

# KOMATSU®

## D65E-12 D65P-12

WITH STEERING CLUTCH/BRAKE SYSTEM

FLYWHEEL HORSEPOWER @ 1950 rpm

D65E-12

**135 kW** 180 HP

D65P-12

**142 kW** 190 HP

OPERATING WEIGHT:

D65E-12

**19125 kg** 42,160 lb

D65P-12

**20185 kg** 44,500 lb



**D**  
**65**



Photo may include optional equipment

# CRAWLER DOZER

**2171700**®

# D65E-12, D65P-12 Crawler Dozer

## WALK-AROUND

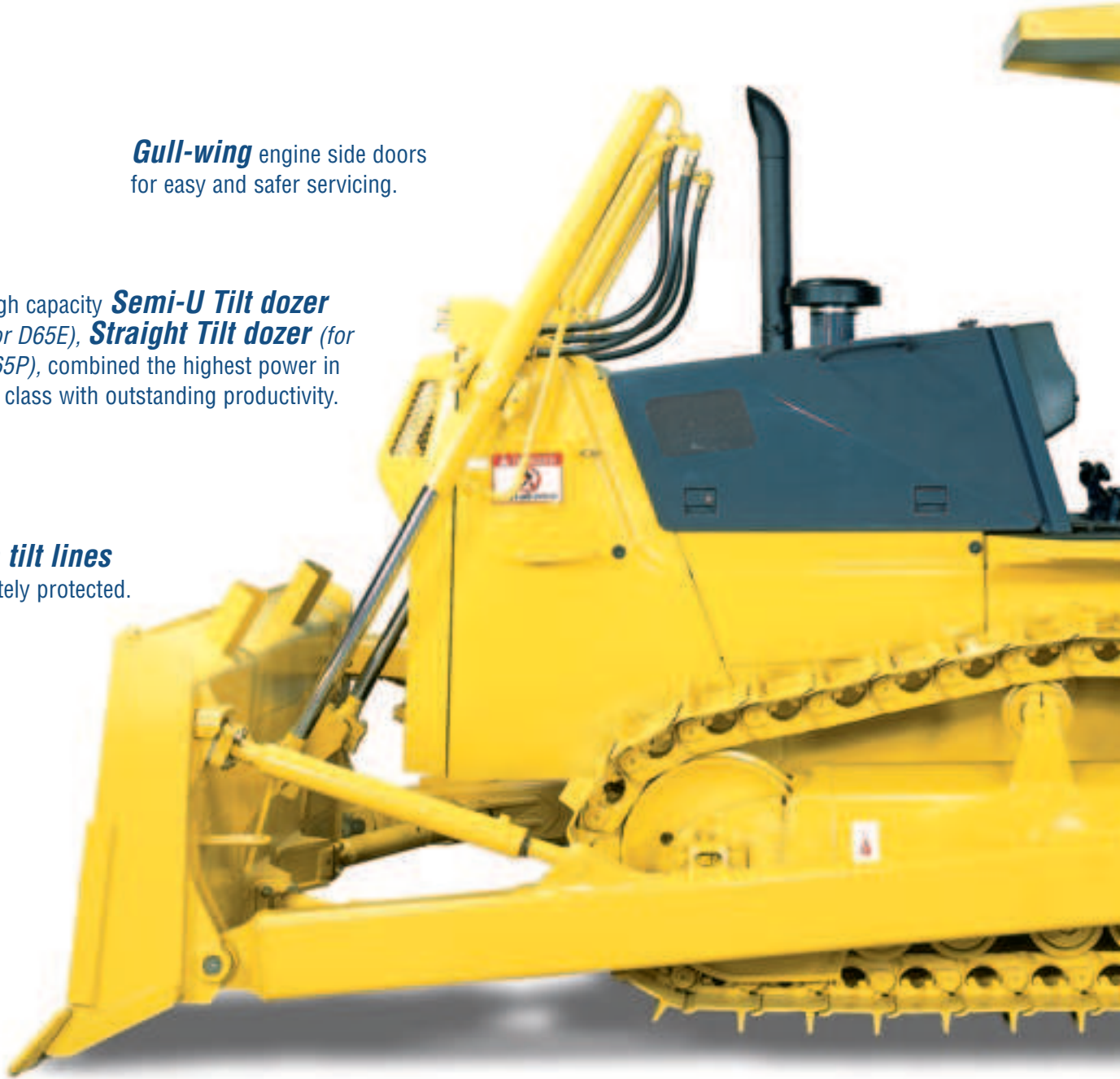
The **Komatsu 6D125E-2** (for D65E) and **S6D125E-2** (for D65P) **diesel engine** provide an output of **135 kW** 180 HP (for D65E) and **142 kW** 190 HP (for D65P) with excellent productivity.

