STANDARD EQUIPMENT

- Alternator 50 ampere/24V
- Back up alarm
- Batteries 140 Ah x 2 x 12V
- Clutch pedal
- Dry-type air cleaner with dust evacuator and dust indicator
- Electric priming pump
- Engine hood
- Final drive case wear guard
- Front pulley
- Hinged front mask, perforated
- Hydraulic drive radiator cooling fan
- Hydraulic track adjusters
- Hydrostatic steering system (HSS)
- Lighting system (including two front and rear lights)
- Muffler with rain cap
- Palm lever steering control
- Perforated side covers
- Radiator reserve tank
- Rear cover
- Segmented sprockets
- Shoes:
  - 560 mm 22” single-grouser (EX)
  - 910 mm 36” single-grouser (PX)
- Starting motor 7.5 kW/24 V
- Suspension seat and reclining
- TUCKFLOW transmission
- Track frames
- Track roller guards, full length (EX), center and end section (PX)
- Warning horn
- Water separator

CRAWLER DOZER

STANDARD EQUIPMENT

- Alternator 50 ampere/24V
- Back up alarm
- Batteries 140 Ah x 2 x 12V
- Clutch pedal
- Dry-type air cleaner with dust evacuator and dust indicator
- Electric priming pump
- Engine hood
- Final drive case wear guard
- Front pulley
- Hinged front mask, perforated
- Hydraulic drive radiator cooling fan
- Hydraulic track adjusters
- Hydrostatic steering system (HSS)
- Lighting system (including two front and rear lights)
- Muffler with rain cap
- Palm lever steering control
- Perforated side covers
- Radiator reserve tank
- Rear cover
- Segmented sprockets
- Shoes:
  - 560 mm 22” single-grouser (EX)
  - 910 mm 36” single-grouser (PX)
- Starting motor 7.5 kW/24 V
- Suspension seat and reclining
- TUCKFLOW transmission
- Track frames
- Track roller guards, full length (EX), center and end section (PX)
- Warning horn
- Water separator

OPTIONAL EQUIPMENT

- Air conditioner
- Alternator 75 ampere/24V
- AM-FM radio with cassette
- Batteries 200 Ah x 12V
- Fire extinguisher
- First-aid kit
- Heater and defroster
- Light for ripper point
- Lunch box
- Mirror, rearview

- Panel cover
- Seat belt
- Shoes:
  - 610 mm 24” Single grouser shoe (EX)
  - 660 mm 26” Single grouser shoes (EX)
  - 910 mm 36” Swamp shoes (PX)
- Starting motor 11 kW/24 V
- Sun visor
- Suspension seat, turn, fabric material
- Thermos

- Tool kit
- Vandalism protection kit

ROPS canopy (without cab):*

<table>
<thead>
<tr>
<th>Weight</th>
<th>. . . . . . . . . . . . . . . . . .</th>
<th>437 kg 970 lb</th>
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<tbody>
<tr>
<td>Roof dimensions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>. . . . . . . . . . . . . . . . . .</td>
<td>1368 mm 4'6&quot;</td>
</tr>
<tr>
<td>Width</td>
<td>. . . . . . . . . . . . . . . . . .</td>
<td>1800 mm 6'0&quot;</td>
</tr>
<tr>
<td>Height from compartment floor</td>
<td>. . . . . . . . . . . . . . . .</td>
<td>1768 mm 5'10&quot;</td>
</tr>
</tbody>
</table>

*Meets ISO 3471 and SAE J1045 ROPS standards, as well as ISO 3449 FOPS standard.

ROPS for cab:*

<table>
<thead>
<tr>
<th>Weight</th>
<th>. . . . . . . . . . . . . . . . . .</th>
<th>371 kg 820 lb</th>
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<tbody>
<tr>
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<td></td>
<td></td>
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<tr>
<td>Length</td>
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<td>650 mm 2'2&quot;</td>
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<tr>
<td>Width</td>
<td>. . . . . . . . . . . . . . . . . .</td>
<td>1774 mm 5'10&quot;</td>
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<tr>
<td>Height from compartment floor</td>
<td>. . . . . . . . . . . . . . . .</td>
<td>1754 mm 5'9&quot;</td>
</tr>
</tbody>
</table>

*Meets ISO 3471 and SAE J1045 ROPS standards.

