HORSEPOWER

Gross: 451 kW 605 HP @ 1800 rpm Net: 391 kW 525 HP @ 1800 rpm

> **OPERATING WEIGHT 69560 kg** 153,350 lb

KOMATSU®

D375A-5E0







CRAWLER DOZER

WALK-AROUND



Building on the technology and expertise Komatsu has accumulated since establishment in 1921, GALEO presents customers worldwide with strong, distinctive image of technological innovation and exceptional value.

The GALEO brand will be employed for Komatsu's full lineup of advanced construction and mining equipment. Designed with high productivity, safety and environmental considerations in mind, the machines in this line reflect Komatsu's commitment to contributing to the creation of a better world.

Komatsu-integrated design

for the best value, reliability, and versatility. Hydraulics, power train, frame, and all other major components are engineered by Komatsu. You get a machine whose components are designed to work together for higher production, greater reliability, and more versatility.

Hydraulic drive radiator cooling fan

controlled automatically, reduces fuel consumption and operating noise levels.

See page 6.



The **Dual tilt dozer**

Large blade capacities: 18.5 m³ 24.2 yd³ (Semi-U dozer) and 22.0 m³ 28.8 yd³ (U dozer)

(option) increases productivity while reducing operator effort. See page 8. Automatic lockup **torque converter** saves fuel and increases speed and power transmission efficiency on long pushes. See page 7.

New track link design

reduces maintenance cost by making turning pins easier, with improved pin reuse. See page 9.

HORSEPOWER

Gross: 451 kW 605 HP @ 1800 rpm Net: 391 kW 525 HP @ 1800 rpm

OPERATING WEIGHT 69560 kg 153,350 lb

BLADE CAPACITY Semi-U: 18.5 m³ 24.2 yd³

Full-U: 22.0 m³ 28.8 yd³

New hexagonal designed cab includes:

- Spacious interior
- Comfortable ride with new cab damper mounting and K-bogie undercarriage
- Excellent visibility
- High capacity air conditioning system (optional)
- PCCS (Palm Command Control System) lever
- Pressurized cab (optional)
- Adjustable left armrest
- Travel control console integrated with operator seat

Extra-low machine profile

provides excellent machine balance and low center of gravity.



Low-drive, long-track, eight roller undercarriage provides outstanding grading ability and stability.

Track shoe slip control system (option) reduces operator fatique. See page 8.

K-Bogie undercarriage system improves traction, component durability, and operator comfort.
See page 7.

Photo may include optional equipment.

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

Ergonomically designed 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.

Fully adjustable suspension seat and travel control console

For improved rear visibility

during return part of cycle, the operator can adjust the seat 15° to the right. The transmission and steering controls move with the seat for best operator comfort. The travel control console also has adjustments fore and aft and for height. With an independently adjustable armrest, each D375A operator can adjust control positions to his individual preference, providing optimum operational posture for all operators.

Left-hand joystick



Blade and ripper control joystick



Fuel control dial

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

Palm command PPC controlled blade control joystick

Blade control joystick uses the PPC (Proportional Pressure Control) valve and the same palm command type joystick as travel control joystick. PPC control, combined with the highly reliable Komatsu hydraulic system, provides superb fine control. (Dual tilt and pitch operation are activated by depressing switch with a thumb. This is available with optional dual tilt dozer.)

Height adjustable blade control armrest

Blade control armrest is height adjustable without any tools in three stages, providing the operator with firm arm support and ideal armrest positioning.

Position adjustable ripper control lever

Ripper control lever is position adjustable, providing optimum operation posture for all operators during ripping operations facing front or watching ripper point.

