Comparison Dot D65EX/ D65EX/ D65EX-12 D65PX D65PX-12 Comparison

FLYWHEEL HORSEPOWER @ 1950 rpm D65EX/PX-12 142 KW **190 HP**

OPERATING WEIGHT:

CRAWLER DOZER

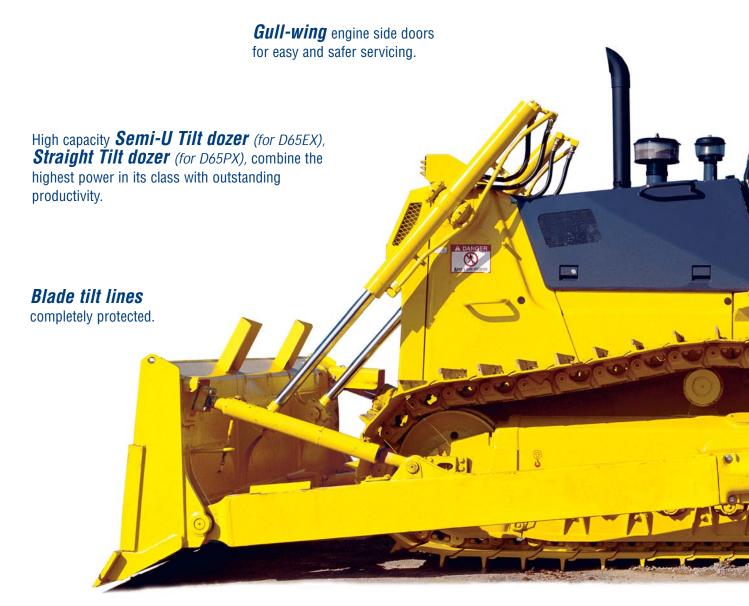
D65EX-12 STANDARD TRACK 19295 kg **42,540 lb** LONG TRACK 20030 kg **44,160 lb** D65PX-12 20315 kg **44,790 lb**



D65EX-12, D65PX-12 Crawler Dozer

The Komatsu S6D125E-2 turbocharged diesel engine provides an output of 142 kW **190 HP** with excellent productivity, while meeting current emissions standards.

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



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.

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

D65EX/PX-12 142 kW 190 HP

OPERATING WEIGHT

D65EX-12: Standard track 19295 kg **42,540 lb** Long track 20030 kg **44,160 lb** D65PX-12: 20315 kg **44,790 lb**

BLADE CAPACITY

Semi-U Tilt Dozer: D65EX-12: 5.61 m³ **7.34 yd³**

Straight Tilt Dozer D65PX-12: 3.69 m³ 4.83 yd³

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

NOMATSI

Hydrostatic Steering System (HSS)

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

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

Modular power train for increased serviceability and durability.

. 2

Photo may include optional equipment.

CARENDRYC CARENCS

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 dampening cab mounts suspension soften shocks for operator comfort and extends component life.

Easy-to-Operate Work Equipment Control Lever

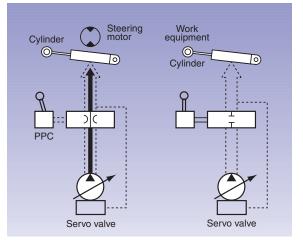
With the Closed-center Load Sensing (CLSS) hydraulic system, blade lever stroke is directly proportional with blade speed, regardless of the load and travel speed. This results in superb, fine controllability.

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 D65EX-12 and D65PX-12







Three-stage height adjustable arm rests



Hydrostatic Steering System— Smooth, Powerful Turning

For models D65EX-12 and D65PX-12 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.

Left

Sprocket

- 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.



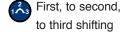


Left Hand

Steering Functions Forward and reverse

Right and left

steering





Right Hand

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 Light

Steering

Steering Planetary

Bevel Gear

Wet Disc Brakes

Blade Functions

Lifting and

lowering

Tilting

Motor

Right Sprocket

- Engine Oil Pressure Caution Light
- Engine Water Temperature Caution Light
- Engine Water Temperature Gauge
- Fuel Gauge
- Intake Air Heater Light
- Monitor Caution
 Cancel Switch
- Monitor Caution Light
- Service Meter
- Transmission Oil Temperature Caution Light
- Transmission Oil Temperature Gauge
- Transmission Gear Indicator

Ripper Functions (Optional)

Raise and lower

EDARASHEUNG EMARIS UNA

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

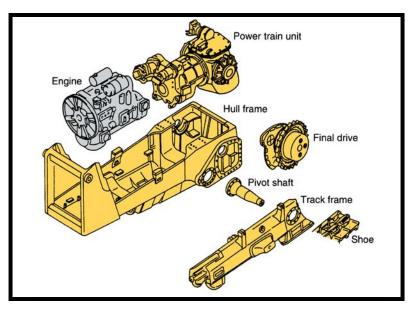
Numerous improvements to increase undercarriage reliability and durability have been incorporated. Serviceability has also been improved with the addition of remote greasing of the equalizer bar center pin.