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

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

High capacity **Semi-U Tilt dozer** (for D65E), **Straight Tilt dozer** (for D65P), 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.



# D65E/P

## CRAWLER DOZER

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

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

### FLYWHEEL HORSEPOWER @ 1950 rpm

D65E-12	135 kW 180 HP
D65P-12	142 kW 190 HP

### OPERATING WEIGHT

D65E-12:	19125 kg 42,160 lb
D65P-12:	20185 kg 44,500 lb

### BLADE CAPACITY

Semi-U Tilt Dozer:  
D65E-12: **5.61 m<sup>3</sup>** 7.34 yd<sup>3</sup>

Straight Tilt Dozer  
D65E-12: **3.89 m<sup>3</sup>** 5.09 yd<sup>3</sup>  
D65P-12: **3.69 m<sup>3</sup>** 4.83 yd<sup>3</sup>



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

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

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

Photo may include optional equipment.

# 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. Since the D65 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 arm rests and relocated fuel control lever provide comfortable operation and increased leg space.

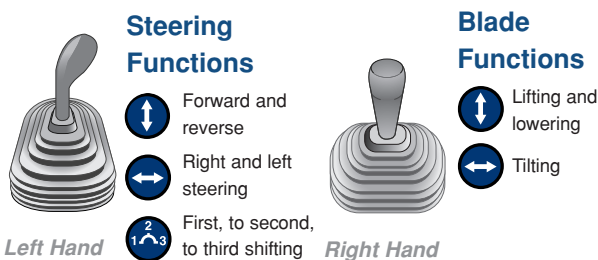


## Hexagonal Pressurized Cab (Optional)

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.



Photo may include optional equipment.



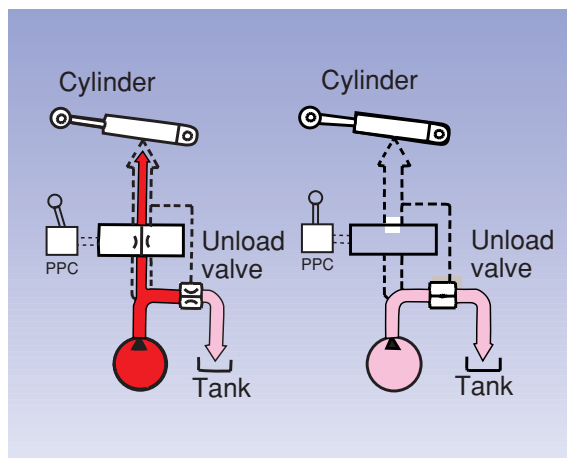
## Easy-to-Operate Work Equipment Control Lever

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.

CLSS for D65E-12 and D65P-12



## 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.



# RELIABILITY FEATURES

## Field-Proven Engine

Powerful S6D125E-2 (D65P) and 6D125E-2 (D65E) diesel engines provide a massive output of 142 kW 190 HP (D65P) and 135 kW 180HP (D65E). The engine power is transmitted smoothly to the final drives via a high-efficiency torque converter.

## Modular Designed Power Train Units

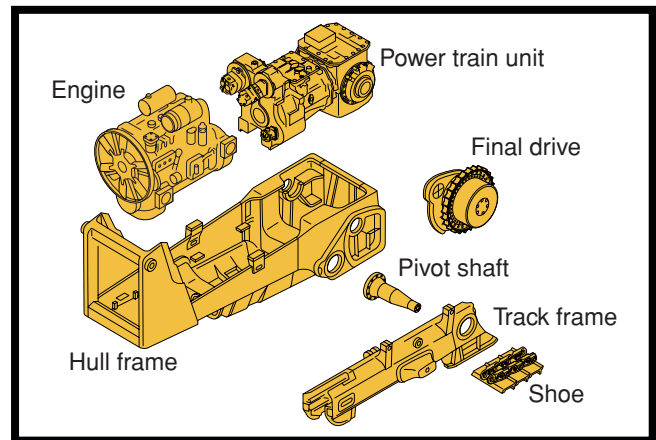
The modular design allows easy removal and installation of any individual unit for shorter downtime.

