



# Crawler Dozer D375A-6

**ENGINE POWER** 474 kW / 636 HP @ 1.900 rpm

OPERATING WEIGHT 71.640 kg



# Walk-Around

Remarkably efficient both for ripping and for dozing, the D375A-6 is a productive, reliable and durable Komatsu bulldozer. Among many outstanding features, all perfectly combined to give you a drastically enhanced competitive edge and a lower cost of ownership, the D375A-6 boasts a powerful and fuel efficient engine, a redesigned high capacity blade, and a field proven automatic transmission and lockup torque converter electronically controlled with the latest Komatsu technology. The D375A-6 illustrates the expert care Komatsu puts into always manufacturing top quality, comfortable and safe machines. Rain or shine, this outstanding dozer will quickly become your trusted working partner.

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# High productivity & low fuel consumption

- Torque converter with auto lockup
- Automatic transmission
- Clean, powerful engine
- Selectable working modes
- Auto-downshift function

# **Optimized work equipment**

- 18,5 m<sup>3</sup> (Semi-U dozer) or
- 22,0 m<sup>3</sup> (Full-U dozer)
- Variable giant ripper (optional)
- Variable multishank ripper (optional)

# **D375A-6**

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# **First-class operator comfort**

- Quiet and comfortable cab
- Fully adjustable air suspension seat
- Superior visibility on blade and ripper
- Less noise and vibrations



# Torque converter with auto lockup

Combined with the automatic transmission, the exclusive automatic lock up torque converter on the D375A-6 is the key to low cycle times and to improved overall performance. The power train control system either engages the torque converter when torque multiplication is needed, or automatically locks it up and sends full engine power directly to the transmission during less torque demanding applications. This eliminates unnecessary power loss and lets the machine constantly operate at maximum efficiency. Necessary drawbar pull is always maintained and overall fuel consumption is reduced by up to 10%.

### Automatic transmission

Set by default, the D375A-6's highly efficient transmission automatically matches the best gear mode for all dozing and ripping operations and includes a travel speed preset function to reduce work time and operator's efforts. Thanks to Komatsu's ECMV (Electronic Controlled Modulation Valves), gear changes are smoothly timed to always keep the power transfer at maximum efficiency.

### A clean, powerful engine

A powerful and fuel-efficient engine certified for EU Stage IIIA emission regulations makes the D375A-6 an outstanding performer both for dozing and ripping. This 474 kW / 636 HP ecot3 engine combines top productivity and preservation of the environment.

# Hydraulic drive radiator cooling fan

The rotation speed of the cooling fan is electronically controlled and is correctly determined by the temperature of the engine coolant and hydraulic oil: the higher the temperature, the faster the fan will turn. This system increases fuel efficiency, reduces the operating noise levels and requires less horsepower than belt driven fans.



Komatsu SAA6D170E-5 ecot3 engine



#### Hydraulic drive radiator cooling fan

### Selectable working modes

Working mode can be set to either "Power" for maximum power or to "Economy" for energy saving operations. Combined with a choice between automatic or manual working mode, this lets the operator select the optimum machine power configuration for the work at hand.



# Auto-downshift

The engine controller continuously monitors the engine speed, travel gear and travel speed. When a load is applied and the machine slows, the controller automatically downshifts, optimising the gear speed for the best dozing performance. This function enables comfortable operation and high productivity without manual downshifting. It can be deactivated by a cancel switch on the monitor panel.





# Quiet and comfortable cab

Operator comfort is essential for safe and productive work. The D375A-6 provides a quiet and comfortable cab, the ideal environment to concentrate on the job at hand. The cab's hexagonal design and large tinted glass windows offer excellent panoramic visibility. The high capacity and fully automatic climate control system pressurizes the cab to keep dust out. A high quality sound absorbent lining covers the interior to minimize operator ear noise levels.