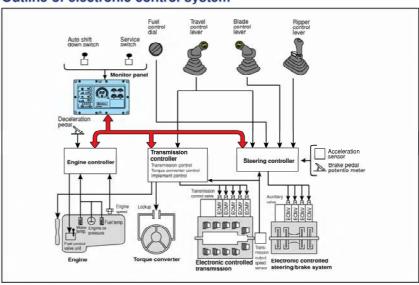
Facing front



When turned 15°



Outline of electronic control system



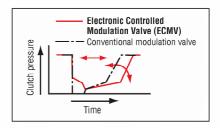
Power Train Electronic Control System

Smooth and soft operation

D375A-5E0 uses a newly designed power train electronic control system. The controller registers the amount of operator control (movements of lever and operation of switches) and machine condition signals from each sensor, and calculates to accurately control torque converter, transmission, steering clutches and brakes for optimized machine operation. The ease of operation and productivity of the new D375A-5E0 is greatly improved by numerous new functions.

ECMV (Electronic Controlled Modulation Valve) controlled transmission

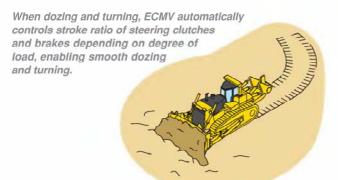
Controller automatically adjusts each clutch engagement depending on travel conditions such as gear speed, revolution and shifting pattern. This provides shockless smooth clutch engagement, improved component reliability, expansion of component life and operator riding comfort.

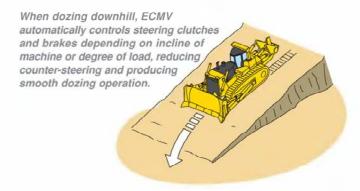


ECMV (Electronic Controlled Modulation Valve) controlled steering clutches/brakes

Sensors monitor machine operating conditions, and electronically control steering clutches and brakes depending on type of job, such as size of load during dozing, incline angle of slope or load, providing smooth and ease of operation by reducing counter-steering on downhill travel, etc.

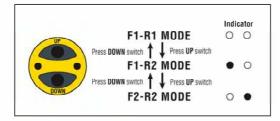
Effect of ECMV steering clutches/brake control

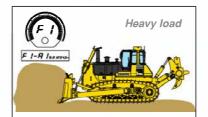




Preset travel speed selection function

Preset travel speed selection function is standard equipment, enabling the operator to select fore and aft travel speed from three preset patterns; F1-R1, F1-R2 and F2-R2 by using the UP/DOWN switch. When the F1-R2 or F2-R2 preset pattern is selected and the travel control is moved into forward or reverse, the machine travels in the preset gear range automatically. This function reduces manual gear shifting frequency during machine operation, enabling the operator to focus on directional and hydraulic control. Preset travel speed selection is especially helpful when used in combination with the Auto-Downshift Function and reduces cycle times during repeated round trip operations.

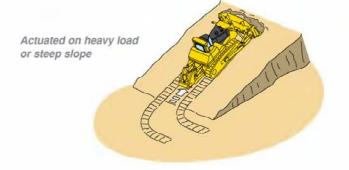






Auto downshift function

Controller monitors engine speed travel gear and travel speed. When load is applied and machine travel speed is reduced, the controller automatically downshifts to optimum gear speed to provide high fuel efficiency. This function provides comfortable operation without manual downshift and high productivity. (This function can be cancelled with cancel switch.)



PRODUCTIVITY FEATURES



Engine

The Komatsu SAA6D170E-5 engine delivers **391 kW** 525 HP at 1800 rpm. The fuel-efficient Komatsu engine, together with the heavy machine weight, make the D375A-5E0 a superior crawler dozer in both ripping and dozing production. The engine is EPA Tier 3 and EU stage 3A emission regulations certified, and features direct fuel injection, turbocharger, air-to-air aftercooler and cooled EGR system to maximize fuel efficiency.

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

Hydraulic drive radiator 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.

Automatic torque converter lockup system

For greater efficiency during long pushes, the lockup mode allows the system to automatically engage the torque converter lockup clutch. Locking up the torque converter transmits all the engine power directly to the transmission, increasing ground speed thus achieving efficiencies equal to a direct drive. The result is efficient use of engine power, less fuel consumption, and faster cycle times.

