

D65EX-12
D65EX-12 LT
D65PX-12

FLYWHEEL HORSEPOWER
142 kW 190 HP @ 1950 rpm

OPERATING WEIGHT
D65EX-12: 18575 kg 40,960 lb
D65EX-12 LT: 19310 kg 42,475 lb
D65PX-12: 19615 kg 43,250 lb

KOMATSU[®]



D65EX/ PX-12

CRAWLER DOZER[®]

D65EX-12, D65EX-12 LT, D65PX-12 Crawler Dozer

WALK-AROUND

Hydrostatic Steering System (HSS)

provides smooth, quick, and powerful control in varying ground conditions.

Left hand **joystick** controls all tractor motion.

Hexagonal, low noise cab

with viscous mounts provides unsurpassed operator comfort and visibility.

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

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

Modular power train for increased serviceability and durability.

Blade tilt lines completely protected.



D65 EX/PX

CRAWLER DOZER

FLYWHEEL HORSEPOWER
142 kW **190 HP** @ 1950 rpm

OPERATING WEIGHT
D65EX-12: 18575 kg **40,960 lb**
D65EX-12 LT: 19310 kg **42,475 lb**
D65PX-12: 19615 kg **43,250 lb**

BLADE CAPACITY
D65EX-12 (ANGLE-DOZER):
3.55 m³ **4.64 yd³**
D65EX-12 (STRAIGHT-TILTDOZER):
3.89 m³ **5.09 yd³**
D65EX-12 (SEMI-U TILTDOZER):
5.61 m³ **7.34 yd³**
D65EX-12 LT (SEMI-U TILTDOZER):
5.61 m³ **7.34 yd³**
D65PX-12 (STRAIGHT-TILTDOZER):
3.69 m³ **4.83 yd³**

Electronic Monitoring System prevents minor problems from developing into major ones.

Gull-wing engine side doors for easy and safer servicing.



The S6D125E-2
turbocharged diesel engine

provides an output of 142 kW **190 HP**, with excellent productivity, while meeting current emissions standards.

High capacity dozer blades combined with highest power in class provide outstanding productivity.

Standard length (D65EX-12),
long track (D65EX-12 LT), and
low ground pressure (D65PX-12)
versions available. Low drive design provides outstanding stability and gradability.

OPERATOR'S COMPARTMENT

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. And, because these models employ joysticks, the walk-through operator compartment is uncluttered for smooth entry and exit. A suspension seat with backrest is standard equipment.

Hexagonal Pressurized Cab (Optional)

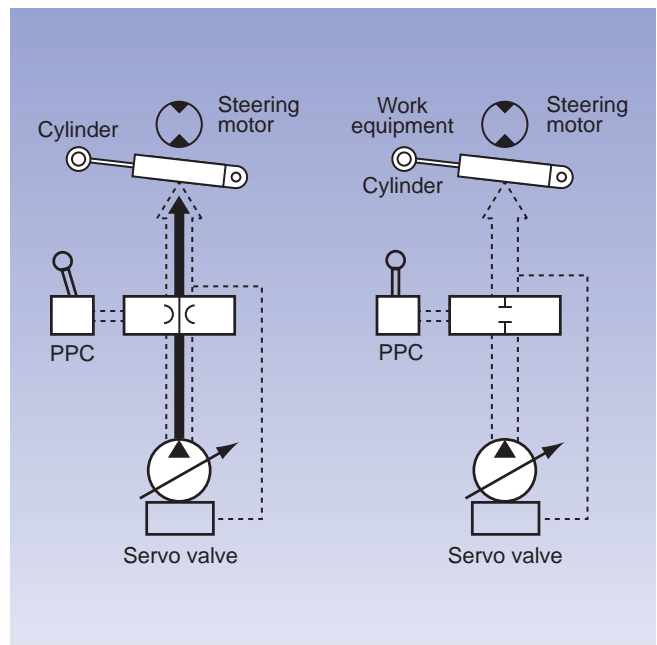
This is another added comfort feature. Air filters and a higher internal air pressure combine to prevent external dust from entering the cab. In addition, the cab's hexagonal design provides excellent front, sides, and rear visibility. Viscous damper cab suspension softens shocks for operator comfort and extends component life.