Addition of Long Track Version (EX Series)

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







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

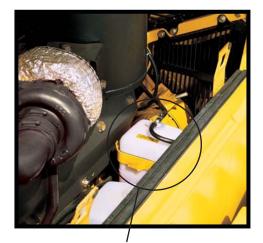
Wet, Multiple-Disc Brakes

Eliminates 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.

Reservoir

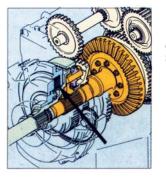


A radiator coolant reservoir makes it easier to check the coolant level and eliminates frequent refilling.

Test Ports



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



Wet, multiple-disc brakes eliminate brake adjustment for maintenancefree operation.

RELREVICE ENGRICE. GUY EUUSIUE VUD

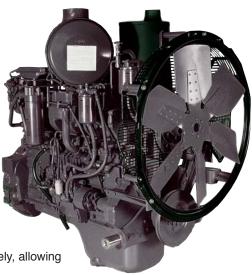
Komatsu S6D125E-2 Turbocharged Diesel Engine

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. This engine also meets current emissions standards, without sacrificing power or machine productivity.

Gull-Wing Engine Side Covers

A gas-spring cylinder opens the gull-wing engine side covers widely, allowing the engine and auxiliary components to be easily checked.





Sherigalions





Model:

 D65EX, PX-12
 Komatsu S6D125E-2

 Type
 4-stroke cycle, water-cooled, emissionized, direct injection

 Aspiration:
 D65EX, PX-12

 D65EX, PX-12
 Turbocharged engine

 Number of cylinders
 6

 Bore
 125 mm 4.92"

 Stroke
 150 mm 5.91"

 Piston displacement
 11.04 ltr 674 in³

 Gross horsepower*:
 D65EX, PX-12

 D65EX, PX-12
 153 kW 205 HP @ 1950 rpm

 Net flywheel horsepower*:
 D65EX, PX-12

 D65EX, PX-12
 142 kW 190 HP @ 1950 rpm

 Net maximum torque:
 D65EX, PX-12

 D65EX, PX-12
 981 N•m 100 kg•m 723 lb ft @ 1200 rpm

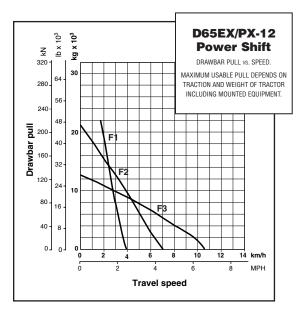
Direct injection fuel system. All-speed mechanical governor. Forced lubrication driven by gear pump. Full-flow for lube purification. Dry-type air cleaner with automatic dust evacuator and dust indicator. 7.5 kW/24V electrical starter motor. 35 A/24V alternator. 140 Ah/2 x 12V batteries.

* 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.



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





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.



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.

The Hydrostatic Steering System (HSS) is comprised of a hydraulic pump and motor. This design allows for counter rotation under certain ground conditions. Wet, multiple-disc, pedal-controlled service brakes are spring-actuated and hydraulically-released. The directional and gear control joystick lock lever also applies the brakes. Minimum turning radius*.

D65EX-12		2.2 m 7'3"
D65EX-12 Long Track		2.2 m 7'3"
D65PX-12		2.7 m 8'10"
a second second to the second second second	a second s	

*As measured by track marks on ground.

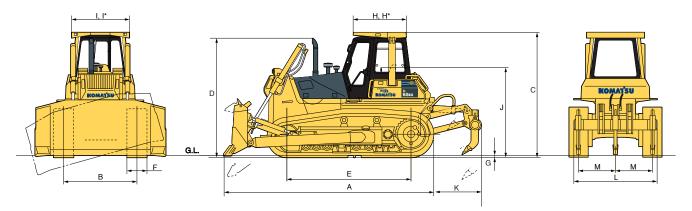


Suspension	Oscillation with equalizer bar
	and forward mounted pivot shafts
Track roller frame	Monocoque, large section,
	durable construction
Number of carrier rollers (each side	e)
Track shoes Lu	bricated tracks. Unique dust seals
	nting entry of foreign abrasives into
pin-to-bushin	ig clearances for extended service.

Track tension is easily adjusted with a grease gun.