# Fully adjustable suspension seat and travel control console

A comfortable, heavy-duty and fully adjustable suspension seat is at the centre of the operator's safe and cosy work space. For dozing operations, the seat faces straight forward, with a perfect view of both sides of the blade. For ripping, it can be turned 15° to the right, significantly improving rear visibility and reducing neck strain. The position of the travel control console can also be independently adjusted fore, aft and in height to fit each operator's preference.

# Superior visibility on blade and ripper

The slim engine bonnet and the well-located operator seat give optimal blade visibility to the left and right and make both dozing and grading easy, safe and fast. To further improve safety and ripping efficiency the special shape of the fuel tank gives the operator a clear view of the ripper point and of the dozer's back side.

# Less noise and vibrations

The D375A-6 cab mounts use a cab damper that provides excellent shock and vibration absorption with its long stroke and exclusive design. Cab damper mounts significantly soften shocks and vibrations that conventional mounting systems are unable to absorb.







# State of the Art Controls

### Easy and precise

The ergonomic Palm Command Control System (PCCS) provides efficient and comfortable steering. The blade control joystick uses Proportional Pressure Control (PPC) for precise operations, excellent and easy grading jobs - and better productivity. When backing up over shot rock or other rough surfaces, travel speed can be reduced with the "slow reverse" function to improve ride quality and decrease vibrations and fuel consumption.

### Gearshift preset function

To reduce the frequency of gear shifting and for comfortable machine operation, a shift preset mode is provided as standard equipment. The preset switch lets the operator select a combination of forward/reverse gear shifts by using the UP/DOWN shift switch on the steering lever. Once the shift pattern is selected, only forward / reverse direction control selection is required for a correct gear shift.

### Track shoe slip control system

This system removes the need to continuously control the engine power output with the decelerator pedal while ripping: the output automatically adjusts to the optimum level. This substantially reduces fatigue, letting the operator concentrate on the ripping without having to monitor track shoe slippage. Less track shoe slippage also means lower undercarriage operating cost and lower fuel consumption.

### Electronic Control Modulation Valve (ECMV)

Using an innovative valve design, ECMV provides a smooth, shockless clutch engagement for improved component reliability, a longer life of the power train, and a more comfortable ride for the operator. With ECMV managing the transmission, full power is always available and productivity is increased.









# Large TFT colour multi monitor

A large user-friendly colour monitor with simple and easy to operate switches enables safe, accurate and smooth work. The TFT (Thin Film Transistor) liquid crystal display can easily be read at various angles and lighting conditions, and the industry-first function keys facilitate multi-function activity.







# Tough and Reliable

### Low drive undercarriage

Komatsu's undercarriage is extraordinarily tough and offers excellent grading ability and stability. The centre of gravity of the whole machine remains low for safe and stable machine usage on slopes. The low drive undercarriage also greatly reduces the noise levels around the dozer. The heavy-duty link assemblies with large-diameter bushings, substantial track link height and superior oil seals are the basis for a high durable undercarriage – and a drastically lower cost of ownership.

### K-Bogie undercarriage system

The K-bogie undercarriage is built with an oscillating idler and with flexible mounted bogie systems that allow a high vertical track roller movement. The oscillating idler combined with the 8 track roller/K-bogie design supports and guides the undercarriage on all ground conditions for a much smoother drive and a longer undercarriage life.

### Sturdy, rugged design

A high-rigidity hull structure main frame improves durability and reduces stress concentration at critical areas. The track frame with a large cross section utilizes pivot shaft mounting for greater reliability. All hydraulic piping is robustly protected by cover and inner route to ensure damage protection from materials.

# Highly reliable electric circuit

The new generation of Komatsu dozers have special reinforced electrical wiring harnesses covered with a heat-resistant material that improves mechanical strength, provides longer life, and protects the system from damage. The reliability of the D375A-6's electrical circuit is further increased by the use of "DT connectors" that have a very high resistance to dust, corrosion and moisture and keep your machine up and running.