## 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.



## Tough Undercarriage

Large-diameter bushings, increased track link heights, and improved oil-seals help to increase undercarriage durability. Serviceability has also been improved with the addition of remote greasing of the equalizer bar center pin.

## Low Drive and Long Track Undercarriage

Komatsu's design is extraordinarily tough and offers excellent grading ability and stability.

# EASY MAINTENANCE

## 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.

# SPECIFICATIONS



## ENGINE

Model:  
 D65E-12 ..... Komatsu 6D125E-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 in<sup>3</sup>  
 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 N•m 81.5 kg•m 589 lb ft @ 1100 rpm  
 D65P-12 ..... 981 N•m 100 kg•m 723 lb ft @ 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. 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

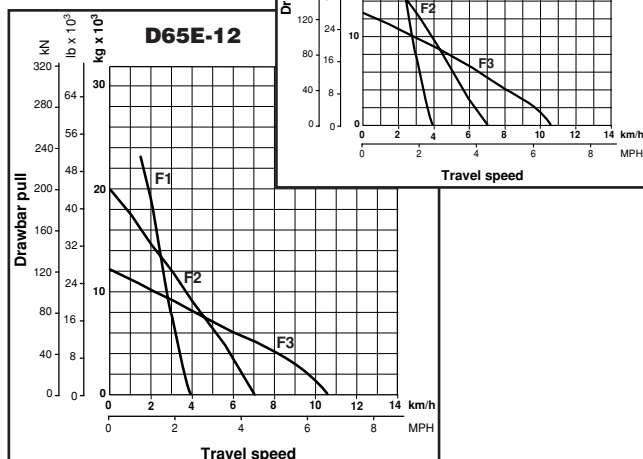
Komatsu's TORQFLOW transmission consists of a water-cooled, 3-element, 1-stage, 1-phase torque converter and a planetary gear, multiple-disc clutch transmission which is hydraulically actuated and force-lubricated for optimum heat dissipation. Joystick control of gears (3 forward and 3 reverse) and directional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

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

### D65E/P-12 Power Shift

DRAWBAR PULL vs. SPEED.

MAXIMUM USABLE PULL DEPENDS ON TRACTION AND WEIGHT OF TRACTOR INCLUDING MOUNTED EQUIPMENT.



## 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 11'11"

\*As measured by track marks on ground.



## UNDERCARRIAGE

Suspension ..... Oscillation with equalizer bar and forward mounted pivot shafts

Track roller frame ..... Monocoque, 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.

		D65E-12
Number of track rollers (each side)		7
Number of shoes (each side)		39
Grouser height	mm in	65 2.6"
Shoe width (standard)	mm in	510 20.1"
Ground contact area	cm <sup>2</sup> in <sup>2</sup>	27285 4,230
Ground pressure (Tractor)	kPa kgf/cm <sup>2</sup> psi	55.9 0.57 8.11
Track gauge	mm in	1880 6'2"
Length of track on ground	mm ft.in	2675 8'9"

		D65P-12
Number of track rollers (each side)		8
Number of shoes (each side)		45
Grouser height	mm in	65 2.6"
Shoe width (standard)	mm in	915 36.0"
Ground contact area	cm <sup>2</sup> in <sup>2</sup>	60115 9,318
Ground pressure (Tractor)	kPa kgf/cm <sup>2</sup> psi	27.5 0.28 3.98
Track gauge	mm in	2050 6'9"
Length of track on ground	mm ft.in	3285 10'9"