K-Bogie undercarriage system

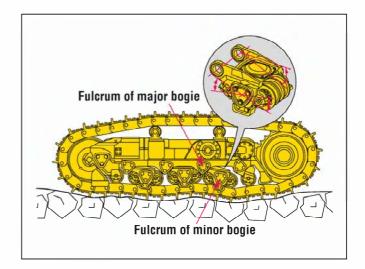
New K-Bogie undercarriage system combines prior advantages with new additional features.

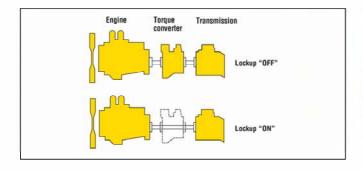
Current features:

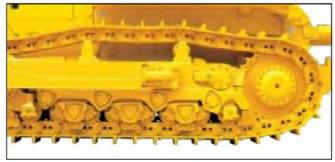
- K-Bogies that oscillate with two fulcrums assure large amount of track roller vertical travel. Impact load to undercarriage components is minimized and durability of components is improved since track rollers are always in contact with track link.
- Track rollers follow track link movement to extend the undercarriage life.
- Excellent riding comfort is provided due to less vibration and shock when traveling over rough terrain.

Features on new K-Bogie undercarriage system:

- New K-Bogies with front and rear single bogies are utilized providing increased length of track on ground to improve machine stability and leveling performance.
- The oscillating idler and increased sprocket lead angle improve riding comfort when travelling over rough terrain.







Large blade

Capacities of **18.5** m³ 24.2 yd³ (Semi-U dozer) and **22.0** m³ 28.8 yd³ (U dozer) yield outstanding production. High-tensile-strength steel comprising the front and sides of the blade increase durability.

Dual tilt dozer (option)

The dual tilt dozer increases productivity while reducing operator effort.

- Optimum blade cutting angle for all types of materials and grades can be selected on-the-go for increased load and production.
- Digging, hauling, and dumping are easy and smooth with less operator fatigue.
- Dozer tilt angle and tilt speed are twice that of a conventional single tilt system.

Rippers (option)

- The variable giant ripper features a long sprocket center-to-ripper point distance, making ripping operation easy and effective while maintaining high penetration force.
- The variable giant ripper is a parallelogram single shank ripper ideal for ripping tough material. The ripping angle is variable, and the depth is adjustable in three stages by a hydraulically controlled pin puller.
- The multi-shank ripper is a hydraulically controlled parallelogram ripper with three shanks.

Track shoe slip control system (option)



Track shoe slip control panel

- Eliminates the need for the operator to constantly control engine power output with the decelerator while ripping. Operator fatigue is substantially reduced.
- Maneuverability is improved because the operator is free to focus on the ripping application without having to monitor the track shoe slippage.
- Repair costs are significantly lowered and undercarriage life is prolonged with the reduction in track shoe slippage.
- The track shoe slip control system will contribute to lower fuel costs, because the engine output is automatically controlled to optimum levels for operation.



WORKING ENVIRONMENT

Operator Comfort

Operator comfort is essential for safe and productive work. The D375A-5E0 provides the operator with 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.

Comfortable ride with new cab damper mounting and K-Bogie undercarriage

D375A-5E0's cab mount uses a new cab damper mounting which further improves viscous damper and provides excellent shock and vibration absorption capacity with its long stroke. The cab damper mounting, combined with new K-bogie undercarriage, softens shocks and vibrations while traveling over adverse condition that are impossible to absorb with conventional cab mounting methods. The soft spring cab damper isolates the cab from machine body, suppressing vibrations and providing a quiet, comfortable operating environment.

New suspension seat

D375A-5E0 uses a new suspension seat. Fore and aft sliding rails and suspension spring increases strength and rigidity and reduces play of joints.

New seat provides excellent support and riding comfort. Fore and aft sliding amount is designed to fit all operators.

ROMAYSU 375A

Photo may include optional equipment.

