D375A-3

KOMATSU®

Operating Weight
66740 kg
147,160 lb

Net Horsepower
391 kW
525 HP

D375A-3
SPECIFICATIONS

CRAWLER DOZER

D375A-3 Crawler Dozer

WALK-AROUND

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.

The ***Dual Tilt Dozer*** (option) increases productivity while reducing operator effort. See page 7.

391 kW ***525 HP*** turbocharged, aftercooled engine provides plenty of power.

Extra-low Machine Profile provides excellent machine balance and low center of gravity. See page 4.

Preventative Maintenance

- Centralized Service Station
- Enclosed Hydraulic Piping
- Modular Power Train Design
- Oil Pressure Checking Ports

See page 8.

Simple hull frame and monocoque track frame with pivot shaft for greater reliability.

Large Blade Capacities:
18.5 m^3 **24.2 yd^3** (Semi-U dozer) and 22.0 m^3 **28.8 yd^3** (U dozer)

Automatic ***torque converter*** lock up saves fuel on long pushes. See page 7.

D375A-3
CRAWLER DOZER

NET HORSEPOWER
391 kW **525 HP** @ 1800 rpm

OPERATING WEIGHT
66740 kg **147,160 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
- Excellent visibility
- High capacity air conditioning system
- Compact joystick controls
- Pressurized cab (optional)
- Adjustable left armrest

Improved engine air intake means cleaner air to the engine.

Rippers (option):
- Variable giant
- Multi-Shank

See page 7.

Low-drive, long-track, seven roller undercarriage
ensures outstanding grading ability and stability.

Resilient Equalized Undercarriage (REU)
improves traction, component durability, and operator comfort.

See page 6.

WORKING ENVIRONMENT

Operator Comfort

Operator comfort is essential for safe and productive work. The D375A-3 provides the operator with a quiet, comfortable environment where they can concentrate on the work at hand.

Hexagonal Pressurized Cab

- The cab's new hexagonal design provides excellent front, side, and rear visibility.
- A suspension seat with reclining backrest improves riding comfort.
- Air filters and a higher internal air pressure combine to prevent dust from entering the cab.
- The viscous damper-type cab suspension, combined with the REU softens shocks for greater operating comfort.
- The compact joystick controls allow smooth entrance and exit from the uncluttered cab. The left armrest is adjustable for improved operator comfort.

- For riding comfort, power train components are mounted to the frame with rubber pads to dampen vibration and reduce noise.
- The fuel control lever is conveniently located.

Viscous Dampers

The cab mounts combine silicone oil and rubber to lessen vibration and shocks for improved operator comfort.

Joystick Control Levers

The left joystick requires only small movements to precisely control all steering and directional changes. A simple twist of the left joystick provides quick gear changes. The right joystick controls all blade functions. All blade and ripper controls are proportional pressure controls (PPC) for low effort and short stroke operation. The machine's quick response to joystick movement provides the operator with the feeling of natural control.

Monitor

Conditions of both check-before-starting items and caution items appear on the liquid crystal panel. The continuous condition check helps prevent the development of serious problems and allows the operator to concentrate his attention on the controls.

Low Machine Profile

The low-profile design assures excellent machine balance and a low center of gravity. These combine to make the D375A-3 stable and controllable, giving the operator greater confidence and comfort.

All controls are conveniently located for greater operator efficiency

New cab provides more space.

Productivity Features

Engine

The Komatsu SA6D170E engine delivers 391 kW **525 HP** and **1,931 ft-lb** of torque at 1800 rpm. These features, together with the heavy machine weight, make the D375A-3 a superior crawler dozer in both ripping and dozing production. The engine is designed to surpass EPA/CARB regulations, and features direct fuel injection, a turbocharger, and an aftercooler to maximize fuel efficiency.

To minimize noise and vibration, the engine is mounted to the main frame with rubber cushions. For further convenience, fuel adjustment is unnecessary up to an altitude of 3000 m **9,840 ft**.