Steel cab:*

<table>
<thead>
<tr>
<th>Weight</th>
<th>. . . . . . . . . . . . . . . . . .</th>
<th>410 kg 910 lb</th>
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<tbody>
<tr>
<td>Dimensions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>. . . . . . . . . . . . . . . . . .</td>
<td>1758 mm 5'9&quot;</td>
</tr>
<tr>
<td>Width</td>
<td>. . . . . . . . . . . . . . . . . .</td>
<td>1323 mm 4'4&quot;</td>
</tr>
<tr>
<td>Height from compartment floor to ceiling</td>
<td>. . . . . . . . . . . . . . . .</td>
<td>1592 mm 5'3&quot;</td>
</tr>
</tbody>
</table>

*Meets ISO 3449 FOPS standard.

Multi-shank ripper (EX):

- Hydraulically controlled parallelogram ripper with three shanks.
- Weight (including hydraulic control unit) | . . . . . . . . . . . . . . . . | 2500 kg 5,520 lb |
- Beam length | . . . . . . . . . . . . . . . . | 2246 mm 7'4" |
- Maximum lift above ground | . . . . . . . . . . . . . . . . | 564 mm 1'10" |
- Maximum digging depth | . . . . . . . . . . . . . . . . | 653 mm 2'2" |

HORSEPOWER

- Gross: 199 kW 266 HP @ 1900 rpm
- Net: 197 kW 264 HP @ 1900 rpm

OPERATING WEIGHT

- D85EX-15R: 28000 kg 61,730 lb
- D85PX-15R: 27550 kg 60,740 lb

Materials and specifications are subject to change without notice.

KOMATSU is a trademark of Komatsu Ltd. Japan.
**WALK-AROUND**

**Komatsu-integrated design** for the best value, reliability, and versatility. Hydraulics, power train, frame, and all other major components are engineered by Komatsu. You get a machine whose components are designed to work together for higher production, greater reliability, and more versatility.

**Hydraulic drive radiator cooling fan** controlled automatically, reduces fuel consumption and operating noise levels. See page 6.

**New hexagonal designed cab includes:**
- Spacious interior
- Comfortable ride with new cab damper
- Excellent visibility
- High capacity air conditioning system (optional)
- Palm Command Control System (PDCCS) lever
- Pressurized cab (optional)
- Adjustable armrests

**Extra-low machine profile** provides excellent machine balance and low center of gravity.

**Building on the technology and expertise Komatsu has accumulated since establishment in 1921, GALEO presents customers worldwide with 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 a better world.**

**Genuine Answers for Land and Environment Optimization**

**SAA6D125E-5 turbocharged after-cooled diesel engine** provides an output of 197 kW 264 HP with excellent productivity. See page 6.

**Preventative maintenance**
- Centralized service station
- Enclosed hydraulic piping
- Modular power train design
- Electric priming pump
See page 8.

**Simple hull frame**
and monocoque track frame with pivot shaft for greater reliability. See page 8.

**Large blade capacities:**
- **D85EX:**
  - 5.2 m³ 6.8 yd³ (Straight tilt dozer)
  - 7.0 m³ 9.2 yd³ (Semi-U tilt dozer)
- **D85PX:**
  - 5.9 m³ 7.7 yd³ (Straight tilt dozer)
See page 8.

**The track link life** is greatly improved through increased bushing diameter and link height in addition to lubricated track. See page 8.

**Low-drive, long-track, undercarriage** ensures outstanding grading ability and stability. See page 6.

**Filtration**
Further enhanced reliability of the machine against fuel contamination thanks to the improvement in fuel filtration. See page 9.
Palm Command Control System (PCCS)

Komatsu’s new ergonomically designed control system “PCCS” creates an operating environment with “complete operator control.”

Human-machine interface

Palm command electronic controlled travel control joystick
Palm command travel joystick provides the operator with a relaxed posture and superb fine control without operator fatigue. Transmission gear shifting is simplified with thumb push buttons.