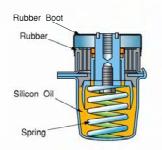


Photo may include optional equipment.

Fresh air intake from rear of engine hood

The air conditioner air intake port is now located at the rear of the engine hood where there is minimal dust. As a result, the air inside the cab is always clean. Cleaning interval of the filter is greatly extended, and use of a new structure filter element facilitates cleaning and replacement.

Cab damper mounting



EASY MAINTENANCE

Preventative Maintenance

Preventative maintenance is the only way to ensure long service life from your equipment. That's why Komatsu designed the D375A-5E0 with conveniently located maintenance points to make necessary inspections and maintenance quick and easy.

Monitor with self-diagnostic function

When the starting switch turned ON, the monitor displays P on the upper part of the display, service meter on the lower part of the display and Check-before-starting and caution items appear on the right part of the liquid crystal panel. If the monitor finds abnormalities, corresponding warning lamp blinks and warning buzzer sounds. The monitor displays engine rpm and forward/reverse gear speed on the upper part of the display during operation. If an error occurs during operation, and a high importance user code is displayed, a caution lamp blinks and warning buzzer sounds to prevent the development of serious problems.



Centralized service station

To ensure convenient maintenance, the transmission and torque converter oil filters are both arranged next to the power train oil level gauge.

Oil pressure checking ports

Pressure checking ports for power train components are centralized to promote quick and simple diagnosis.

Enlarged engine room

Engine room space is enlarged by increasing engine hood height, facilitating maintenance of the engine and related equipment. Solid engine hood prevents dust and rain from entering and keeps the engine clean.

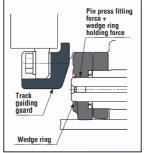
Gull-wing engine side covers

Gull-wing engine side covers facilitate engine maintenance and filter replacement. Side covers are a thick two-piece structure with bolt-on latch to improve durability and repairability.

Low Maintenance Costs

Track link with wedge ring

New D375A-5E0 track links feature reduced press-fit force and a wedge ring. Conventional track pins are retained only with a large press-fit force. The new track link divides pin forces between the wedge ring and press-fit force. This results in easier service with reduced pin damage when turning pins and bushings. The result is



improved undercarriage life and reduced maintenance cost through reduced wear, greater pin reusability, and reduced maintenance man-hours.

Highly reliable electric circuit

The electrical circuit reliability is increased by utilizing dust, vibration and corrosion resistant "DT connectors". The reinforced electrical wiring harnesses include a circuit breaker and are covered with a heat-resistant material to

increase mechanical strength, provide longer life, and protect the system from damage.

Flat face O-Ring seals

Flat face O-ring seals are used to securely seal all hydraulic hose connections and to prevent oil leakage.

Enclosed hydraulic piping

Hydraulic piping for the blade tilt cylinder is completely housed in the push arm protecting it from damage.

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, making servicing work clean, smooth, and easy.

Maintenance-free disc brakes

Wet disc brakes require less maintenance.

SPECIFICATIONS



ENGINE

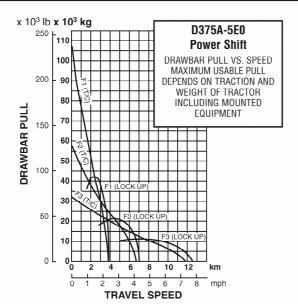
Model
Number of cylinders
Bore x stroke
Piston displacement
Governor
Horsepower
SAE J1995
ISO 9249 / SAE J1349*
Rated rpm
Fan drive type
Lubrication system
Method Gear pump, force lubrication
Filter Full-flow
*Net horsepower at the maximum speed of
radiator cooling fan
*Net horsepower of this machine is controlled to be constant regardless
of the fan speed.



TORQFLOW TRANSMISSION

Komatsu TORQFLOW transmission consists of a water-cooled, 3-element, 1-stage, 1-phase, torque converter with lockup clutch and a planetary gear, multiple-disc clutch transmission which is hydraulically actuated and force-lubricated for optimum heat dissipation. Gearshift lock lever and neutral safety switch prevent accidental starts.

