

SPECIFICATIONS



ENGINE

Model.....Komatsu SAA4D107E-7*
 Type.....4-cycle, watercooled, direct injection
 Aspiration.....Variable geometry, turbocharged,
 air-to-air aftercooled
 Number of cylinders.....4
 Bore x stroke.....107 mm x 124 mm **4.21" x 4.88"**
 Piston displacement.....4.5 ltr **275 in³**
 Governor.....All-speed, electronic
 Horsepower
 SAE J1995.....Gross 99 kW **133 HP**
 ISO 9249 / SAE J1349.....Net 98 kW **131 HP**
 Hydraulic fan at maximum speed.....Net 91 kW **122 HP**
 Rated rpm.....2200 rpm
 Fan drive type.....Hydraulic
 Lubrication system
 Method.....Gear pump, force lubrication
 Filter.....Full-flow

*EPA Tier 4 Final emissions certified

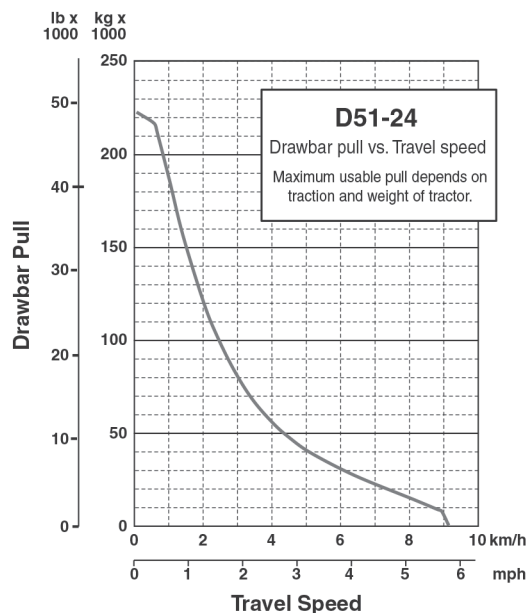


HYDROSTATIC TRANSMISSION

Dual-path, hydrostatic transmission provides infinite speed changes up to 9.0 km/h **5.6 mph**. The variable capacity travel motors allow the operator to select the optimum speed to match specific jobs. Travel control lock lever and neutral switch.

Travel speed (quick shift mode)*	Forward	Reverse
1st	0-3.4 km/h 0-2.1 mph	0-4.1 km/h 0-2.5 mph
2nd	0-5.6 km/h 0-3.5 mph	0-6.5 km/h 0-4.0 mph
3rd	0-9.0 km/h 0-5.6 mph	0-9.0 km/h 0-5.6 mph
Travel speed (variable mode)	Forward	Reverse
	0-9.0 km/h 0-5.6 mph	0-9.0 km/h 0-5.6 mph

*Quick shift speeds are adjustable in the monitor.



FINAL DRIVES

In-shoe mounted, axial-piston-type travel motors, with integrated two-stage planetary gear reduction. Compact, in-shoe mount reduces risk of damage by debris. Bolt-on sprocket ring with triple labyrinth seal design.



STEERING SYSTEM

Palm Command Control System (PCCS) joystick control for all directional movements. Pushing the joystick forward results in forward machine travel, while pulling it back reverses the machine. Simply tilt the joystick to the left or right to make a turn. Tilting the joystick fully to the left or right activates counter-rotation.

Hydrostatic Transmission (HST) provides smooth, powerful turns. Fully electronic control enables smooth control that can be adjusted in the monitor. The PCCS utilizes shift buttons to increase and decrease speed.

Minimum turning radius*

D51EXi-24.....2.4 m **94"**

D51PXi-24.....2.6 m **102"**

*As measured by track marks on the ground at pivot turn.



UNDERCARRIAGE

Suspension.....Rigid type
 Track roller frameMonocoque, large section, durable construction
 Rollers & idlers.....Lubricated track rollers

Sealed & lubricated track...Track tension easily adjusted w/grease gun

	D51EXi-24	D51PXi-24
Number of track rollers (each side)	7	7
Type of shoes (standard)	Single grouser	Single grouser
Number of shoes (each side)	44	44
Grouser height	mm in 55 2.2"	55 2.2"
Shoe width (standard)	mm in 560 22"	710 28"
Ground contact area	cm ² 30750	38980
	in² 4,766	6,042
Ground pressure	kPa 39.4	32.0
(with dozer, ROPS cab)	kgf/cm ² 0.40	0.33
(ISO 16754)	psi 5.71	4.64
Track gauge	mm ft.in 1790 5'10"	1880 6'2"
Length of track on ground	mm ft.in 2745 9'0"	2745 9'0"