Resilient Equalized Undercarriage (REU)

The REU system provides powerful traction, component durability, and operator comfort. Outstanding traction can be achieved because the shoes always follow the contour of the ground. The X-shaped, bogie-structured resilient equalized undercarriages perform independent see-saw movements. To decrease vibration and shock, rubber shock absorbers are mounted on the X-shaped bogies. The bogies and rubber cushions provide different absorption characteristics depending on the ground surface. When the machine travels on flat ground, the REU functions as a conventional rigid undercarriage. When the machine travels on uneven ground, the REU maximizes the suspension effect.

Large Blade

Capacities of 18.5 m^3 **24.2 yd^3** (Semi-U dozer) and 22.0 m^3 **28.8 yd^3** (U dozer) yield outstanding production. High-tensile-strength steel comprising the front and sides of the blade increases durability. The variable giant ripper features a long sprocket center-to-ripper point distance, making ripping operation easy and effective while maintaining high penetration force.

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 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.

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 is a parallelogram single shank ripper ideal for ripping up 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. The ripping angle is adjustable from 32.5° to 55.5°.

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-3 with conveniently located maintenance points to make necessary inspections and maintenance quick and easy.

Centralized Service Station

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

Enclosed Hydraulic Piping

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

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.

Oil Pressure Checking Ports

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

Wet disc brakes account for less maintenance.

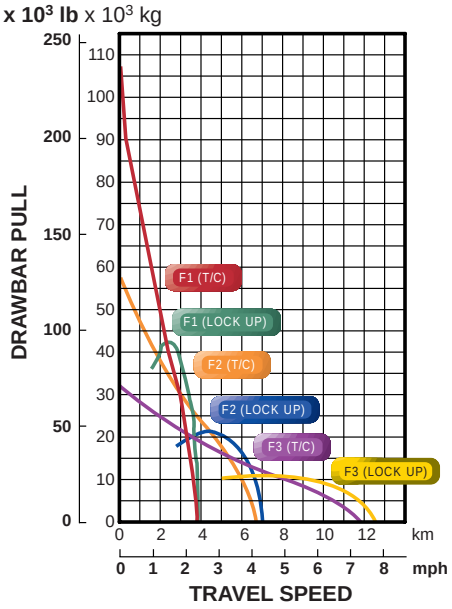
ENGINE

Model . . . . . Komatsu SA6D170E
Type . . . . . 4-stroke, water-cooled, direct injection
Aspiration . . . . . Turbocharged, aftercooled
No. of cylinders 6
Bore x stroke . . . . . 170 mm x 170 mm **6.69" x 6.69"**
Piston displacement . . . . . 23.15 ltr **1,413 in³**
Horsepower rating @ 1800 rpm
Gross power (SAE J1349) . . . . . 427 kW **573 HP**
Net power (SAE J1349) . . . . . 391 kW **525 HP**
Governor . . . . . All-speed, mechanical
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 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		Reverse	
1st	3.8 km/h	**2.4 mph**	5.1 km/h	**3.2 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**



FINAL DRIVES

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

Single lever, joystick-controlled, wet multiple-disc steering clutches are spring-loaded and hydraulically released. Wet multiple-disc 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 . . . . . Oscillating equalizer bar and pivot shaft
Track roller frame . . . . . Cylindrical, high-tensile-strength steel construction
Rollers and idlers. . . . . Lubricated track rollers

Resilient Equalized Undercarriage
Lubricated track rollers are resiliently mounted to the roller frame with a series of X-type bogies 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.

No. of shoes (each side) 40
Grouser height:
Single grouser . . . . . 93 mm **3.7"**
Shoe width (standard) . . . . . 610 mm **24"**
Ground contact area . . . . . 46766 cm² **7,248 in²**
Ground pressure . . . . . 1.42 kg/cm² **20.3 psi**
No. of track rollers 7
No. of carrier rollers 2

Extreme service shoes	Additional weight	Ground contact area	Tractor ground pressure
710 mm **28"**	660 kg **1,460 lb**	54541 cm² **8,456 in²**	1.23 kg/cm² **17.57 psi**
810 mm **32"**	1330 kg **2,930 lb**	62332 cm² **9,664 in²**	1.09 kg/cm² **15.53 psi**