## 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)

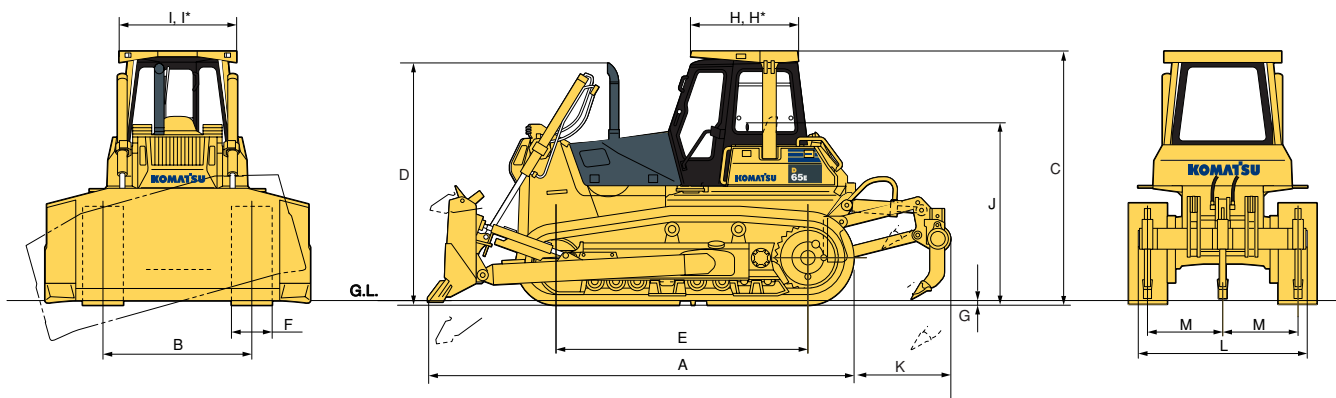
**Tractor weight:**  
Including rated capacity of lubricant, coolant, full fuel tank, operator and standard equipment.

D65E-12	15620 kg	34,440 lb
D65P-12	16940 kg	37,350 lb

**Operating weight:**  
Including semi U-tilt dozer (E) or straight tilt dozer (P), ROPS canopy, steel cab, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank.

D65E-12	19125 kg	42,160 lb
D65P-12	20185 kg	44,500 lb

## DIMENSIONS



Ground clearance . . . . . 405 mm 1'4"

FVD00585

	D65E-12		D65P-12	
A	5440 mm	17'10"	5520 mm	18'1"
B	1880 mm	6'2"	2050 mm	6'9"
C	3165 mm	10'5"	3165 mm	10'5"
D	2990 mm	9'10"	2990 mm	9'10"
E	2675 mm	8'9"	3285 mm	10'9"
F	510 mm	20.1"	915 mm	36.0"
G	65 mm	2.6"	65 mm	2.6"
H	1270 mm	4'2"	1270 mm	4'2"
H*	1830 mm	6'0"	1830 mm	6'0"
I	1490 mm	4'11"	1490 mm	4'11"
I*	1600 mm	5'3"	1600 mm	5'3"
J	2300 mm	7'7"	2300 mm	7'7"
K	1220 mm	4'0"	N/A	
L	2170 mm	7'1"	N/A	
M	950 mm	3'1"	N/A	

Dimension with semi-U dozer and multi-shank ripper (D65E) and straight tilt dozer (D65P).

\*ROPS canopy without cab.



## 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 at rated engine rpm):

..... **180 ltr/min** 47.6 U.S. gal/min

Relief valve setting . . . . . 20.6 MPa **210 kgf/cm<sup>2</sup>** 2,990 psi

**Hydraulic cylinders** . . . . . Double-acting, piston

### 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 . . . . . **55.0 ltr** 14.5 U.S. gal

Straight tilt dozer . . . . . **55.0 ltr** 14.5 U.S. gal

Angle tilt dozer . . . . . **55.0 ltr** 14.5 U.S. gal

Multi-shank ripper . . . . . **55.0 ltr** 14.5 U.S. gal

	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"