SERVICE REFILL CAPACITIES

Coolant	37 ltr	9.8 U.S. gal
Fuel tank	270 ltr	71.3 U.S. gal
Engine oil	16 ltr	4.2 U.S. gal
Hydraulic tank	64 ltr	17 U.S. gal
Final drive (each side).....	5.5 ltr	1.5 U.S. gal
Diesel Exhaust Fluid (DEF) tank	20.5 ltr	5.42 U.S. gal



OPERATING WEIGHT (APPROXIMATE)

Tractor weight:

Including ROPS cab, U frame for Power Angle Tilt (PAT) dozer, rated capacity of lubricant, coolant, full fuel tank, operator, and standard equipment.

D51EXi-24.....12110 kg **26,698 lb**

D51PXi-24.....12470 kg **27,492 lb**

Operating weight:

Including Power Angle Tilt (PAT) dozer, ROPS cab, operator, standard equipment, rated capacity of lubricant, hydraulic control unit, coolant, and full fuel tank.

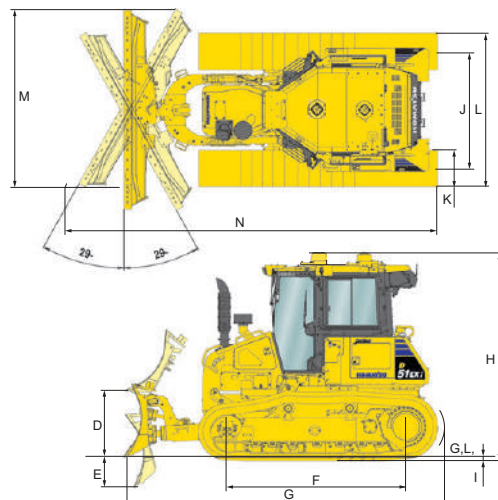
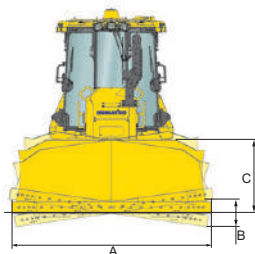
D51EXi-24.....13780 kg **30,380 lb**

D51PXi-24.....14260 kg **31,438 lb**



DIMENSIONS

	D51EXi-24	D51PXi-24
A	3045 mm 10'	3350 mm 11'
B	425 mm 1'5"	470 mm 1'7"
C	1120 mm 3'8"	1170 mm 3'10"
D	1015 mm 3'4"	1035 mm 3'5"
E	455 mm 1'6"	475 mm 1'7"
F	2745 mm 9'	2745 mm 9'
G	4800 mm 15'9"	4850 mm 15'11"
H	3176 mm 10'5"	3176 mm 10'5"
I	55 mm 2.2"	55 mm 2.2"
J	1790 mm 5'10"	1880 mm 6'2"
K	560 mm 22"	710 mm 28"
L	2350 mm 7'9"	2590 mm 8'6"
M	2720 mm 8'11"	2990 mm 9'10"
N	5485 mm 18'	5605 mm 18'5"



Ground clearance 390 mm **15"**



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 remote to the hydraulic tank. Piston-type hydraulic pump with capacity (discharge flow) of 97 ltr/min **26 U.S. gal/min** at rated engine rpm.

Relief valve setting 27.4 MPa 280 kg/cm² **3,974 psi**
Hydraulic cylinders Double-acting, piston type

	Number of cylinders	Bore
Blade lift	2	90 mm 3.5"
Blade tilt	1	100 mm 4"
Blade angle	2	90 mm 3.5"

Hydraulic oil capacity (refill):

Power angle tilt dozer 64 ltr **17 U.S. gal**

Control valves:

3-spool control valve for Power Angle Tilt dozer

Positions:

Blade lift Raise, hold, lower, and float

Blade tilt Right, hold, and left

Blade angle Right, hold, and left

Additional control valve required for ripper

Positions:

Ripper lift Raise, hold, and lower



DOZER EQUIPMENT

	Overall Length With Dozer mm ft.in	Blade Capacity m ³ yd ³	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
D51EXi-24	4800	2.7	3045 x 1120*	1015	455	425
Power Angle Tilt Dozer	15'9"	3.5	10' x 3'8"	3'4"	1'6"	1'5"
D51PXi-24	4850	3.4	3350 x 1170	1035	475	470
Power Angle Tilt Dozer (High-capacity)	15'11"	4.4	11' x 3'10"	3'5"	1'7"	1'7"

Blade capacities are based on the recommended practice ISO 9246. Use of high-tensile-strength steel in moldboard for strengthened blade construction.