#### Komatsu blades

For increased blade performance and better machine balance, Komatsu uses a box blade design, with the highest resistance for a light weight blade. For increased durability, special Komatsu highly wear resistant steel is used for the front and sides of the blade. The special deep curved design of the blade makes it easy to handle a wide range of materials, with good penetration and a large blade capacity, optimizing high dozing performance with excellent fuel efficiency.

#### Komatsu rippers

Komatsu's special ripper concept, with all cylinders connected to the ripper shank holder, allows maximum pry-out force. Its key feature is the ripper point movement that lifts up the material during the ripper shank operation to greatly improve overall performance. The shank supplies great penetration into various types of materials and is fitted with special wear parts for increased longevity.

### Semi-U blade

The newly designed Komatsu Semi-U blade will stand up to the toughest applications. The shape of the blade improves carrying capacity, minimizes shoe slippage and increases productivity. Its two side wings prevent material spillage and offer a class-leading performance when dozing.

# U blade

KOMATSU

The Komatsu U blade was specially designed to handle large quantities of material with a minimum of spillage. Along with a large capacity this outstanding blade also has a good rolling performance, and helps to get the best out of the machine.

# Monitoring Systems

# **KØMTRAX Plus**

KOMTRAX<sup>™</sup> is the perfect tool to manage a whole fleet of machines easily and cost effectively. Komatsu's exclusive satellite monitoring system lets you supervise essential information about your equipment directly on a computer. Once the system is activated, data is downloaded daily via satellite and can then be easily accessed through a generic web browser.

A variety of parameters are available to precisely determine the sta-

tus of your KOMTRAX<sup>™</sup>-equipped machines. You can track their exact location in the field and further optimize their output through increased efficiency.

#### **KOMTRAX™** Plus

Available on all D375A-6 dozers, KOMTRAX<sup>™</sup> Plus lets you keep an even closer eye on the state of your machine. A special KOMTRAX<sup>™</sup> Plus controller monitors and collects various technical and operational data from the engine, transmission controller and other major components. This detailed data can be downloaded in the field for a direct on-site investigation. For easy viewing by customers, distributors and Komatsu service personnel, it can also be transferred to a web site either manually or through Orbcomm satellite communication. Close monitoring of the machine's health allows proactively correcting negative conditions thru



preventive maintenance or repairs before extensive damage can occur. KOMTRAX<sup>™</sup> Plus improves machine operating management, uptime and productivity and promotes longer component life.

#### Lower Total Cost of Ownership

KOMTRAX<sup>™</sup> Plus perfectly completes KOMTRAX<sup>™</sup> to help keep the total cost of ownership of your machine as low as possible. Supervisors and managers now have advanced hands-on tools to easily monitor fuel consumption, machine utilization and performance and to train operators based on the actual machine data. Machine operating management uses the accumulated data to improve availability, productivity and component life. Close monitoring of the machine's health helps to maintain optimal operating conditions through planned maintenance and preventive repairs before extensive damage can occur. It optimizes machine availability and dramatically reduces repair costs.

# Easy Maintenance

### Centralised service station

Preventative maintenance is essential to ensure the long life of your equipment. Komatsu designed the D375A-6 with centralised and conveniently located service points to make necessary inspections and maintenance quick and easy.

### Reversible radiator fan

The radiator can be cleaned by utilization of the reversible, hydraulically driven cooling fan. The fan can be reversed from inside the cab by simply activating a switch.

### **Extended service intervals**

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

# Track link with wedge ring

D375A-6 track links feature the same reduced press-fit force and wedge ring that are used on larger Komatsu dozers. This new track link system allows a simpler undercarriage maintenance - with easy turning of pins and bushings for improved undercarriage life and reduced maintenance costs, greater pin reusability, and reduced maintenance man-hours.

# Self-diagnostic monitor

Simple warning functions, service interval announcements and key operational functions are displayed on the new centralised monitor panel. At a glance, any operator can select the best options to get the best out of the D375A-6. In addition, when required, countermeasures are clearly indicated on the screen to enable the operator or service people to quickly take correct and safe action, and keep the machine free of costly major problems and downtime.

