FLYWHEEL HORSEPOWER

142 kW **190 HP** @ 1950 rpm

OPERATING WEIGHT

D65EX-15: 20080 kg **44,270 lb** D65PX-15: 20800 kg **45,860 lb** D65WX-15: 20940 kg **46,160 lb**

KOMATSU®

D65EX-15 D65PX-15 D65WX-15

65



CRAWLER DOZER



WALK-AROUND

The Komatsu SA6D125E-3 turbocharged aftercooled diesel engine provides an output of 142 kW **190 HP**, with excellent productivity, and is Tier 2 EPA, EU, and Japan emissions certified.

Hydrostatic Driven Engine Cooling Fan automatically controlled; reduces fuel consumption and operating noise levels.



Komatsu Torqflow transmission offers single lever control of speed and directional changes (3 forward and 3 reverse).

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

CRAWLER DOZER

New Hexagonal Designed Cab includes:

- Spacious interior
- Comfortable ride with new cab damper
- Excellent visibility
- High capacity air conditioning system (optional)
- PCCS (Palm Command Control System) lever
- Pressurized cab (optional)
- Adjustable armrests

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

OPERATING WEIGHT

D65EX-15:

20080 kg 44,270 lb Standard track 20820 kg **45,900 lb** Long track D65PX-15: 20800 kg **45,860 lb** 20940 kg 46,160 lb D65WX-15:

BLADE CAPACITY

Semi-U Tilt Dozer: D65EX-15: 5.61 m3 7.34 yd3 D65WX-15: 6.20 m3 8.10 yd3 Straight Tilt Dozer D65EX-15: 3.89 m3 5.09 yd3 D65PX/WX-15: 3.69 m3 4.83 yd3



Wet, multiple-disc brakes

eliminates brake-disc adjustments for maintenance-free operation.

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



Komatsu's highly productive, innovative technology, environmentally friendly machines built for the 21st century.

Photos may include optional equipment.

Bolt-on segmented sprocket teeth

for easy in-the-field replacement

PCCS (PALM COMMAND CONTROL SYSTEM)

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 simply carried out 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).

Palm Command PPC Controlled Blade Control Joystick

Blade control joystick uses the PPC (Proportional Pressure Control) valve and joystick is similar to the travel control joystick. PPC control combined



Blade

with the highly reliable Komatsu hydraulic system enables superb fine control.

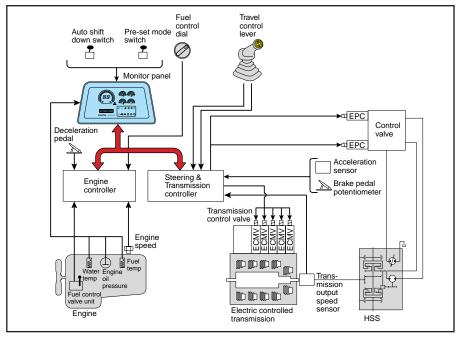
Fuel Control Dial

Engine revolution is controlled by an electric signal, providing ease of operation, eliminating maintenance of linkage and joints.

Height Adjustable Armrest

Armrest height is adjustable without any tools, providing the operator with firm arm support in an ideal armrest.

Outline of Electronic Control System





Power Train Electronic Control System

Smooth and Soft Operation

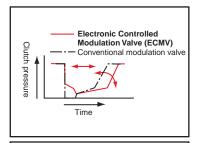
D65 utilizes a newly designed power train electronic control system. The controller registers the amount of operator control (movements of lever and operation of switches) along with machine condition signals from each sensor, to calculate accurately the control of the transmission for optimal machine operation. The ease of operation and productivity of the new D65EX/PX/WX is greatly improved through these new features.

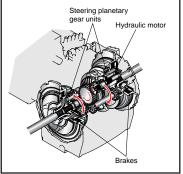
ECMV (Electronic Controlled Modulation Valve) Transmission

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.