		D65EX-12	D65EX-12 LT	D65PX-12	
Number of track rollers (each side)		7	8	8	
Number of shoes (each side	e)	39	45	45	
Grouser height	mm in	65 2.6 "	65 2.6"	65 2.6 "	
Shoe width (standard)	mm in	510 20.1"	510 20.1"	915 36.0"	
Ground contact area	cm² in²	27285 4,230	33505 5,193	60115 9,318	
Ground pressure (Tractor)	kPa kgf/cm² psi	55.9 0.57 8.11	48.1 0.49 6.97	27.5 .28 3.98	
Track gauge	mm in	1880 6'2"	1880 6'2"	2050 6'9"	
Length of track on ground mm ft.in		2675 8'9 "	3285 10'9"	3285 10'9"	





	D65EX-12		D65EX-	12 LT	D65PX-12		
А	5440 mm	17'10"	5440 mm	17'10"	5520 mm	18'1"	
В	1880 mm	6'2"	1880 mm	6'2"	2050 mm	6'9"	
С	3165 mm	10'5"	3165 mm	10'5"	3165 mm	10'5"	
D	2990 mm	9'10"	2990 mm	9'10"	2990 mm	9'10"	
E	2675 mm	8'9"	3285 mm	10'9"	3285 mm	10'9"	
F	510 mm	20.1"	510 mm	20.1"	915 mm	36.0"	
G	65 mm	2.6"	65 mm	2.6"	65 mm	2.6"	
Н	1270 mm	4'2"	1270 mm	4'2"	1270 mm	4'2"	
H*	1830 mm	6'0"	1830 mm	6'0"	1830 mm	6'0"	
I	1490 mm	4'11"	1490 mm	4'11"	1490 mm	4'11"	
I *	1600 mm	5'3"	1600 mm	5'3"	1600 mm	5'3"	
J	2300 mm	7'7"	2300 mm	7'7"	2300 mm	7'7"	
K	1220 mm	4'0"	1220 mm	4'0"	N/A		
L	2170 mm	7'1"	2170 mm	7'1"	N/A		
М	950 mm	3'1"	950 mm	3'1"	N/A		

Dimension with semi-U dozer and multi-shank ripper (D65EX/EX LT) and straight tilt dozer (D65PX).

*ROPS canopy without cab.

COOLANT AND LUBRICANT CAPACITY (REFILLING)

Coolant. 52 ltr Fuel tank 406 ltr Engine oil 38 ltr Damper. 1.7 ltr Transmission, bevel gear, and steering system 48 ltr Final drive (each side) 48 ltr	107.3 U.S. gal 10.0 U.S. gal 0.4 U.S. gal
D65EX-12	6.3 U.S. gal
D65PX-12	7.1 U.S. gal



Tractor weight:

Including rated capacity of lubricant, coolant, full fuel tank, operator and standard equipment.

D65EX-12

Standard Track	15670	kg 34,550 lb
Long Track	16405	kg 36,170 lb
D65PX-12	16950	kg 37,370 lb

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

D65EX-12

Standard Track	. 19295 kg 42,540 lb
Long Track	. 20030 kg 44,160 lb
D65PX-12	. 20315 kg 44,790 lb



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:

D65EX/PX Variable displacement plunger-type Capacity (discharge flow at rated engine rpm):

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"		

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

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

DOZER EQUIPMENT

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

	Overall Length With Dozer	1	Blade Width y Height	Max. Lift Above Ground	Max. Drop Below Ground	Max. Tilt Adjustment	Addit Dozer	ional Weight Hydraulic control unit	Additional Ground
	mm ft.in	m ³ yd ³	mm ft.in	mm ft.in	mm ft.in		Equipment	1	Pressure*2
D65EX-12	5440	5.61	3460 x 1425	1105	440	465	2280	720	10.8/0.11/ 1.56
Semi-U Tilt Dozer	17'10''	7.34	11'4" x 4'8"	3'8''	1'5''	1'6"	5,030	1,590	
D65EX-12	5260	3.89	3415 x 1225	1105	440	460	2000	720	9.8/0.10/ 1.42
Straight Tilt Dozer	17'3 "	5.09	11'2" x 4'0"	3'8''	1'5 "	1'6"	4,410	1,590	
D65EX-12	5470	3.55	3970 x 1100	1185	450	400	2280	650	10.8/0.11/ 1.56
Angle Dozer	17'11''	4.64	13'0" x 3'7"	3'11''	1'6 "	1'4 "	5,030	1,430	
D65PX-12	5520	3.69	3970 x 1100	1105	540	450	2030	710	4.5/0.046/ 0.65
Straight Tilt Dozer	18'1"	4.83	13'0" x 3'7"	3'8"	1'9''	1'6"	4,480	1,570	

Remarks:

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

*2 Indicates additional ground pressure to D65EX/D65PX tractor. (unit: kPa/kgf/cm²/psi)