Easy-to-Operate Work Equipment Control Lever

- A PPC valve is used with the right joystick blade control. This improves operator comfort because of reduced operating effort and stroke.
- 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

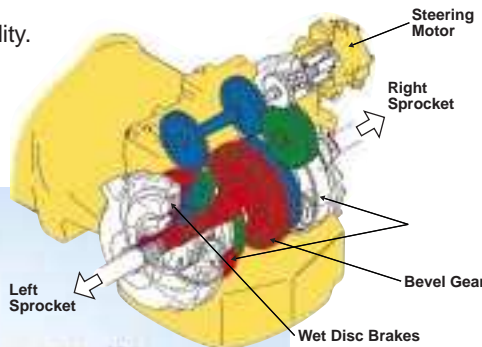
- More precise and responsive operation due to the pressure compensation valve.
- Reduced fuel consumption by discharging only the required amount of oil from the pump.
- The work equipment moves smoothly for operations such as side-cutting even when priority is given to steering.



Hydrostatic Steering System— Smooth, Powerful Turning

The Hydraulic Steering System (HSS) distributes power 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. The left and right tracks can be counter-rotated for a 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.
- Side-cutting—when side-loading the blade, straight travel can be maintained utilizing HSS.
- On downhill slopes—the machine doesn't require cross 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.
- Counter-rotates for exceptional maneuverability.



Electronic Monitoring System

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.



- Charge Lamp
- Engine Oil Pressure Caution Lamp
- Engine Water Temperature Caution Lamp
- Engine Water Temperature Gauge
- Fuel Gauge
- Intake Air Heater Lamp
- Monitor Caution Cancel Switch
- Monitor Caution Lamp
- Service Meter
- Transmission Oil Temperature Caution Lamp
- Transmission Oil Temperature Gauge

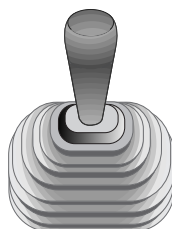
Steering Functions



Left Hand

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

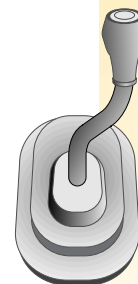
Blade Functions



Right Hand

- Lifting and lowering
- Tilting

Ripper Functions (Optional)



- Raise and lower

UNDERCARRIAGE AND FRAME

Undercarriage

Low Drive and Long Track Undercarriage

It 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.

Addition of Long Track Version (EX Series)

The long track version (the same length of track on ground with PX models) has been added to D65EX to increase operational stability.

Improvements

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



Frame

Flat Bottom Frame

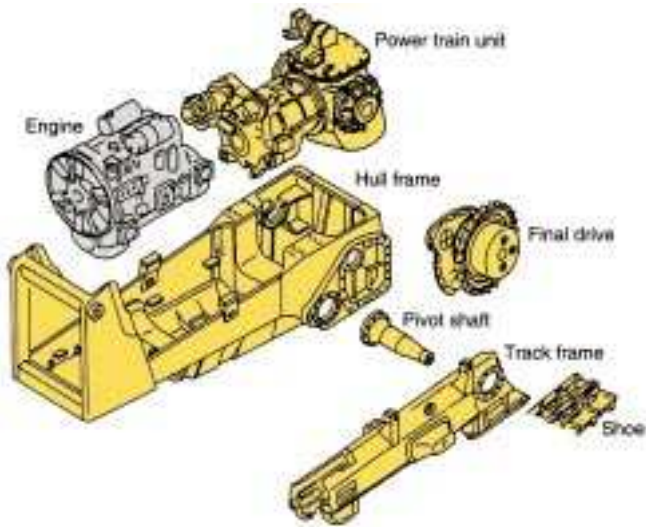
A **flat bottom frame**, the monocoque track frames and forward-mounted pivot shafts provide good maneuverability in muddy terrain by preventing mud from building up under the frame.

Modular Designed Power Train Units

The modular design allow easy removal and installation of any individual unit for shorter downtime.

Wet, Multiple-Disc Brakes

Eliminate brake-band adjustments for maintenance-free operation.



Durability

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.

Test Ports



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

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



ENGINE AND TORQUE CONVERTER

Komatsu S6D125E-2 Turbocharged Diesel Engine

Powerful Engine

A powerful S6D125E-2 turbocharged diesel engine provides a massive output of 142 kW **190 HP**. The engine power is transmitted smoothly to the final drives via a high-efficiency torque converter. And this engine also meets current emissions standards, without sacrificing power or machine productivity.

Gull-Wing Engine Side Covers

With a gas-spring cylinder that opens widely, the engine and the auxiliary components can be checked easily.