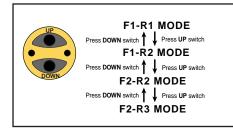


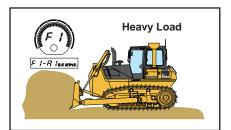
Shift Preset Function

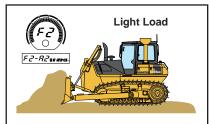
Shift Preset Mode is provided as standard.equipment. The preset switch enables the operator to select a combination of forward/reverse gear shifts, from 4 patterns; F1-R1, F1-R2, F2-R2 and F2-R3, by using UP/DOWN shift switch, and once the shift pattern is selected, operator can control the machine, 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, in case of using Auto-Downshift Function together.

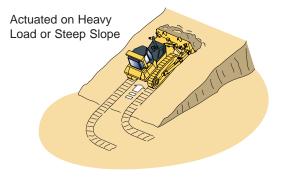






Auto-Downshift Function

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).



PRODUCTIVITY FEATURES

Engine

The Komatsu SA6D125E-3 engine delivers 142 kW **190 HP** at 1950 rpm. The fuel-efficient Komatsu engine, together with the heavy machine weight, make the D65 crawler dozers superior in both ripping and dozing operations. The engine is designed to surpass EPA/CARB Tier 2, EU and Japan regulations, and features direct fuel injection, turbocharger, and aftercooler to maximize fuel efficiency.

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

Hydrostatic Driven Engine 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.

Work Equipment

Large Blade

Capacities of 3.89 m³ **5.09 yd³** (Straight-tilt dozer for D65EX), 3.69 m³ **4.83 yd³** (Straight-tilt dozer for D65PX/WX), 5.61 m³ **7.34 yd³** (Semi-U dozer for D65EX), and 6.20 m³ **8.10 yd³** (Semi-U dozer for D65WX) yield outstanding production. Hightensile-strength steel has been incorporated into the front and sides of the blade for increased durability.

Undercarriage

Low Drive and Long Track Undercarriage

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



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,

Addition of Wide Track Version (WX Series)

A wide track machine has the same length of track on ground as an EX model combined with the track gauge of the PX model. This provides the operator with the tractive effort and productivity of the EX as well as the stability and flotation of the PX.



WORKING ENVIRONMENT

Operator Comfort

Operator comfort is essential for safe and productive work. The D65 provides a quiet, comfortable environment where the operator can concentrate on the work at hand.



Hexagonal Pressurized Cab

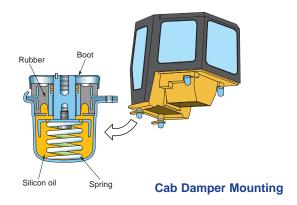
- The cab's new hexagonal design and large tinted glass windows provide excellent front, side, and rear visibility.
- Air filters and a higher internal air pressure combine to prevent dust from entering the cab.



Photos may include optional equipment

Comfortable Ride with New Cab Damper Mounting

D65's cab mounts use a newly designed cab damper which provides excellent shock and vibration absorbtion capacity with its long stroke. Cab damper mounts soften shocks and vibration while traveling over adverse conditions, which conventional mounting systems are unable to absorb. The cab damper spring isolates the cab from the machine body, suppressing vibration and providing a quiet, comfortable operating environment.



New Suspension Seat (optional)

D65 uses a newly designed suspension seat. Fore and aft sliding rails and suspension spring have been newly designed to increase strength and rigidity. The new seat

provides excellent support, improving riding comfort. Fore and aft seat travel has been designed for all operator sizes.



EASY MAINTENANCE

Preventative Maintenance

Preventative maintenance is the only way to ensure long service life from your equipment. That's why Komatsu designed the D65 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 gauge and hydraulic tank are arranged on 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 a warning buzzer sounds. The monitor displays engine rpm and forward/reverse gear speed on the upper part of the monitor during operation. When abnormalities occur during operation, user code and service meter are displayed alternately. When a critical user code is displayed, the caution lamp blinks and a warning buzzer sounds to prevent the development of serious problems.

Enclosed Hydraulic Piping

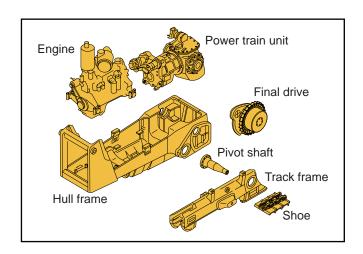
Hydraulic piping for the blade tilt cylinder is completely housed in the push arm, ensuring damage protection from materials.

