFILLING)

- Coolant: 52 ltr 13.7 U.S. gal
- Fuel tank: 406 ltr 107.3 U.S. gal
- Engine oil: 38 ltr 10.0 U.S. gal
- Damper: 1.7 ltr 0.4 U.S. gal
- Transmission, bevel gear, and steering system: 48 ltr 12.7 U.S. gal
- Final drive (each side):
  - D65E-12: 24 ltr 6.3 U.S. gal
  - D65P-12: 27 ltr 7.1 U.S. gal

OPERATING WEIGHT (APPROXIMATE)

- Tractor weight:
  - D65E-12: 15620 kg 34,440 lb
  - D65P-12: 16940 kg 37,350 lb
- Operating weight:
  - D65E-12: 19125 kg 42,160 lb
  - D65P-12: 20185 kg 44,500 lb

DIMENSIONS

Ground clearance: 405 mm 1' 4"
HYDRAULIC SYSTEM

Closed-center Load Sensing System (CLSS) designed for precise and responsive control and for efficient simultaneous operation.

Hydraulic control unit:
All spool control valves externally mounted beside the hydraulic tank.
Type of pump: Gear pump
Capacity (discharge flow @ rated engine rpm): 180 ltr/min 47.6 U.S. gal/min
Relief valve setting: 20.6 MPa 210 kgf/cm² 2,990 psi
Hydraulic cylinders: Double-acting, piston

<table>
<thead>
<tr>
<th>Number of cylinders</th>
<th>Bore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blade lift</td>
<td>2</td>
</tr>
<tr>
<td>Blade tilt</td>
<td>1</td>
</tr>
<tr>
<td>Ripper lift</td>
<td>1</td>
</tr>
</tbody>
</table>

Control valves:
Spool control valve for semi-U tilt dozer and straight tilt dozer.
Positions:
- Blade lift: Raise, hold, lower, and float
- Blade tilt: Right, hold, and left
Spool control valve for angle dozer.
Positions:
- Blade lift: Raise, hold, lower, and float
Additional control valve for multi-shank ripper
Positions:
- Ripper lift: Raise, hold, and lower

Hydraulic oil capacity (refilling):
- Semi-U tilt dozer: 55.3 ltr 14.5 U.S. gal
- Straight tilt dozer: 55.3 ltr 14.5 U.S. gal
- Angle tilt dozer: 55.3 ltr 14.5 U.S. gal
- Multi-shank ripper: 55.3 ltr 14.5 U.S. gal

DOZER EQUIPMENT

Use of high tensile strength steel in moldboard for strengthened blade construction.

| Overall Length | Blade | Blade | Max. | Max. | Max. | Additional | Additional |
| With Dozer | Capacity* | W x H | Lift | Drop | Tilt | Weight | Ground |
| mm ft.in | m³/yd³ | mm ft.in | mm ft.in | mm ft.in | mm ft.in | kg lb | kPa kgf/cm² psi |
| D65E-12 | 5540 | 17'10" | 5.61 | 3460 x 1425 | 1105 | 440 | 465 | 2280 | 600 | 10.8/0.11/1.56 |
| Semi-U Tilt Dozer | | | | | | | | | | |
| D65E-12 | 5620 | 17'3" | 3.80 | 3415 x 1225 | 1105 | 440 | 460 | 2000 | 600 | 9.6/0.10/1.42 |
| Straight Tilt Dozer | | | | | | | | | | |
| D65E-12 | 5470 | 17'11" | 3.55 | 3970 x 1100 | 1185 | 450 | 400 | 2280 | 540 | 10.8/0.11/1.56 |
| Angle Dozer | | | | | | | | | | |
| D65P-12 | 5520 | 18'1" | 3.69 | 3970 x 1100 | 1105 | 540 | 450 | 2030 | 990 | 3.9/0.04/0.57 |
| Straight Tilt Dozer | | | | | | | | | | |

Remarks:
* Blade capacities are based on the SAE recommendation practice J1265.