Full-adjustable suspension seat and travel control console
The travel control console has adjustment fore and aft, and height. For improved rear visibility during reverse operations, the operator can adjust seat 15° to the right. (opt)

Facing front

Power train electronic control system

Smooth and soft operation
D85EX/PX utilizes a newly designed power train electronic control system. The controller registers the amount of operator control (movements of lever and operation of switches) along with machine condition signals from each sensor, to calculate accurately the control of the transmission for optimal machine operation. The ease of operation and productivity of the new D85EX/PX is greatly improved through these new features.

Electronic Controlled Modulation Valve (ECMV) controlled transmission
Controller automatically adjusts each clutch engagement depending on travel conditions such as gear speed, revolution and shifting pattern. This provides smooth shockless clutch engagement, improved component reliability, improved component life and operator ride comfort.

Hydrostatic Steering System—smooth, powerful turning
The Hydrostatic Steering System (HSS) is powered by an independent hydraulic pump with engine power transmitted to both tracks without power interruption on the inside track. When the machine turns, the outside track moves faster and the inside slower, for smooth, powerful turns. Counter-rotation is available for minimum turning radius providing excellent maneuverability. Shock-free steering reduces machine vibration and minimizes operator fatigue.

- Turning while dozing— the machine turns by driving the left and right tracks under power at different speeds allowing the machine to travel at the same speed as in straight dozing.
- On downhill slopes— the machine doesn’t require counter-steering. The joystick provides the same steering response on downhill slopes as on flat ground.
- Grading— can be done efficiently without damaging the ground, because the inside track is not locked during turning.

Preset travel speed function
Preset travel speed selection function is provided as standard equipment. The preset switch enables the operator to select a combination of forward/reverse gear shifts, from 4 patterns; F1-R1, F1-R2, F2-R1 and F2-R2, by using UP/DOWN shift switch, and once the shift pattern is selected, operator can control the machine concentrating his attention on directional control only. Once F2-R2 pattern is selected, for example, 2nd gear is automatically selected when travel control joystick is moved into forward/reverse. This function reduces gear shifting frequency during machine operation and is especially helpful when used in combination with Auto-Downshift Function.

Auto downshift function
Controller monitors engine speed, travel gear and travel speed. When load is applied and machine travel speed is reduced, the controller automatically downshifts to optimize gear speed to provide high fuel efficiency. This function provides comfortable operation and high productivity without manual downshifting. (This function can be deactivated with cancel switch.)
**Engine**

The Komatsu SAA6D125E-5 engine delivers 197 kW (264 HP) at 1900 rpm. The fuel-efficient Komatsu engine, together with the heavy machine weight, make the D85EX/PX superior crawler dozers in both ripping and dozing operations. The engine features direct fuel injection, turbocharger, and air-to-air aftercooler to maximize fuel efficiency.

To minimize noise and vibration, the engine is mounted to the main frame with rubber cushions.

**Hydraulic drive radiator cooling fan**

Fan rotation is automatically controlled depending on coolant and hydraulic oil temperature, saving fuel consumption and providing great productivity with a quiet operating environment.

**Undercarriage**

**Low drive and long track undercarriage**

Komatsu’s design is extraordinarily tough and offers excellent grading ability and stability. Large-diameter bushings, increased track link heights, and improved oil-seals help to increase undercarriage durability.

**Improvements**

Numerous improvements to increase undercarriage reliability and durability have been incorporated. Serviceability has also been improved with the addition of remote greasing of the equalizer bar center pin.

---

**Work equipment**

**Large blade**

Capacities of 5.2 m³ (6.8 yd³) (Straight tilt dozer for D85EX), 5.9 m³ (7.7 yd³) (D85PX), 7.0 m³ (9.2 yd³) (Semi-U tilt dozer for D85EX) yield outstanding production. High-tensile-strength steel has been incorporated into the front and sides of the blade for increased durability.

**Rippers (EX)**

- The multi-shank ripper features a long sprocket center-to-ripper point distance, making ripping operation easy and effective while maintaining high penetration force.
- The multi-shank ripper is a parallelogram type ideal for ripping in tough material. The ripping depth is adjustable in two stages.