Easy Cleaning With Hydraulic Driven 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.

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.



CLEAN AND SILENT DESIGN

Low Emission

The SA6D125E-3 is USA EPA Tier 2, EU and Japan emissions certified, without sacrificing power or machine productivity.

Quiet Design

The low-noise engine hydraulically driven fan and rubbermounted power train provide a quiet operation.

Use of Recyclable Parts

Recyclable parts are used to minimize the effects on the environment.

Extended Service Interval

Long-life consumable parts such as filters and elements are used to lengthen their replacement interval to lower the maintenance cost.



Photo may include optional equipment.

SPECIFICATIONS



ENGINE

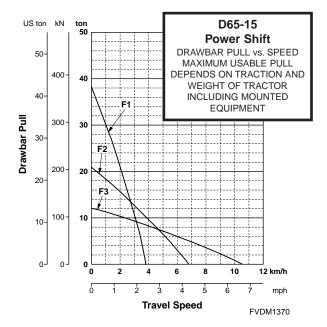
ModelKomatsu SA6D125E-3Type4-stroke, water-cooled, direct injectionAspirationTurbocharged, aftercooledNo. of cylinders6
Bore x stroke
Piston displacement
Flywheel horsepower
SAE J1349142 kW 190 HP at 1950 rpm
DIN 6270
Governor All-speed, electronic
Lubrication system
Method Gear pump, force lubrication
Filter Full-flow



TORQFLOW TRANSMISSION

Komatsu 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 electrically-controlled, hydraulically-actuated and force-lubricated for optimum heat dissipation. Gearshift lock lever and neutral safety switch prevent 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 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.



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.

Hydrostatic Steering System (HSS) is powered by steering planetary units and an independent hydraulic pump and motor. Counterrotation turns are also available. Wet, multiple-disc, pedal-controlled service brakes are spring-actuated and hydraulically released. Gear shift lock lever also applies parking brake.



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.

		D65EX-15	D65EX-15 Long Track	D65PX-15	D65WX-15 Wide Gauge
Number of track rollers (each side)		7	8	8	7
Type of shoes (standard)		Single grouser	Single grouser	Single grouser	Single grouser
Number of shoes (each side)		39	45	45	39
Grouser height	mm in	65 2.6 "	65 2.6"	65 2.6 "	65 2.6 "
Shoe width (standard)	mm in	510 20"	510 20"	915 36"	810 32"
Ground contact area	cm² in²	27285 4,230	33505 5,193	60115 9,318	43335 6,717
Ground pressure (tractor)	kPa kgf/cm² psi	58.8 0.60 8.53	50.0 0.51 7.25	28.4 0.29 4.12	39.2 0.40 5.69
Track gauge	mm ft.in	1880 6'2"	1880 6'2"	2050 6'9"	2050 6'9"
Length of track on ground	mm ft.in	2675 8'9"	3285 10'9"	3285 10'9"	2675 8'9"

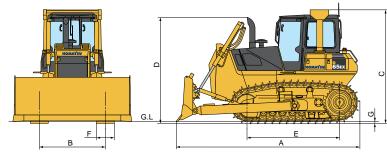


COOLANT AND LUBRICANT CAPACITY (REFILL)

Fuel tank 415 ltr Coolant 52 ltr Engine 38 ltr	13.7 U.S. gal
Torque converter, transmission, bevel gear, and steering system 48 ltr Final drive (each side)	12.7 U.S. gal
D65EX-1524 ltr	
D65PX-1527 ltr	
D65WX-15 27 ltr	7.1 U.S. gal



	D65EX-15	D65EX-15 Long Track	D65PX-15	D65WX-15
Α	5440 mm 17'10"	5845 mm 19'2"	5520 mm 18'1"	5440 mm 17'10"
В	1880 mm 6'2"	1880 mm 6'2"	2050 mm 6'9"	2050 mm 6'9"
C	3220 mm 10'7"	3220 mm 10'7"	3220 mm 10'7"	3220 mm 10'7"
D	2990 mm 9'10"	2990 mm 9'10"	2990 mm 9'10"	2990 mm 9'10"
Е	2675 mm 8'9"	3285 mm 10'9"	3285 mm 10'9"	2675 mm 8'9"
F	510 mm 20"	510 mm 20"	915 mm 36"	810 mm 32"
G	65 mm 2.6"	65 mm 2.6"	65 mm 2.6"	65 mm 2.6"



Dimension with semi-U tilt dozer (D65EX-15) single grouser shoe.