## DOZER EQUIPMENT

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

	Overall Length With Dozer mm ft.in	Blade Capacity* m <sup>3</sup> yd <sup>3</sup>	Blade Width x Height mm ft.in	Max. Lift Above Ground mm ft.in	Max. Drop Below Ground mm ft.in	Max. Tilt Adjustment mm ft.in	Additional Weight		Additional Ground Pressure kPa kgf/cm <sup>2</sup> psi
							Dozer equipment kg lb	Hydraulic control unit kg lb	
<b>D65E-12</b> Semi-U Tilt Dozer	<b>5440</b> 17'10"	<b>5.61</b> 7.34	<b>3460 x 1425</b> 11'4" x 4'8"	<b>1105</b> 3'8"	<b>440</b> 1'5"	<b>465</b> 1'6"	<b>2280</b> 5,030	<b>600</b> 1,320	10.8/ <b>0.11</b> /1.56
<b>D65E-12</b> Straight Tilt Dozer	<b>5260</b> 17'3"	<b>3.89</b> 5.09	<b>3415 x 1225</b> 11'2" x 4'0"	<b>1105</b> 3'8"	<b>440</b> 1'5"	<b>460</b> 1'6"	<b>2000</b> 4,410	<b>600</b> 1,320	9.8/ <b>0.10</b> /1.42
<b>D65E-12</b> Angle Dozer	<b>5470</b> 17'11"	<b>3.55</b> 4.64	<b>3970 x 1100</b> 13'0" x 3'7"	<b>1185</b> 3'11"	<b>450</b> 1'6"	<b>400</b> 1'4"	<b>2280</b> 5,030	<b>540</b> 1,190	10.8/ <b>0.11</b> /1.56
<b>D65P-12</b> Straight Tilt Dozer	<b>5520</b> 18'1"	<b>3.69</b> 4.83	<b>3970 x 1100</b> 13'0" x 3'7"	<b>1105</b> 3'8"	<b>540</b> 1'9"	<b>450</b> 1'6"	<b>2030</b> 4,480	<b>590</b> 1,300	3.9/ <b>0.04</b> /0.57

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
- ROPS 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)
- Underguards, oil pan and transmission





### 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

#### ROPS CANOPY

- Additional weight **420 kg** 930 lb
- Meets ISO 3471 and SAE J1040 APR88 ROPS standards, and ISO 3449 FOPS standard.
- Roof dimensions:
  - Length: **1830 mm** 6'0"
  - Width: **1600 mm** 5'3"
  - Height from operator compartment floor: **1700 mm** 5'7"

#### Additional ground pressure

D65E	1.5 kPa/ <b>0.015 kgf/cm<sup>2</sup></b> /0.21 psi
D65P	0.7 kPa/ <b>0.007 kgf/cm<sup>2</sup></b> /0.10 psi

#### ROPS CANOPY FOR CAB

- Additional weight **340 kg** 750 lb
  - Meets ISO 3471 and SAE J1040 APR88 ROPS standards, and ISO 3449 FOPS standard.
  - Roof dimensions:
    - Length: **1270 mm** 4'2"
    - Width: **1490 mm** 4'11"
    - Height from operator compartment floor: **1705 mm** 5'7"
- |      |  |
|------|--|
| D65E | 1.2 kPa/ <b>0.012 kgf/cm<sup>2</sup></b> /0.17 psi |
| D65P | 0.6 kPa/ <b>0.006 kgf/cm<sup>2</sup></b> /0.09 psi |

- 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, filler caps and covers
- Pressure check ports for power train
- Radiator core protective grid
- Rigid type drawbar

#### 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"

#### Additional ground pressure

D65E	1.0 kPa/ <b>0.010 kgf/cm<sup>2</sup></b> /0.14 psi
D65P	0.6 kPa/ <b>0.006 kgf/cm<sup>2</sup></b> /0.09 psi

- ROPS canopy
- ROPS canopy 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

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

- 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"
- Additional ground pressure  
5.9 kPa/**0.06 kgf/cm<sup>2</sup>**/0.85 psi

#### SHOES

Models	Shoe	Additional weight	Ground contact area	Additional ground pressure to tractor
D65E	560 mm 22.0" single-grouser shoe	+120 kg +260 lb	29960 cm <sup>2</sup> 4,644 in <sup>2</sup>	-3.9 kPa <b>-0.04 kgf/cm<sup>2</sup></b> -0.57 psi
	610 mm 24.0" single-grouser shoe	+230 kg +510 lb	32635 cm <sup>2</sup> 5,058 in <sup>2</sup>	-7.8 kPa <b>-0.08 kgf/cm<sup>2</sup></b> -1.14 psi
	660 mm 26.0" single-grouser shoe	+360 kg +790 lb	35310 cm <sup>2</sup> 5,473 in <sup>2</sup>	-11.8 kPa <b>-0.12 kgf/cm<sup>2</sup></b> -1.71 psi
D65P	950 mm 37.4" circular-arc shoe	+50 kg +110 lb	62420 cm <sup>2</sup> 9,675 in <sup>2</sup>	-1.0 kPa <b>-0.01 kgf/cm<sup>2</sup></b> -0.14 psi

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The image shows the Komatsu logo, which consists of the word "KOMATSU" in a bold, blue, sans-serif font. The letter "O" is stylized with a horizontal bar across its top. A registered trademark symbol (®) is located to the upper right of the "U".