*Optional PAT Dozer Assembly (EXi), 11' x 3' 10" (3350 mm x 1170 mm) wide



STANDARD EQUIPMENT FOR BASE MACHINE*

- Accumulator for Electric Proportional Control (EPC)
- Air cleaner, dry, double element type with caution lamp on monitor
- Air conditioner (A/C)
- Air inlet
- Alternator, 24 V/85 A
- Back-up alarm
- Batteries, large capacity 24 V/92 Ah
- Cab accessories
 - 12 V × 2 power supply
 - Cup holder
 - Rear view mirror
 - Rear view monitor system
 - Bluetooth/USB compatible radio with remote AUX plug (3.5 mm)
- Crankcase guard and underguard
- Decelerator/brake pedal (Single pedal)
- Electronically controlled Hydrostatic Transmission (HST) with quick-shift and variable speed settings
- Electronic monitor panel with on-board diagnostics
- Engine hood and side panels
- Engine, KOMATSU SAA4D107E-3, gross output of 98 kW **131 HP**, direct injection, water-cooled turbocharged, air-to-air aftercooler, cooled EGR, EPA Tier 4 Final and EU Stage 4 emissions certified
- Fan, hydraulic driven, electronic control
- Filler cap locks and cover locks
- Fluid sampling ports
- Foot rest, high mounted
- Fuel pre-filter (10 micron) and fuel filter (2 micron)
- Grease gun holder
- High altitude arrangement (No fuel adjustment up to 2300 m)
- Horn
- Hydraulics for PAT dozer
- Intake pipe with precleaner
- intelligent Machine Control 2.0
- Komatsu Diesel Oxidation Catalyst (KDOC)
- KOMTRAX Level 5.0
- Large high-resolution LCD
- LED worklights
- Lunch box holder
- Marks and plates, English
- New Operator Identification System
- Palm Command Control System (PCCS) with electronic control for travel control
- Palm Command Control System (PCCS) with EPC for blade control
- Power turn with counter rotation
- Pullhook, front
- Radiator guard grid
- Radiator reserve tank
- Real-time DEF monitoring
- Rear-hinged radiator guard
- Reverse travel speed presets
- ROPS cab
 - Meets ISO 3471, SAE J/ISO 3471 ROPS standards, and ISO 3449 FOPS standard.
- Seat belt, 76 mm **3"** retractable
- Seat, air suspension, fabric, heated, low back, headrest
- Starting motor, 24 V/4.5 kW
- Selective Catalytic Reduction (SCR)
- Self adjusting roller
- Sprockets, bolt-on
- Sprocket inner guard
- Track roller guards, end section
- Track shoe assembly (PLUS)
 - Sealed and lubricated
- D51EXi-24: 560 mm **22"** single grouser shoe
- D51PXi-24: 710 mm **28"** single grouser shoe
- Triple labyrinth final drive
- Water separator

Dozer assembly and rear-mounted equipment are not included in base machine price.



OPTIONAL EQUIPMENT

- Dozer assembly
- Hitch
- Hydraulics for rear equipment
- Track roller guard, full length

Multi-shank ripper (for D51EXi only)

Weight.....	860 kg 1,874 lb
Beam length.....	1556 mm 5'1"
Maximum lift above ground.....	380 mm 1'3"
Maximum digging depth	425 mm 1'8"
Number of shanks	3



ALLIED MANUFACTURER'S ATTACHMENTS (SHIPPED LOOSE)

- Guarding - Komatsu
 - Front sweeps 258 kg **569 lb**
 - Hinged cab side screens 44 kg **97 lb**
 - Hinged cab rear screen 43 kg **95 lb**
 - Rear A/C guard (requires front sweep) 61 kg **134 lb**
- Hydraulic winch - Allied H5C (without wire rope) 953 kg **2,101 lb**



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Note: All comparisons and claims of improved performance made herein are made with respect to the prior Komatsu model unless otherwise specifically stated.