OPERATING WEIGHT

Tractor weight:

Including rated capacity of lubricant, coolant, full fuel tank, operator, and standard equipment. D65EX-15

 Standard Track
 16350 kg 36,050 lb

 Long Track
 17090 kg 37,680 lb

 D65PX-15
 17330 kg 38,210 lb

 D65WX-15
 17160 kg 37,830 lb

Operating weight

Including Semi-U tilt dozer (EX/WX) or straight tilt dozer (PX), steel cab, ROPS, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank. D65EX-15

 Standard Track
 20080 kg 44,270 lb

 Long Track
 20820 kg 45,900 lb

 D65PX-15
 20800 kg 45,860 lb

 D65WX-15
 20940 kg 46,160 lb



HYDRAULIC SYSTEM

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 210 ltr/min **55.5 U.S. gal/min** at rated engine rpm.

Relief valve setting 20.6 MPa 210 kg/cm² **2,990 psi** Control valves:

Spool control valves for tilt dozer

Additional control valve required for multi-shank ripper (EX)

 $\label{thm:cylinders} \mbox{Hydraulic cylinders} \dots \dots \dots \mbox{Double-acting, piston}$

	Number of cylinders	Bore
Blade lift	2	95 mm 3.7"
Blade tilt	1	140 mm 5.5"
Ripper lift	1	140 mm 5.5"

Hydraulic oil capacity (refill):

 Straight tilt dozer
 .55 ltr
 14.5 U.S. gal

 Semi-U tilt dozer
 .55 ltr
 14.5 U.S. gal

Ripper equipment (additional volume):

Multi-shank ripper 7 ltr 1.8 U.S. gal



DOZER EQUIPMENT

Blade capacities are based on the SAE recommended practice J1265.

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

	Overall Length	Blade	Blade	Max. Lift	Max. Drop	Max. Tilt	Weight		Ground
	With Dozer mm ft.in	Capacity m ³ yd ³	Width x Height mm ft.in	Above Ground mm ft.in	Below Ground mm ft.in	Adjustment mm ft.in	Dozer equipment kg lb	Hydraulic control unit kg lb	Pressure kPa kg/cm² psi
D65EX-15	5440	5.61	3460 x 1425	1105	440	855	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 "	2'10"	5,030	1,590	
D65EX-15	5210	3.89	3415 x 1225	1105	440	855	2000	720	9.8/0.10/ 1.42
Straight Tilt Dozer	17'1"	5.09	11'2" x 4'0"	3'8"	1'5 "	2'10"	4,410	1,590	
D65EX-15 Long Track	5845	5.61	3460 x 1425	1105	440	855	2280	720	8.8/0.09/ 1.28
Semi-U Tilt Dozer	19'2"	7.34	11'4" x 4'8"	3'8"	1'5"	2'10"	5,030	1,590	
D65EX-15	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/WX-15	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	
D65WX-15	5440	6.20	3640 x 1410	1105	440	820	2360	720	6.9/0.07/ 1.00
Semi-U Tilt Dozer	17'10"	8.10	11'11" x 4'8"	3'8"	1'5"	2'8"	5,200	1,590	



TANDARD EQUIPMENT FOR BASE MACHINE

- Air cleaner, double element with dust indicator
- Alternator, 75 ampere
- Back-up alarm
- Batteries, 140 Ah/2 x 12V
- Hydraulic-driven reversible cooling fan
- Decelerator pedal
- Electronic instrument monitor panel
- Engine hood
- Fenders
- Muffler with curved exhaust pipe
- Engine side covers, gull-wing
- High mount foot rests