Gear	Forward		Rev	erse
1st	3.5 km/h	2.2 mph	4.6 km/h	2.9 mph
2nd	6.8 km/h	4.2 mph	9.2 km/h	5.7 mph
3rd	11.8 km/h	7.3 mph	15.8 km/h	9.8 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 teeth are bolt-on for easy replacement.



STEERING SYSTEM

PCCS lever, joystick controlled, wet multiple-disc steering clutches are spring-loaded and hydraulically released. Wet multiple-disc, pedal/lever controlled steering brakes are spring-actuated hydraulically released and require no adjustment. Steering clutches and brakes are interconnected for easy, responsive steering.

Minimum turning radius......4.2 m 13'9"



UNDERCARRIAGE

Suspension	n Oscillating equalizer bar and pivot shat				
Track roller frame	Cylindrical, high-tensile-strength				
	steel construction				
Rollers and idlers	Lubricated track rollers				

K-Bogie undercarriage

Lubricated track rollers are resiliently mounted to the track frame with a bogie suspension system whose oscillating motion is cushioned by rubber pads.

Extreme service track shoes

Lubricated tracks. Unique seals prevent entry of foreign abrasives into pin to bushing clearances to provide extended service life. Track tension is easily adjusted with grease gun.

Number of shoes (each side)
Grouser height:
Single grouser
Shoe width (standard)
Ground contact area
Ground pressure (tractor) 105 kPa 1.07 kg/cm² 15.2 psi
Number of track rollers
Number of carrier rollers

Extreme service shoes	Additional weight	Ground contact area	Ground pressure
710 mm 28"	680 kg 1,500 lb	56520 cm² 8,760 in²	122 kPa 1.24 kgf/cm ² 17.6 psi
810 mm 32"	1360 kg 3,000 lb	64480 cm² 9,990 in²	108 kPa 1.10 kgf/cm ² 15.6 psi



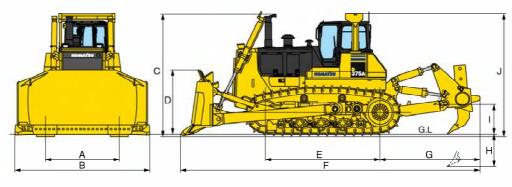
COOLANT AND LUBRICANT CAPACITY (REFILL)

Fuel tank	277 U.S. gal
Coolant	31.7 U.S. gal
Engine	22.7 U.S. gal
Torque converter, transmission,	
bevel gear, and steering system150 ltr	39.6 U.S. gal
Final drive (each side)	17.1 U.S. gal

DIMENSIONS

SEMI-U DOZER WITH GIANT RIPPER

Α	2500 mm	8'2"
В	4695 mm	15'5"
С	4265 mm	14'
D	2265 mm	7'5"
Е	3980 mm	13'1"
F	10410 mm	34'2"
G	3450 mm	11'4"
Н	1370 mm	4'6"
I	1470 mm	4'10"
J	4285 mm	14'1"



Ground Clearance: 610 mm 2'0"



OPERATING WEIGHT



HYDRAULIC SYSTEM

Hydraulic control unit:

- All-spool control valves are externally mounted on the hydraulic tank.
- Hydraulic gear pump.

Control valves:

- Two control valves for semi-U tilt dozer and U dozer
 Positions: Blade lift Raise, hold, lower, and float
 Blade tilt Right, hold, and left
- Additional control valve required for ripper

(digging angle). Increase, hold, and decrease

Hydraulic cylinders Double-acting, piston

	Number of cylinders	Bore
Blade lift	2	150 mm 5.9"
Blade tilt	1	225 mm 8.9"
Ripper lift	2	225 mm 8.9"
Ripper tilt	2	200 mm 7.9"

Hydraulic oil capacity (refill):



DOZER EQUIPMENT

Blade capacities are based on the SAE recommended practice J1265.