STANDARD EQUIPMENT FOR BASE MACHINE

- Air cleaner, double element with dust indicator
- Alternator, 35 ampere
- Backup alarm
- Batteries, 140 Ah/2 x 12V
- Blower cooling fan
- Decelerator pedal
- Electronic instrument monitor panel
- Engine hood
- Engine side covers, gull-wing
- Fenders
- Front pull hook
- High mount foot rests

- Intake pipe with precleaner
- Lighting system, (includes 2 front, 1 rear)
- Locks, filler caps and covers
- Mono-lever steering
- Muffler with curved exhaust pipe
- Pressure test ports for power train
- Radiator guard door, flat
- Radiator reserve tank
- Rear cover
- ROPS mounting brackets
- Seat belt, retractable
- Starting motor, 7.5 kW/24V
- Steering system:
- -HSS (Hydrostatic Steering System)

- Suspension seat, with high-back
- Track roller guard, center section (EX Long Track, PX)
- Track roller guard, end sections (EX)
- Track shoe assembly
 - -Heavy-Duty sealed and lubricated track
 - 510 mm 20" single grouser shoe (EX, EX Long Track)
 - 915 mm 36.0" single grouser shoe (PX)
- Underguards, oil pan and transmission



- Air conditioner
- AR track assembly (abrasion resistant bushings)
- Cab
- Cab accessories
 - -Cup holder
 - -Lunch box holder
 - -Rear view mirror

ROPS CANOPY

- Additional weight 420 kg 930 lb
- Meets ISO 3741, SAE J1040 APR88, and ISO 3449 FOPS standards.
- Boof dimensions:
 - -Length: 1830 mm 6'0"
 - -Width: 1600 mm 5'3"
 - -Height from operator compartment floor: 1700 mm 5'7"
- Additional ground pressure • D65FX

1.5 kPa/0.015 kg/cm²/0.21 psi D65EX Long Track

- 1.3 kPa/0.013 kg/cm²/0.18 psi D65PX
 - 0.7 kPa/0.007 kg/cm²/0.10 psi

ROPS CANOPY FOR CAB

- Additional weight 340 kg 750 lb
- Meets ISO 3471, SAE J1040, SAE J3 •
- ROPS and ISO 3449 FOPS standards Roof dimensions:
 - -Length: 1270 mm 4'2"
 - -Width: 1490 mm 4'11"
 - -Height from operator compartment floor: 1705 mm 5'7"

D65EX

- 1.2 kPa/0.012 kg/cm²/0.17 D65EX Long Track
- 1.0 kPa/0.010 kg/cm²/0.14 D65PX

0.6 kPa/0.006 kg/cm²/0.09

- · Heater and defroster
- · Hitch type drawbar
- Hydraulics for ripper (EX, EX LT) •
- Hydraulics for tilt dozer
- Light working, cab additional
- Radiator core protective grid
- Rigid type drawbar
- ROPS canopy

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 • D65EX
 - 1.0 kPa/0.010 kg/cm²/0.14 psi D65EX Long Track 0.9 kPa/0.009 kg/cm²/0.13 psi
 - D65PX
 - 0.6 kPa/0.006 kg/cm²/0.09 psi

ROPS canopy with sweep

- 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 D65EX/EX LT)

- 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 D65EX
 - 5.9 kPa/0.06 kg/cm²/0.85 psi D65EX Long Track
 - 4.9 kPa/0.05 kg/cm²/0.71 psi

Models	Shoe	Additional weight	Ground contact area	Additional ground pressure to tractor
D65EX Standard Track	560 mm 22.0 " single-grouser shoe	+120 kg + 260 lb	29960 cm ² 4,644 in ²	-3.9 kPa -0.04 kg/cm ² -0.57 psi
	610 mm 24.0 " single-grouser shoe	+230 kg +510 lb	32635 cm ² 5,058 in ²	-7.8 kPa -0.08 kg/cm ² -1.14 psi
	660 mm 26.0 " single-grouser shoe	+360 kg +790 lb	35310 cm ² 5,473 in ²	-11.8 kPa -0.12 kg/cm ² -1.71 psi
D65EX	560 mm 22.0 " single-grouser shoe	+140 kg +310 lb	36790 cm ² 5,702 in ²	-3.9 kPa -0.04 kg/cm ² -0.57 psi
Long Track	610 mm 24.0 " single-grouser shoe	+270 kg +600 lb	40075 cm ² 6,212 in ²	-6.9 kPa -0.07 kg/cm ² -1.00 psi
D65PX	950 mm 37.4 " circular-arc shoe	+50 kg +110 lb	62420 cm ² 9,675 in ²	-1.0 kPa -0.01 kg/cm² -0.14 psi

AESS575-00

©2002 Komatsu Printed in USA

DK2(5M)C (5M)BM 10/02

2/02 (EV-1)



Komatsu America International Company 440 N. Fairway Dr., Vernon Hills, IL 60061



SHOES