# Gull-wing engine side cover

Engine maintenance and filter replacement is further facilitated by gull-wing engine side covers that can be easily and safely opened. The opening angle of the covers has been increased to further facilitate access.

# Modular power train

All the power train components are enclosed in a sealed module. This eliminates oil spills during mounting and dismounting, and prevents dust and dirt polluting individual components. Servicing is much cleaner, smoother and easier.



Maintenance monitor



Centralised service station



Canister-type breathers facilitate checking and cleaning (optional)



Remote drain ports with couplings (optional)

# Specifications

#### ENGINE

Model	
Engine power	
at rated engine speed	
ISO 14396	474 kW / 636 HP
ISO 9249 (net engine power)	455 kW / 610 HP
No. of cylinders	6
Bore × stroke	
Displacement	23,15 ltr
Governor	All-speed, electronic
Fan drive type	
Lubrication system	
Method	Gear pump, force lubrication
Filter	

#### TORQFLOW TRANSMISSION

Type Komatsu TORQFLOW
Torque converter
with lock-up clutch
TransmissionPlanetary gear, multiple-disc clutch
hydraulically actuated, force-lubricated
Gearshift lock lever and neutral safety switch prevent accidental starts.

#### MAX. TRAVEL SPEEDS

	Forward	Reverse
1st	3,5 km/h	4,6 km/h
2nd	6,8 km/h	9,2 km/h
3rd L	8,0 km/h	9,7 km/h
3rd	11,8 km/h	15,8 km/h



### STEERING SYSTEM

TypeClutch and brake steering system Steering controlPCCS-lever
Steering brakes Wet, multiple-disc, pedal-/hand controlled,
spring-loaded and hydraulically released
Interconnected with steering clutch
Steering clutchWet multiple-disc clutch. Spring loaded,
hydraulically released, hand operated,
interconnected with steering brake.
Service brakes Steering brakes function as service brake,
pedal-controlled
Minimum turning radius (counter-rotation)
(as measured by track marks on ground)4,2 m

#### UNDERCARRIAGE

Suspension Oscilla	ting equaliser bar and pivot shaft
Track roller frame	
	durable construction
Rollers and idlers	Lubricated track rollers
K-Bogie undercarriage Lub	ricated track rollers are resiliently
	mounted on the track frame
	with a bogie suspension system
Tracks	
Track tensionCo	
Number of shoes (each side)	
Grouser height (single grouser)	93 mm
Shoe width (standard)	610 mm
Ground contact area	
Track rollers (each side)	8
Carrier rollers (each side)	2
Extreme service shoes	
Additional weight	680 kg
Ground contact area	
Ground pressure	126 kPa
Extreme service shoes	
Additional weight	1.360 kg
Ground contact area	
Ground pressure	111 kPa

#### SERVICE REFILL CAPACITIES

Fuel tank	1.200 ltr
Radiator	120 ltr
Engine oil	86 ltr
Torque converter, transmission,	
bevel gear and steering system	150 ltr
Final drive (each side)	65 ltr
Dozer blade and ripper hydraulics	138 ltr

#### FINAL DRIVE

TypeSpur	gear double reduction and planetary gear
	double reduction, splash lubrication
Sprocket	
	bolt-on for easy replacement

#### HYDRAULIC SYSTEM

Туре	Closed-centre load sensing system
All spool valves externally moun	ted beside the hydraulic tank.
Main pump	Variable piston pump
Maximum pump flow	
Relief valve setting	
Spool control valve positions se	mi-U tilt dozer and full-U tilt dozer
Blade lift	Raise, hold, lower, and float
Blade tilt	Right, hold, and left
Additional control valve position	s for rippers
Ripper lift	Raise, hold, and lower
Ripper tilt	Increase, hold, and decrease
Hydraulic cylinders	Double-acting, piston
No. of cylinders × bore	
Blade lift	2 × 140 mm
	1 × 180 mm
Ripper lift	2 × 200 mm
	2 × 180 mm