SPECIFICATIONS

D65 EX/PX CRAWLER DOZER



ENGINE

Model Komatsu S6D125E-2
Type 4-stroke cycle, water-cooled, emissionized, turbocharged diesel engine
No. of cylinders 6
Bore 125 mm **4.92"**
Stroke 150 mm **5.91"**
Piston displacement 11.04 ltr **674 in³**
Gross horsepower* 153 kW **205 HP/1950 rpm**
Net flywheel horsepower** 142 kW **190 HP/1950 rpm**
Net maximum torque 100 kg m **723 ft lb/1200 rpm**

Direct-injection fuel system. All-speed mechanical governor. Forced lubrication driven by gear pump. Full-flow for lube purification. Dry-type air cleaner with automatic dust evacuator and dust indicator. 11 kW/**24 V** electrical starter motor. 35 /**24 V** alternator. 140 Ah/**2 x 12 V** batteries.

* Gross horsepower output for complete engine operating under SAE J1995 conditions.

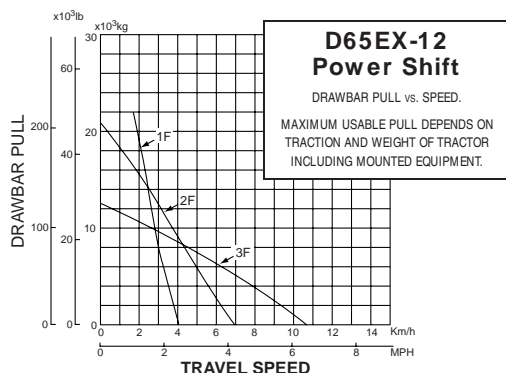
** Net flywheel horsepower output for standard engine (SAE J1349) including air cleaner, alternator (not charging), water pump, lubricating oil pump, fuel pump, muffler, and fan.



TORQFLOW TRANSMISSION

Komatsu's TORQFLOW transmission consists of a wet, spring-friction damper, 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. It offers a single-lever control for the 3 speeds and for directional and steering changes. Gearshift lock lever and neutral safety switch prevent machine from accidental starts.

| Travel speed | Forward | Reverse |
|--------------|------------------------------|------------------------------|
| 1st | 0-3.9 km/h 0-2.4 mph | 0-5.0 km/h 0-3.1 mph |
| 2nd | 0-6.8 km/h 0-4.2 mph | 0-8.6 km/h 0-5.3 mph |
| 3rd | 0-10.6 km/h 0-6.6 mph | 0-13.4 km/h 0-8.3 mph |



STEERING

Single-lever controls for all directional movements. Simply tilt the lever to the left to make a left turn. Tilt it to the right to make a right turn. Pushing the lever forward results in forward motion; pulling toward the operator reverses the machine. Hydrostatic steering system (HSS) of differential planetary gear type. Powered by hydraulic motor, hydraulically actuated, and hand-operated.

Minimum turning radius:
D65EX-12 2.2 m **7'3"**
D65EX-12 LT 2.2 m **7'3"**
D65PX-12 2.7 m **8'10"**

Brakes Wet, multiple-disc, spring-applied, hydraulically released, foot pedal and safety lever operated



FINAL DRIVE

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



UNDERCARRIAGE

Suspension Oscillation, equalizer bar
Track roller frame Mono-coque, high-tensile-strength steel construction
Rollers and idlers Lubricated carrier/track rollers and idlers are sealed with floating seals
Number of track rollers (each side) 7 (D65EX-12)
8 (D65PX-12)
8 (D65EX-12 LT)
Number of carrier rollers (each side) 2
Track shoes Lubricated tracks. Single-grouser shoes. 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.

| | D65EX-12 | D65EX-12 LT | D65PX-12 |
|---------------------------|--|--|--|
| No. of shoes (each side) | 39 | 45 | 45 |
| Grouser height | 65 mm 2.6" | 65 mm 2.6" | 65 mm 2.6" |
| Shoe width (standard) | 510 mm 20.1" | 510 mm 20.1" | 915 mm 36.0" |
| Ground contact area | 27285 cm ² 4,230 in² | 33505 cm ² 5,193 in² | 59923 cm ² 9,288 in² |
| Ground pressure operating | 0.68 kg/cm ² 9.68 psi | 0.57 kg/cm ² 8.20 psi | 0.33 kg/cm ² 4.66 psi |



COOLANT AND LUBRICANT CAPACITY (REFILLING)