- Locks, filler caps and covers
- Pressure test ports for power train
- Radiator reserve tank
- Rear cover
- Starting motor, 11.0 kW/24V

Steering system: HSS (Hydrostatic Steering System)

- Seat, adjustable
- Seat belt, 76 mm 3", retractable
- Suspension seat, with high back
- Track roller guard, center and end section (EX Long Track, PX)
- Track roller guard, end sections (EX, WX)

- Track shoe assembly

 - Heavy-Duty sealed and lubricated track510 mm 20" single grouser shoe (EX, EX Long Track)
 - 810 mm 32" single grouser shoe (WX)
 - 915 mm 36" single grouser shoe (PX)
- Underguards: oil pan and transmission (PX) heavy-duty (EX)
- Water separator



OPTIONAL EQUIPMENT

- Engine intake precleaner
- Air-conditioner intake precleaner
- Batteries 200 Ah/2 x 12 V
- Air conditioner
- AR track assembly (abrasion resistant bushings)
- Cab
- Cab accessories
 - -Cup holder
 - -Sun visor

ROPS CANOPY

Additional weight 390 kg **860 lb** Meets ISO 3471, SAE J1040 APR88 ROPS standards, and ISO 3449 FOPS standard. Roof dimensions:

- -Length: 1830 mm 6'0"
- -Width: 1824 mm **6'0**" -Height from operator compartment
- floor: 1660 mm 5'5"

Additional ground pressure D65EX 1.4 kPa/0.014 kg/cm²/**0.20 psi**

D65EX Long Track

1.2 kPa/0.012 kg/cm²/**0.17 psi**

D65WX 0.9 kPa/0.009 kg/cm²/0.13 psi D65PX 0.6 kPa/0.006 kg/cm²/0.09 psi Rear view mirror

- -12V power supply AM-FM radio with cassette
- Front pull hook
- Hitch type drawbar
- Heater and defroster
- Hydraulics for ripper (EX, WX)
- Intake pipe with precleaner
- Light working, cab additional

STEEL CAB

Additional weight 490 kg 1,080 lb All-weather, enclosed pressurized cab Meets ISO3449 FOPS standard. 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

1.7 kPa/0.017 kg/cm²/**0.24 psi** D65EX

D65EX Long Track

1.5 kPa/0.015 kg/cm²/**0.22 psi** 1.1 kPa/0.011 kg/cm²/**0.16 psi** D65WX D65PX 1.0 kPa/0.010 kg/cm²/0.14 psi ROPS canopy

- ROPS canopy with sweep
- ROPS guard for CAB
- Suspension seat, reclining with fabric material (cab only)
- Track roller guard, full length
- Underguard, heavy-duty (PX)
- Vandalism protection cover for instrument panel

MULTI-SHANK RIPPER (for D65EX/WX, EX Long Track)

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** D65WX 9.0 kPa/0.92 kg/cm²/1.31 psi

ROPS GUARD FOR CAB

Additional weight 240 kg 530 lb Meets ISO 3471, SAE J1040 APR88 ROPS

standards. Roof dimensions:

—Length: 480 mm 1'7" -Width: 1570 mm 5'2"

Additional ground pressure D65EX 0.8 kPa/0.008 kg/cm²/**0.11 psi**

D65EX Long Track

0.7 kPa/0.007 kg/cm²/**0.10 psi**

D65WX 0.6 kPa/0.006 kg/cm²/0.09 psi D65PX 0.4 kPa/0.004 kg/cm²/0.06 psi

SHOES

Models	Shoe	Additional weight Ground contact area		Additional ground pressure to tractor
	560 mm 22.0 " single-grouser shoe	+120 kg +260 lb	29960 cm ² 4,644 in ²	-3.9 kPa -0.04 kg/cm² -0.57 psi
D65EX Standard Track	610 mm 24.0 " single-grouser shoe	+230 kg +510 lb	32635 cm ² 5,058 in ²	-7.8 kPa -0.08 kg/cm² -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/cm² -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/cm² -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/cm² -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

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02/04 (EV-1)



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