#### ENVIRONMENT

Engine emissions Fully complies with EU Stage IIIA exhaust emission regulations
Noise levels
LwA external 113 dB(A) (2000/14/EC)
LpA operator ear77 dB(A) (ISO 6396 dynamic test)
Vibration levels (EN 12096:1997)
Hand/arm $\leq$ 2,5 m/s <sup>2</sup> (uncertainty K = 0,92 m/s <sup>2</sup> )
Body≤ 0,5 m/s² (uncertainty K = 0,29 m/s²)
Contains fluorinated greenhouse gas HFC-134a (GWP 1430). Quantity of gas 1 kg, $CO_2$ equivalent 1,43 t

#### **RIPPER EQUIPMENT**

Multishank ripper	
Type Hydraulically control	olled variable ripper
No. of shanks	3
Weight (including hydraulic control unit and oil)	6.800 kg
Beam length	2.910 mm
Maximum lift above ground	1.135 mm
Maximum digging depth	1.140 mm

#### Giant ripper

Type Hydraulically controlled	variable ripper
Ripping depth is adjustable in three stages by	a hydraulically
controlled pin puller	
No. of shanks	1
Weight (including hydraulic control unit and oil)	6.200 kg
Beam length	1.453 mm
Maximum lift above ground	1.100 mm
Maximum digging depth	1.485 mm

#### **OPERATING WEIGHT (APPR.)**

Including semi-U tilt dozer, giant ripper, steel cab, ROPS, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank, 610 mm shoes.

Operating weight71.	640 kg
Ground pressure14	45 kPa

Tractor weight				. 53.2	00 kg			
Including	rated	capacity	of	lubricant,	coolant,	full	fuel	tank,
operator, and standard equipment.								

#### DOZER EQUIPMENT

	Overall length with dozer	Blade capacity	Blade length × height (with spill guard height)	Max. lift above ground	Max. drop below ground	Max. tilt adjustment	Dozer equipment weight
Semi-U blade	7.780 mm	18,5 m³	4.695 mm × 2.265 mm	1.690 mm	735 mm	970 mm	10.920 kg
Semi-U blade dual tilt	7.780 mm	18,5 m³	4.695 mm × 2.265 mm	1.690 mm	735 mm	1.185 mm	11.100 kg
Strenghtened semi-U blade	7.780 mm	18,5 m³	4.695 mm × 2.265 mm	1.690 mm	735 mm	970 mm	11.390 kg
Strengthened semi-U blade dual tilt	7.780 mm	18,5 m³	4.695 mm × 2.265 mm	1.690 mm	735 mm	1.185 mm	11.570 kg
Strenghtened U blade with spill guard	8.140 mm	22,0 m³	5.140 mm × 2.265 mm (2.525 mm)	1.690 mm	735 mm	1.065 mm	12.420 kg
Strengthened U blade dual tilt with spill guard	8.140 mm	22,0 m³	5.140 mm × 2.265 mm (2.525 mm)	1.690 mm	735 mm	1.300 mm	12.600 kg

Blade capacities are based on the SAE recommended practice J1265.

#### Semi-U dozer with giant ripper



Ground clearance: 610 mm

#### DIMENSIONS

	D375A-6
А	2.500 mm
В	4.695 mm
С	4.265 mm
D	2.265 mm
Е	3.980 mm
F	10.485 mm
G	3.460 mm
Н	1.485 mm
I	1.100 mm
J	4.285 mm