Coolant 50 ltr **13.2 U.S. gal**
Fuel tank 410 ltr **108 U.S. gal**
Engine oil 38 ltr **10.0 U.S. gal**
Damper 2.4 ltr **0.6 U.S. gal**
Torque converter, transmission, bevel gear and steering system 50 ltr **13.2 U.S. gal**
Final drive (each side): D65EX-12 and LT 24 ltr **6.3 U.S. gal**
D65PX-12 27 ltr **7.1 U.S. gal**
Blade hydraulic oil capacity 55 ltr **14.5 U.S. gal**



OPERATING WEIGHT (APPROXIMATE)

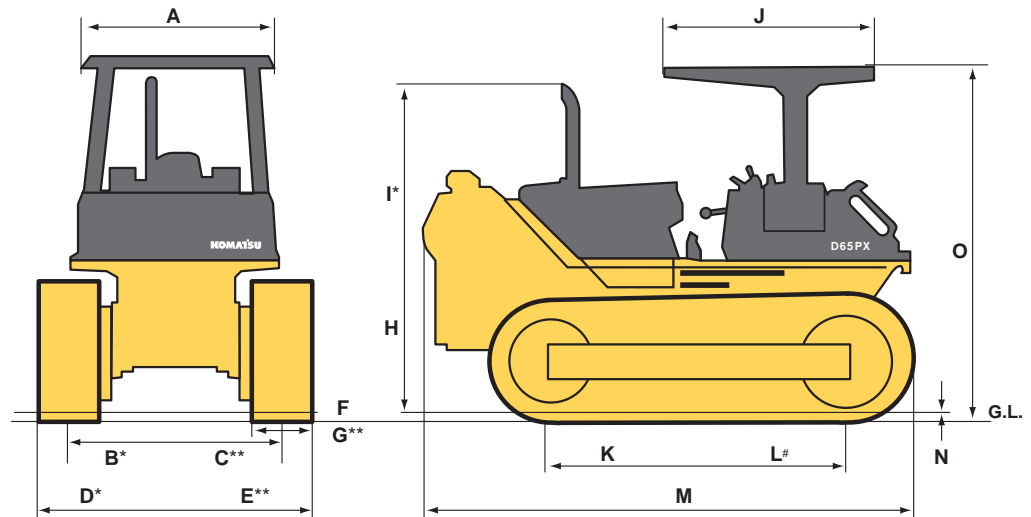
Tractor weight:
Including rated capacity of lubricant, coolant, ROPS, full fuel tank, operator, and standard equipment.
D65EX-12 15340 kg **33,820 lb**
D65EX-12 LT 15530 kg **34,240 lb**
D65PX-12 16670 kg **36,750 lb**

Operating weight:
Including dozer, operator, ROPS, steel cab, standard equipment, rated capacity of lubricant, coolant, and full fuel tank.
D65EX-12 18575 kg **40,960 lb**
D65EX-12 LT 19310 kg **42,475 lb**
D65PX-12 19615 kg **43,250 lb**



DIMENSIONS

| | | |
|-----|---------|-------|
| A | 1495 mm | 4'11" |
| B* | 1880 mm | 6'2" |
| C** | 2050 mm | 6'9" |
| D* | 2390 mm | 7'10" |
| E** | 2972 mm | 9'9" |
| F | 510 mm | 20.1" |
| G** | 915 mm | 36.0" |
| H | 2980 mm | 9'9" |
| I* | 3025 mm | 9'11" |
| J | 1270 mm | 4'2" |
| K | 2675 mm | 8'9" |
| L# | 3285 mm | 10'9" |
| M | 4365 mm | 14'4" |
| N | 65 mm | 2.6" |
| O | 3195 mm | 10'5" |



Ground clearance 400 mm 1'4" *D65EX-12 and D65EX-12 LT **D65PX-12 #D65EX-12 LT and D65PX-12



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. Variable-displacement hydraulic pump with capacity (discharge flow) of 210 ltr/min **55.5 U.S. gal/min** at rated engine rpm.

Relief valve setting 210 kg/cm² **2,990 psi**

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 required for multi-shank ripper.