---

**Operator comfort**

Operator comfort is essential for productive work. The D85EX/PX provides a quiet, comfortable environment where the operator can concentrate on the work at hand.

**Comfortable ride with new cab damper mounting**

D85EX/PX’s cab mount uses a new cab damper which provides excellent shock and vibration absorption capacity with its long stroke. Cab damper mounts soften shocks and vibration while traveling over adverse conditions, which conventional mounting system are unable to absorb. The cab damper spring isolates the cab from machine chassis, suppressing vibration and providing a quiet, comfortable operating environment.

**Hexagonal pressurized cab**

- The cab’s new hexagonal design and large tinted glass windows provide excellent front, side and rear visibility.
- Air filters and a higher internal air pressure combine to prevent dust from entering the cab.

**New suspension seat**

D85EX/PX uses a new suspension seat. Fore and aft sliding rails and suspension spring increase strength and rigidity. The new seat provides excellent support, improving riding comfort. Fore and aft seat travel can be adjusted to accommodate different operator sizes.

---

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Preventative maintenance

Preventative maintenance is the only way to ensure long service life from your equipment. That’s why Komatsu designed the D85EX/PX with conveniently located maintenance points to make necessary inspections and maintenance quick and easy.

Centralized service station
To assure convenient maintenance, the transmission and HSS oil filters, power train oil level gauges and hydraulic tank are arranged in the right side of the machine.

Monitor with self-diagnostic function
With the starting switch turned ON, the monitor displays check-before-starting and caution items appear on the lower right part of the panel. If the monitor finds abnormalities, corresponding warning lamp blinks and warning buzzer sounds. The monitor displays engine rpm and forward/reverse gear speed on the upper part of the monitor during operation. If abnormalities occur during operation, user code appears on display. When a critical user code is displayed, the caution lamp blinks and a warning buzzer sounds to prevent the development of serious problems.

Easy cleaning with hydraulic drive radiator fan
The radiator core and the core on the front side of the oil cooler can be easily cleaned by running the hydraulic engine fan in reverse. Accordingly, the cleaning intervals of those cores can be increased.

Electric priming pump
Simply pressing the button enables bleeding air from the fuel circuit at the time of filter replacement, etc.

Enclosed hydraulic piping
Hydraulic piping for the blade tilt cylinder is completely housed in the push arm, ensuring damage protection from materials.

Modular power train design
Power train components are sealed in a modular design that allows the components to be dismounted and mounted without oil spillage.

Reliable simple structure
Simple hull structure main frame design increases durability and reduces stress concentration at critical areas. The track frame has a large cross section and utilizes pivot shaft mounting for greater reliability.

Maintenance free disc brakes
Wet disc brakes require less maintenance.

Gull-wing engine side covers
The opening area is further enlarged when gull-wing engine side covers are opened, facilitating engine maintenance and filter replacement. Side covers have been changed to a thick one-piece structure with a bolt-on catch to improve durability.

Heavy-duty track link
The track link life is greatly improved through increased bushing diameter and link height in addition to lubricated track.

Filtration

Engine
Newly added main fuel filter of 2µm and water separator protect the engine against dirt and water in the fuel.

The fuel tank is equipped with a high-filtration breather with pressure valve to prevent dust from entering.

Hydraulic
A filter is added to the hydraulic tank cap in order to prevent dust from entering the tank cap and protect hydraulic components against dust.
**SPECIFICATIONS**

**ENGINE**
- Model: Komatsu DAA61D12SE-5
- Type: 4-cylinder, water-cooled, direct injection
- Turbocompound, air-to-air aftercooled
- Number of cylinders: 6
- Bore x stroke: 125 mm x 150 mm (4.92" x 5.91")
- Piston displacement: 7,500 cc (0.44 kg/cm²)
- Governor: 11.04 lb (44 lb)
  - D85EX-15R: 150 kW (200 HP)
  - D85PX-15R: 197 kW (266 HP)
- Rated rpm: 1500rpm
- Fan drive type: Hydraulic lubrication system
- Method: Gear pump, full flow

**TORQFLOW TRANSMISSION**
Komatsu TORQFLOW transmission consists of a water-cooled, 3-element, 1-stage, 1-phase, torque converter and a planetary gear, multi-disc clutch transmission, which is hydraulically actuated and force-lubricated for optimum heat dissipation. Gearshift lock lever and neutral safety switch prevent accidental starts.