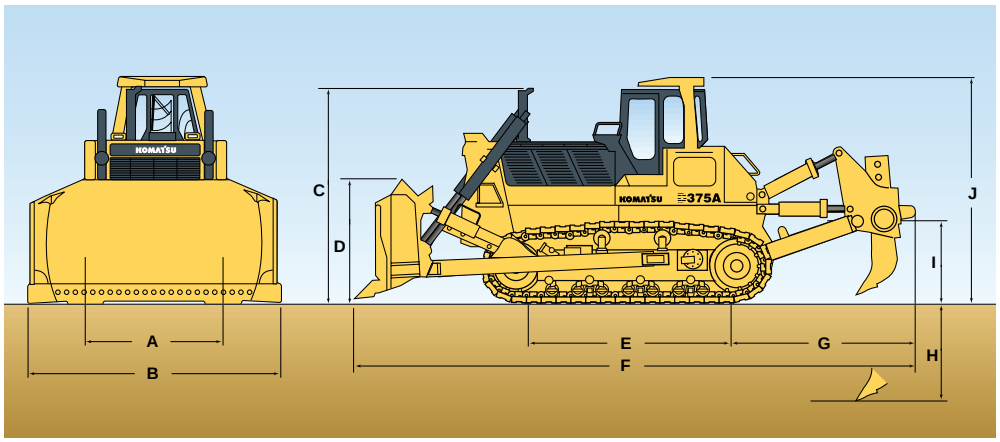
COOLANT AND LUBRICANT CAPACITY (REFILL)

Fuel tank	1050 ltr	**277 U.S. gal**
Coolant	165 ltr	**43.6 U.S. gal**
Engine	51 ltr	**13.5 U.S. gal**
Torque converter, transmission, bevel gear, and steering system	150 ltr	**39.6 U.S. gal**
Final drive (each side)	57 ltr	**15.1 U.S. gal**

DIMENSIONS

SEMI-U DOZER WITH GIANT RIPPER

A	2500 mm	**8'2"**
B	4695 mm	**15'5"**
C	4045 mm	**13'3"**
D	2265 mm	**7'5"**
E	3840 mm	**12'7"**
F	10060 mm	**33'0"**
G	3450 mm	**11'4"**
H	1435 mm	**4'8"**
I	1060 mm	**3'6"**
J	4230 mm	**13'11"**



Ground Clearance: 610 mm **2'0"**

OPERATING WEIGHT

Tractor weight . . . . . 49450 kg **109,020 lb**
Including rated capacity of lubricant, coolant, full fuel tank, operator, and standard equipment.

Operating weight . . . . . 66740 kg **147,160 lb**
Including dual tilt Semi-U dozer, giant ripper, steel cab, ROPS, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank.

Ground pressure . . . . . 1.42 kg/cm² **20.27 psi**

HYDRAULIC SYSTEM

Hydraulic control unit:
Maximum flow . . . . . 405 ltr **107 U.S. gal/min**
Relief valve setting . . . . . 210 kg/cm² **2,990 psi**

- All spool control valves are externally mounted on the hydraulic tank.
- Multi-chamber gear hydraulic pump.
- Flows are combined for maximum implement speed or divided for simultaneous use of multiple functions.

Control valves:

- Two control valves for straight-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
  Positions: Ripper lift. . . . . Raise, hold, and lower
  Ripper tilt
  (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):
Semi-U dozer or U-dozer. . . . . 120 ltr **31.7 U.S. gal**
Ripper equipment (additional volume):
Giant ripper . . . . . 84 ltr **22.2 U.S. gal**
Multi-shank ripper (variable) . . . . . 84 ltr **22.2 U.S. gal**
Multi-shank ripper (fixed) . . . . . 44 ltr **11.6 U.S. gal**

DOZER EQUIPMENT

Blade capacities are based on the SAE recommended practice J1265.