STANDARD EQUIPMENT FOR BASE MACHINE

- Air cleaner, double element with dust indicator
- Alternator, 35 ampere
- Batteries, 140 Ah/2 x 12V
- Blower cooling fan
- Decelerator pedal
- Electronic instrument monitor panel
- 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
- ROPOs mounting brackets
- Starting motor, 7.5 kw/24V
- Wet, multiple-disc steering clutch/brake
- Seat, adjustable
- Track roller guard, center section (P)
- Track roller guard, end sections (E)
- Track shoe assembly
  - Heavy-Duty sealed and lubricated track
    - 510 mm 20" single grouser shoe (E)
    - 915 mm 36.0" single grouser shoe (P)
- Undergirders, oil pan and transmission

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**OPTIONAL EQUIPMENT**

- Air conditioner
- AR track assembly (abrasion resistant bushings)
- Backup alarm
- Cab
- Cab accessories
  - Cup holder
  - Lunch box holder
  - Rear view mirror
- Cooling fan, reversible
- Engine side covers, gull-wing
- Front pull hook
- Hitch type drawbar
- Heater and defroster
- High mount foot rests
- Hydraulics for ripper (E)
- Hydraulics for tilt dozer
- Intake pipe with precleaner
- Light working, cab additional
- Locks, filter caps and covers
- Pressure check ports for power train
- Radiator core protective grid
- Rigid type drawbar
- ROPS caropy
- ROPS caropy with sweep
- Seat belt, retractable
- Suspension seat, with high-back
- Suspension seat, reclining with fabric material (cab only)
- Track roller guard, full length
- Underguard, heavy-duty
- Vandalism protection cover for instrument panel
- Water separator

**ROPS CANOPY**

- Additional weight 420 kg 930 lb

  - Roof dimensions:
    - Length: 1830 mm 60"
    - Width: 1600 mm 53"
    - Height from operator compartment: 1700 mm 57"

  - Additional ground pressure:
    - D65E: 1.5 kPa/0.015 kgf/cm²/0.21 psi
    - D65P: 0.7 kPa/0.007 kgf/cm²/0.10 psi

**STEEL CAB**

- Additional weight 285 kg 630 lb
- All-weather, enclosed pressurized cab

  - Dimensions:
    - Length: 1765 mm 59"
    - Width: 1720 mm 59"
    - Height: 1625 mm 54"
    - Height from floor to ceiling: 1515 mm 50"

  - Additional ground pressure:
    - D65E: 1.0 kPa/0.010 kgf/cm²/0.14 psi
    - D65P: 0.6 kPa/0.006 kgf/cm²/0.09 psi

**ROPS CANOPY FOR CAB**

- Additional weight 340 kg 750 lb

  - Roof dimensions:
    - Length: 1270 mm 42"
    - Width: 1490 mm 4'11"
    - Height from operator compartment: 1705 mm 57"

  - Additional ground pressure:
    - D65E: 1.2 kPa/0.012 kgf/cm²/0.17 psi
    - D65P: 0.6 kPa/0.006 kgf/cm²/0.09 psi

**MULTI-SHANK RIPPER (for D65E)**

- Additional weight (including hydraulic control unit): 1680 kg 3,700 lb
- Beam length: 2170 mm 71"
- Maximum digging depth: 595 mm 1'11"
- Maximum lift above ground: 640 mm 2'1"
- Additional ground pressure: 5.9 kPa/0.06 kgf/cm²/0.85 psi

**SHOES**

<table>
<thead>
<tr>
<th>Models</th>
<th>Shoe Description</th>
<th>Additional weight</th>
<th>Ground contact area</th>
<th>Additional ground pressure to tractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>D65E</td>
<td>560 mm 22.0&quot; single-grouser shoe</td>
<td>+120 kg +260 lb</td>
<td>29966 cm² 4,644 in²</td>
<td>-3.9 kPa -0.04 kgf/cm² -0.57 psi</td>
</tr>
<tr>
<td>D65P</td>
<td>610 mm 24.0&quot; single-grouser shoe</td>
<td>+230 kg +510 lb</td>
<td>32635 cm² 5,058 in²</td>
<td>-7.8 kPa -0.08 kgf/cm² -1.14 psi</td>
</tr>
<tr>
<td>D65E</td>
<td>660 mm 26.0&quot; single-grouser shoe</td>
<td>+360 kg +790 lb</td>
<td>35310 cm² 5,473 in²</td>
<td>-11.9 kPa -0.12 kgf/cm² -1.71 psi</td>
</tr>
<tr>
<td>D65P</td>
<td>950 mm 37.4&quot; circular-arc shoe</td>
<td>+50 kg +110 lb</td>
<td>62426 cm² 9,673 in²</td>
<td>-1.0 kPa -0.01 kgf/cm² -0.14 psi</td>
</tr>
</tbody>
</table>