# Crawler Dozer **D375A-6**

# Standard and Optional Equipment

#### **ENGINE AND RELATED PARTS**

Komatsu SAA6D170E-5 Common rail direct injection diesel engine	•
EU Stage IIIA compliant	
Locks, filter caps and covers	•
Intake pipe with rain cap	•
Radiator reserve tank	•
Heavy-duty radiator mask	٠
Fuel tank inlet strainer	٠
Hard water area arrangement using Komatsu Super Coolant	•
Poor fuel area arrangement	٠
Starter motor 24 V/7,5 kW	٠
Alternator 24 V/90 A	٠
Batteries $2 \times 12$ V/170 Ah	٠
Gull wing engine side covers	٠
Auto-downshift function	٠
Radiator site gauge	•
Electric type engine oil and coolant heater	0
High-capacity batteries $2 \times 12$ V/220 Ah	0

#### HYDRAULIC SYSTEM

Hydraulics for ripper	٠
Hydraulics for dozing blades	٠
Mono lever blade control	٠

#### UNDERCARRIAGE

Single grouser heavy-duty shoes 610 mm	٠
Heavy-duty link assembly, sealed and lubricated	٠
Track roller guards	٠
Segmented sprockets	٠
K-Bogie system	٠
K-Bogie roller guards	٠
Flexible idler	•
Hydraulic track adjusters	٠
Underguards, oil pan and transmission	•
Final drive case wear guard	0
Single grouser heavy-duty shoes	0
(710 mm, 810 mm)	0
Full length track roller guard for K-bogie	0

Your Komatsu partner:

#### CABIN

CABIN	
Air suspension seat: fabric, reclining, high backres turnable	t, •
Seat belt	•
Headrest	•
High mount footrest	٠
Air conditioner	٠
Pre radio installation kit (12 V, antenna,	_
loudspeakers)	•
Viscous cab mounts	٠
Fenders	•
Sun visor (rear window)	٠
Cup holder	٠
Lunch box holder	٠
Wiper front and rear window	٠
Wipers doors (double wipers)	•
Radio-Cassette	0

#### TRANSMISSION AND BRAKES

Palm lever steering control (PCCS)	•
Quick shift selection system	•
Decelerator pedal	•
TORQFLOW transmission	•
C&B wet steering system	•
Track shoe slip control system	•
Torque converter lock-up	•

#### SERVICE AND MAINTENANCE

Dry type air cleaner, double element with dust	_
indicator and evacuator	
Large TFT colour monitor	٠
Water separator	٠
Fuel tank with Wiggins fast fill coupler	•
KOMTRAX <sup>™</sup> Komatsu satellite monitoring system	•
KOMTRAX™ Plus	
(Vehicle Health Monitoring System)	_
Satellite communication system for	
KOMTRAX <sup>™</sup> Plus	_
PM service connectors	٠
Tool kit	•

#### LIGHTING SYSTEM

Working lights: 4 front and 2 rear lights	•
Inspection light	0
Ripper working light	0

#### ATTACHMENTS

Front pull hook	•
Hitch	0
Counterweight (with U blades)	0
Counterweight + hitch	0

#### SAFETY EQUIPMENT

Back-up alarm	٠
Warning horn	٠
Steel cab	•
ROPS canopy, meets ISO 3471 and SAE J1040, APR88 ROPS standards, as well as ISO 3449 FOPS standard	•
Rear-view mirror (inside cab)	•
Rear view camera system	٠
Fire extinguisher	0
First aid kit	0

#### DOZER EQUIPMENT

DOLEK EQUIT MENT	
Semi-U blade single tilt 18,5 m <sup>3</sup>	0
Semi-U blade dual tilt 18,5 m <sup>3</sup>	0
Strenghtened semi-U blade single tilt 18,5 m <sup>3</sup>	0
Strenghtened semi-U blade dual tilt 18,5 m <sup>3</sup>	0
Strenghtened U blade single tilt 22,0 m <sup>3</sup>	0
Strenghtened U blade dual tilt 22,0 m <sup>3</sup>	0
Spill guard for semi-U dozer	0
Spill guard for U dozer	0
Push plate for semi-U dozer weld-on	0
Multishank variable angle ripper	0
Giant variable angle ripper	0

Further equipment on request

• standard equipment

optional equipment



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