	Overall			Maximum Maxim	Maximum Maximum	Weight			
	length with dozer	Blade capacity	Blade length x height	lift above ground	drop below ground	tilt adjustment	Dozer equipment	Hydraulic oil	Ground Pressure*
Semi-U dozer	7635 mm 25'1"	18.5 m³ 24.2 yd³	4695 mm x 2265 mm 15'5" x 7'5"	1660 mm 5'5"	715 mm 2'4"	1065 mm 3'6"	10860 kg 23,940 lb	50 kg 110 lb	140 kPa 1.43 kgf/cm² 20.3 psi
Strengthened U dozer	8000 mm 26'3"	22.0 m³ 28.8 yd³	5140 mm x 2265 mm 16'10" x 7'5"	1660 mm 5'5"	715 mm 2'4"	1165 mm 3'10"	12370 kg 27,270 lb	50 kg 110 lb	143 kPa 1.46 kgf/cm² 20.8 psi
Dual tilt Semi-U dozer	7635 mm 25'1"	18.5 m³ 24.2 yd³	4695 mm x 2265 mm 15'5" x 7'5"	1660 mm 5'5"	715 mm 2'4"	1150 mm 3'9"	11230 kg 24,760 lb	60 kg 130 lb	141 kPa 1.44 kgf/cm² 20.5 psi
Strengthened dual tilt U dozer	8000 mm 26'3"	22.0 m³ 28.8 yd³	5140 mm x 2265 mm 16'10" x 7'5"	1660 mm 5'5"	715 mm 2'4"	1260 mm 4'2"	12740 kg 28,090 lb	60 kg 130 lb	144 kPa 1.47 kgf/cm² 20.9 psi

^{*}Ground pressure shows tractor with cab, ROPS, giant ripper, standard equipment and applicable blade.



- Alternator, 60 ampere/24 V
- Back-up alarm
- Batteries, 170 Ah/2 x 12 V
- Blower fan
- Decelerator pedal
- Dry-type air cleaner with dust evacuator and dust indicator
- Eight-roller track frames
- Final drive case wear guard
- Hinged front mask

- · Hinged underguard with front pull hook
- Hydraulic track adjusters
- Lighting system (including four front and two rear lights)
- Lockup torque converter
- Muffler with rain cap
- · Palm lever steering control
- · Perforated side covers
- Radiator reserve tank
- ROPS brackets

- · Segmented sprockets
- Shoes, 610 mm 24" extreme service, single-grouser
- Starting motors, 2 x 7.5 kW/24 V
- Suspension seat
- TORQFLOW transmissions
- Track roller guards
- Warning horn
- Wet steering clutches



- Air conditioner with heater and defroster
- Alternator, 90 ampere/24 V
- Batteries, 200 Ah/2 x 12 V
- Car stereo
- Counterweight
- Cushion push block
- Dual tilt dozer
- Fire extinguisher
- Hitch
- Hydraulics for ripper
- Light for ripper point
- Mirror, rearview
- Panel cover

- Pusher plate
- Seat belt
- Shoes:
- —**710 mm** 28"
- **—810 mm** 32"
- Spill guard for Semi-U dozer
- Spill guard for U dozer
- Strengthened Semi-U blade
- Strengthened U blade
- Sun visor

Seat

Air suspension seat

-Fabric seat

Suspension seat

-Fabric seat

- -Fabric seat, high backrest
- Track shoe slip control system
- Vandalism protection kit
- VHMS or VHMS with Orbcomm

ROPS*:

Multi-shank ripper:

Hydraulically controlled parallelogram ripper with three shanks. Ripping angle available, stepless adjustable.

Weight (including hydraulic

Variable giant ripper:

Variable, parallelogram single-shank ripper ideal for ripping up tough material. Ripping angle is variable. Ripping depth is adjustable in three stages by a hydraulically controlled pin puller.

Weight (including hydraulic

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