Positions:

Ripper lift Raise, hold, and lower

Hydraulic cylinders Double-acting, piston

| | Number of cylinders | Bore |
|-------------|---------------------|---------------------|
| Blade Lift | 2 | 95 mm 3.74" |
| Blade Tilt | 1 | 140 mm 5.51" |
| Ripper Lift | 1 | 140 mm 5.51" |



BLADE

Use of high-tensile-strength steel in moldboard and box construction of the back plate for extended service. Blade tilt hose piping is mounted inside the dozer push arm to protect from damage.

| | Blades | Overall length with dozer | * Blade capacity | Blade length x height | Maximum lift above ground | Maximum drop below ground | Maximum tilt adjustment | Additional weight | | Additional weight |
|--------------------|---------------------|---------------------------|---|-----------------------------------|---------------------------|---------------------------|-------------------------|---------------------|------------------------|-------------------------------------|
| | | | | | | | | Dozer equipment | Hydraulic control unit | |
| D65EX and D65EX LT | Semi-U tilt dozer | 5390 mm 17'8" | 5.61 m ³ 7.34 yd ³ | 3460 mm x 1425 mm 11'4" x 4'8" | 1095 mm 3'7" | 450 mm 1'6" | 880 mm 2'11" | 2310 kg 5,090 lb | 720 kg 1,590 lb | 0.11 kg/cm ² 1.56 psi |
| D65EX | Straight tilt dozer | 5260 mm 17'3" | 3.89 m ³ 5.09 yd ³ | 3415 mm x 1225 mm 11'2" x 4'1" | 1100 mm 3'7" | 450 mm 1'6" | 870 mm 2'10" | 2000 kg 4,410 lb | 720 kg 1,590 lb | 0.10 kg/cm ² 1.42 psi |
| | Angle dozer | 5470 mm 17'11" | 3.55 m ³ 4.64 yd ³ | 3970 mm x 1100 mm 13'0" x 3'7" | 1180 mm 3'10" | 460 mm 1'6" | 400 mm 1'4" | 2280 kg 5,030 lb | 650 kg 1,430 lb | 0.11 kg/cm ² 1.56 psi |
| D65PX | Straight tilt dozer | 5550 mm 18'3" | 3.69 m ³ 4.83 yd ³ | 3970 mm x 1100 mm 13'0" x 3'7" | 1200 mm 3'11" | 445 mm 1'6" | 890 mm 2'11" | 2030 kg 4,480 lb | 710 kg 1,570 lb | 0.04 kg/cm ² 0.57 psi |
| | Power tilt pitch | 5550 mm 18'3" | 3.69 m ³ 4.83 yd ³ | 3970 mm x 1100 mm 13'0" x 3'7" | 1200 mm 3'11" | 445 mm 1'6" | 890 mm 2'11" | 2040 kg 4,500 lb | 710 kg 1,570 lb | 0.05 kg/cm ² 0.71 psi |
| | Angle dozer | 5766 mm 18'11" | 3.30 m ³ 4.32 yd ³ | 4475 mm x 960 mm 14'8" x 3'2" | 1230 mm 4' | 490 mm 1'7" | 440 mm 1'5" | 1995 kg 4,390 lb | 650 kg 1,430 lb | 0.04 kg/cm ² 0.55 psi |

*Blade capacities are based on SAE recommendation practice J1265.



STANDARD EQUIPMENT FOR BASE MACHINE

- Air cleaner, double element with pre-cleaner
- Alternator, 35 ampere
- Automatic fuel de-aeration
- Back-up alarm
- Batteries 140 Ah/2 x 12V
- Blower cooling fan
- Decelerator
- Electronic instrument monitor panel
- Engine hood and side covers
- Fenders
- HSS hydrostatic steering system
- Hydraulics for tilt dozer
- Lighting system (includes 2 front, 1 rear)
- Locks, filler caps, and covers
- Mono-lever steering with PPC
- Muffler with curved exhaust pipe
- Radiator guard door, hinged
- Radiator reserve tank
- Rear cover, strengthened
- ROPS mounting brackets
- Single grouser shoes with sealed and lubricated link assembly
- Strengthened under guards, crankcase, and transmission
- Suspension seat with seat belt
- Track roller guards, center section D65PX-12
- Track roller guards, end sections
- Track shoe assembly, 510 mm **20.1"** D65EX-12
915 mm **36.0"** D65PX-12