**UNDERCARRIAGE**
- Suspension: Oscillating equalizer bar and pivot shaft
- Track roller frame: Monocoque, large section, durable construction
- Rollers and idlers: Lubricated track rollers
- Track shoes: Lubricated tracks. Unique seals prevent entry of foreign abrasive material into pin to bushing clearances to provide extended service life. Track tension is easily adjusted with grease gun.

**STEERING SYSTEM**
PCCS lever controls for all directional movements. Pushing the PCCS lever forward results in forward machine travel, while pulling it rearward reverses the machine. Simply tilt the PCCS lever to left to make a left turn, tilt it to the right for a right turn.
Hydraulic Steering System (HSS) is powered by steering planetary units and an independent hydraulic pump and motor. Counter-rotation turns are also available. Wet, multi-disc, pedal-controlled service brakes are spring-actuated and hydraulically released. Gear shift lock lever also applies parking brake.

**HYDRAULIC SYSTEM**
- Hydraulic cylinders: Double-acting, piston responsive control, and for efficient simultaneous operation.
- Hydraulic control units: All spool valves externally mounted beside the hydraulic tank. Plunger type hydraulic pump with capacity (discharge flow) of 195 liters/min 6.5 U.S. gal/min at rated engine rpm.
- Relief valve setting: 72.6 kPa (10.7 psi)
- Overall Maximum Maximum Maximum Weight
  - D85EX-15R: 494 ltr 24 kg 12.9 U.S. gal 53 lb 10.9 U.S. gal 7,942 lb 54 lb 10.7 psi
  - D85PX-15R: 58 ltr 3.3 km/h 3.3 km/h 4.4 km/h 4.4 km/h
  - Coolant: 22.6 MPa (329 psi)
  - Fuel tank: 12520 kg 17.7 U.S. gal
  - Hydraulic oil capacity (refill): 24 kg 103 lb
  - Ripper lift: 11 ft 2.6 m
  - Ripper equipment (additional volume): 11 ft 2.6 m

**FINAL DRIVES**
Double-reduction final drive of spur and planetary gear sets to increase tractive effort and reduce gear tooth stresses for long final drive life. Segmented sprocket rims are bolt-on for easy replacement.

**OPERATING WEIGHT**
Operating weight
- Closed-center load sensing system (CLSS) designed for precise and responsive control, and for efficient simultaneous operation.
- Hydraulic control units: All spool valves externally mounted beside the hydraulic tank. Plunger type hydraulic pump with capacity (discharge flow) of 195 liters/min 6.5 U.S. gal/min at rated engine rpm.

**DOZER EQUIPMENT**
Blade capacities are based on the SAE recommended practice J165.

**DIMENSIONS**

<table>
<thead>
<tr>
<th>D85EX-15R</th>
<th>D85PX-15R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall length with dozer</td>
<td>544 mm</td>
</tr>
<tr>
<td>Ripper</td>
<td>19&quot;</td>
</tr>
<tr>
<td>Semi-U tilt dozer</td>
<td>19&quot;</td>
</tr>
<tr>
<td>Multi-shank ripper</td>
<td>19&quot;</td>
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<tr>
<td>Mechanical edge power dozer tilt</td>
<td>1910&quot;</td>
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<tr>
<td>Blade capacity</td>
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<td>Weight</td>
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<tr>
<td>Hydraulic oil</td>
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<tr>
<td>Hydraulic oil capacity (refill)</td>
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<tr>
<td>Ripper lift</td>
<td>24 kg</td>
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<tr>
<td>Ripper equipment (additional volume)</td>
<td>103 lb</td>
</tr>
</tbody>
</table>

*Ground pressures show tractor, cab, ROPS canopy operator, standard equipment and applicable blade.*