	Overall length with dozer	Blade capacity	Blade length x height	Maximum lift above ground	Maximum drop below ground	Maximum tilt adjustment	Weight		Adjustment to ground pressure*
							Dozer equipment	Hydraulic oil	
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"**	10490 kg **23,130 lb**	50 kg **110 lb**	0.00 kg/cm² **0.00 psi**
U-dozer	8000 mm **26'5"**	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"**	11740 kg **25,880 lb**	50 kg **110 lb**	+0.01 kg/cm² **+0.12 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"**	10870 kg **23,960 lb**	50 kg **110 lb**	+0.03 kg/cm² **+0.37 psi**
Dual tilt U-dozer	8000 mm **26'5"**	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"**	12120 kg **26,720 lb**	50 kg **110 lb**	+0.04 kg/cm² **+0.49 psi**

*From operating weight

STANDARD EQUIPMENT

- Alternator 50 A/**24 V**
- Auto-priming system
- Backup alarm
- Batteries 170 Ah/**2 x 12V**
- Blower fan
- Decelerator pedal
- Dry-type air cleaner with dust evacuator and dust indicator
- Provision for fast fuel fill
- 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
- Oil-suspension seat with seat belt
- Radiator reserve tank
- ROPS brackets
- Segmented sprockets
- Shoes, 610 mm **24"** extreme service, single-grouser
- Single lever steering control
- Six-roller track frames
- Starting motors **2 x 24V**
- TORQFLOW transmissions
- Track roller guards
- Vandalism protection kit
- Warning horn
- Wet steering clutches

OPTIONAL EQUIPMENT

- Air conditioner with heater and defroster
- Alternator **75 A**
- Batteries 200 Ah/**2 x 12V**
- Counterweight
- Cushion push block
- Cushion dozer
- Dual tilt dozer
- Fabric seat
- Fan, reversible
- Fire extinguisher
- Hitch
- Hydraulics for ripper
- Lift for ripper
- Mirror, rearview
- Perforated side covers
- Perforated single radiator mask
- Pusher plate
- Radiator core protection grid
- Shoes: 710 mm **28"**, 810 mm **32"**
- Sun visor
- Strengthened Semi-U blade
- Strengthened U blade

ROPS canopy:*
Weight . . . . . 670 kg **1,480 lb**
Height from
compartment floor . . . . . 1867 mm **6'2"**

*Meets ISO 3471 and SAE J1040, APR88, ROPS standards, as well as ISO 3449 FOPS standards

ROPS canopy must be ordered for all machines.

Steel Cab:
Weight. . . . . 415 kg **910 lb**
Dimensions:
Length . . . . . 1790 mm **5'10"**
Width . . . . . 1455 mm **4'9"**
Height from compartment
floor to ceiling . . . . . 1530 mm **5'0"**

Multi-shank ripper:
Hydraulically controlled parallelogram ripper with three shanks. Ripping angle adjustable from 32.5° to 55.5°.

Weight (including hydraulic
control unit) . . . . . 6720 kg **14,810 lb**
Beam length . . . . . 2854 mm **9'4"**
Maximum lift above ground . . 1050 mm **3'5"**
Maximum digging depth . . . . 1075 mm **3'6"**

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
control unit) . . . . . 5470 kg **12,060 lb**
Beam length . . . . . 1367 mm **4'6"**
Maximum lift above ground . . 1060 mm **3'6"**
Maximum digging depth . . . . 1435 mm **4'8"**

Komatsu Mining Systems

Comprehensive Solutions, Exceptional Value, and Remarkable Service from One Source: Komatsu Mining Systems, Inc.

Whatever your mining challenges, whatever your opportunities, **simplify your operation and achieve your maximum profit potential** by partnering with the professionals at Komatsu Mining Systems—**one sure source** for your mine fleet and machine monitoring needs.

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By introducing (among other things) the first true off-highway mining truck, the first all-hydraulic shovel, and the largest dozer in the industry we've built a **legacy of innovation,** changing the face of mining forever. But we know the best is yet to come. Our vast global mining **experience,** our unequivocal commitment to **quality,** and our vibrant **vision** for the mine of tomorrow assure our customers that Komatsu will continue to lead the way to **promote customer profitability.**

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Come ride with us.

Featured machines may include optional or special equipment. Materials and specifications are subject to change without notice.

KOMATSU®

Komatsu Mining Systems, Inc.
568 Atrium Drive
P.O. Box 8131
Vernon Hills, IL 60061-8131
www.komatsu-mining.com

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