OPTIONAL EQUIPMENT

- AR track assembly (abrasion resistant links and bushings)
- Air conditioner with heater, defroster, pressurizer
- Cooling fan, reversible
- Counterweight, additional 650 kg **1,430 lb**
- Drawbar, rigid (not for use with counterweight)
- Front pull hook
- Heat resistant fuel hoses
- Heater and defroster
- Intake pipe with pre-cleaner
- Hydraulics for ripper (EX)
- Hitch
- Long track arrangement (for use with Semi-U blade only)
- Light working, rear additional
- Lunch box holder
- Mirror
- Power tilt and pitch (PX)
- Side screens
- Sweeps and rear screen
- Segmented, full length track roller guards
- Radiator core protective grid
- Radiator guard door, flat, strengthened, hinged
- Sun visor
- Suspension seat, reclining with fabric material (cab only)
- Tank guard group
- Underguards, hinged
- Vandalism protection cover for instrument panel (for ROPS canopy)
- Water separator
- Track roller guards, end sections, and center guiding guards (D65EX-12, D65EX-12 LT)



ROPS

ROPs Canopy for Steel Cab*

Meets ISO 3471, SAE J1040 APR88, and SAE J395a ROPS standards, as well as ISO 3499 FOPS standards.

Additional weight 340 kg **750 lb**

Roof dimensions:

Length 1270 mm **4'2"**

Width 1490 mm **4'11"**

Height from compartment floor 1700 mm **5'7"**

Additional ground pressure:

D65EX 0.01 kg/cm² **0.14 psi**

D65PX 0.005 kg/cm² **0.07 psi**

Steel Cab

All-weather, enclosed pressurized cab, includes oil damper suspension, left and right front and rear wipers, ashtray, cigarette lighter, floor mat, hot/cold box.

Additional weight 285 kg **630 lb**

Roof dimensions:

Length 1765 mm **5'9"**

Width 1720 mm **5'8"**

Height from floor to ceiling 1515 mm **5'2"**

Additional ground pressure:

D65EX 0.01 kg/cm² **0.14 psi**

D65PX 0.005 kg/cm² **0.07 psi**

*ROPS canopy must be ordered by all machines.



RIPPER

Multi-shank Ripper for D65EX

Hydraulically controlled parallelogram ripper with three shanks.

Additional weight

(including hydraulic control unit) 1680 kg **3,700 lb**

Beam length 2170 mm **7'1"**

Maximum lift above ground 640 mm **2'1"**

Maximum digging depth 595 mm **1'11"**

Additional ground pressure:

D65EX 0.06 kg/cm² **0.85 psi**

SHOES

| Models | Shoes | Additional weight | Ground contact area | Additional ground pressure to tractor |
|--------------------|------------------------------------|---------------------------|--|--|
| D65EX and D65EX LT | 560 mm 22.0" single-grouser | +120 kg +260 lb | 29660 cm ² 4,644 in² | -0.04 kg/cm ² -0.57 psi |
| | 610 mm 24.0" single-grouser | +230 kg +510 lb | 32635 cm ² 5,058 in² | -0.08 kg/cm ² -1.14 psi |
| D65EX LT | 510 mm 20.1" single-grouser | +45 kg +100 lb | 33506 cm ² 5,193 in² | — |
| D65EX | 660 mm 26.0" single-grouser | +350 kg +770 lb | 35310 cm ² 5,473 in² | -0.11 kg/cm ² -1.56 psi |
| D65PX | 950 mm 37.4" circular arc | +50 kg +110 lb | 62420 cm ² 9,675 in² | -0.01 kg/cm ² -0.14 psi |

SUPPORT

Count on Komatsu and your local distributor for the support you deserve. Our success depends on satisfying your need for productive equipment and supporting that equipment. That's why we have one of the largest and strongest heavy-equipment distributor organizations in North America. Their personnel are not only trained to help you select the equipment that is best-matched for your business but to support that equipment.



Finance Through its finance company, Komatsu can offer you a wide variety of financing alternatives designed to meet your needs. Programs include municipal leases for governmental agencies, conditional sales contracts, and leases with \$1 purchase options for customers interested in owning their equipment. Ask your distributor about Komatsu leasing. We offer finance and operating leases and the unique *Advantage Lease* which offers you predetermined purchase, return, and renewal options.



Parts Three computer-linked parts distribution centers provide fast access to anywhere in the U.S. and Canada. Most parts are available overnight. Plus, Komatsu distributors keep a large assortment of commonly used parts in stock for immediate access.



Remanufactured parts Save money and still have the same warranty as new parts at a fraction of the cost with like-new remanufactured parts.



Maintenance Take advantage of the experience we have gained and ask your distributor about our factory-supported programs including: regular scheduled maintenance, oil and wear analysis, diagnostic inspections, undercarriage inspections, training, special service tools, parts programs, and even a special software program to help your distributor keep track of and manage service-related data.

KOMATSU®

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