

- Alternator 75 ampere/24V
- Backup alarm
- Batteries 170 Ah/2 x 12V
- Blower fan

• Hinged front mask

 Decelerator pedal • Dry-type air cleaner with dust evacuator and dust indicator

Hinged underguard with front pull hook

• Final drive case wear guard

- Palm lever steering control
 - Radiator reserve tank
 - ROPS brackets

• Hydraulic track adjusters

and two rear lights)

• Muffler with rain cap

• Torque converter

• Lighting system (including four front

- Segmented sprockets

- Shoes, 610 mm 24" extreme service, single-grouser
- Seven-roller track frames
- Starting motor 11 kW/24 V
- Suspension seat, synthetic leather
- TORQFLOW transmission
- Track roller guards
- Warning horn
- Wet steering clutches/brakes

KOMATSU[®] **D275A-5**

MAMME

OPTIONAL EQUIPMENT

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

- - Pusher plate
 - Seat belt
 - Shoes:

ROPS canopy:*

Weight 650 kg 1,430 lb Roof dimensions Length 1405 mm 4'7" Height from compartment floor..... 1830 mm 6'0"

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

Additional ground

pressure . . 2.0 kPa 0.02 kg/cm² 0.28 psi

Steel Cab:

Weight
Dimensions:
Length 1790 mm 5'10
Width 4'9
Height from compartment
floor to ceiling 1530 mm 5'0
Additional ground
pressure 1.0 kPa 0.01 kg/cm ² 0.14 ps

KOMATSU®

• Perforated side covers Perforated single radiator mask

• Mirror. rearview

Panel cover

- -710 mm 28"
- Spill guard for semi-U dozer

Multi-shank ripper:

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

Weight (including hydraulic

control unit) 4462 kg 9,840 lb Maximum lift above ground . . . 955 mm 3'2" Maximum digging depth 900 mm 2'11" Additional ground

pressure . . 9.8 kPa 0.10 kg/cm² 1.42 psi

CEN00024-01

/eignt
imensions:
Length 1790 mm 5'10"
Width 1455 mm 4'9"
eight from compartment
floor to ceiling 1530 mm 5'0"
dditional ground
pressure 1.0 kPa 0.01 kg/cm ² 0.14 ps

Variable, parallelogram single-shank ripper

Variable giant 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) 3600 kg 7,940 lb Beam length 1252 mm 4'1" Maximum lift above ground . 1195 mm 3'11" Maximum digging depth 1420 mm 4'8" Additional ground

pressure . . 7.8 kPa 0.88 kg/cm² 1.14 psi

Printed in Japan 200807 IP.AD (10)



- Sun visor
- Suspension seat -Fabric seat
 - -Fabric seat, high backrest
- Strengthened Semi-U blade
- Strengthened U blade
- Track shoe slip control system
- Vandalism protection kit

Materials and specifications are subject to change without notice KOMAT'SU is a trademark of Komatsu Ltd. Japan

NET HORSEPOWER 306 kW 410 HP

OPERATING WEIGHT 49850 kg 109,900 lb







D275A-5 Crawler Dozer MATIX-YHONID

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.

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

Hydrostatic Driven Engine Cooling Fan

controlled automatically, reduces fuel consumption and operating noise levels. See page 6

New Hexagonal Designed Cab includes:

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

306 kW 410 HP turbocharged, aftercooled engine provides ample power. See page 6.

Preventative Maintenance

- Centralized Service Station
- Enclosed Hydraulic Piping
- Modular Power Train Design • Oil Pressure Checking Ports
- See page 9.

Simple Hull Frame and monocoque track frame

with pivot shaft for greater reliability.



Photo may include optional equipment

Large Blade Capacities:

13.7 m³ 17.9 yd³ (Semi-U dozer) and **16.6 m³** 21.7 yd³ (U dozer)

New Track Link Design

Track link height and link tread width are increased, providing extended wear life. See page 9.

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

K-Bogie Undercarriage System improves traction, component durability, and operator comfort.

See page 6.

D275A-5 CRAWLER DOZER

NET HORSEPOWER 306 kW 410 HP @ 2000 rpm

> **OPERATING WEIGHT** 49850 kg 109,900 lb

BLADE CAPACITY Semi-U: **13.7 m³** 17.9 yd³ Full-U: 16.6 m³ 21.7 yd³

ECMV (Electronic Controlled Modulation Valve) controlled steering clutches/brakes facilitating steering operation. See page 5.

• Variable giant • Multi-shank Unique Komatsu exclusive linkage provides excellent productivity. See page 7.

Rippers (option) :



Komatsu develops new ergonomically designed control system "PCCS" creating 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 fatique. Transmission gear shifting is simply carried out with thumb push buttons.

Full-adjustable Suspension Seat and **Travel Control Console**

For improved rear visibility during reverse operations, the operator can adjust seat 15° to the right. The transmission and steering controls move with the

seat for optimum operator comfort. The travel control console also has adjustment fore and aft, and height. The armrest is independently adjustable up and down, providing optimum operation posture for all operators.

Facing Front



When Turned 15°



Fuel Control Dial

Engine revolution is controlled by electric signal, 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 palm command joystick similar to the travel control joystick. PPC control combined with the highly reliable Komatsu hydraulic system enables superb fine control. (Dual tilt and pitch operation are enabled by depressing switch with thumb. This is available when the optional dual tilt dozer is installed.)

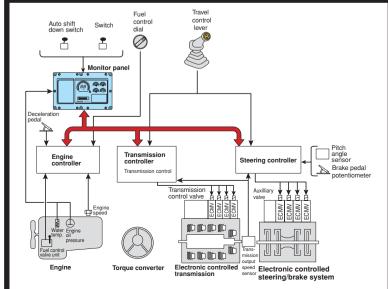
Height Adjustable Blade Control Armrest

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

Position Adjustable Ripper Control Lever

Ripper control lever position is adjustable, providing optimum operator posture during all types of ripping operations.

Outline of Electronic Control System



Power Train Electronic Control System

Smooth and Soft Operation

D275A-5 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, steering clutches and brakes for optimal machine operation. The ease of operation and productivity of new D275A-5 is greatly improved through these new features.

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 smooth shockless clutch engagement, improved component reliability, improved component life and operator ride comfort.

ECMV (Electronic Controlled Modulation Valve) Controlled Steering Clutches/Brakes

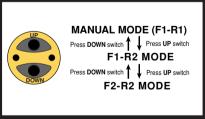
Sensors monitor machine operating conditions, and electronically control steering clutches and brakes depending on type of job, such as size of load during dozing, incline angle of slope or load, providing smooth and ease of operation by reducing counter-steering on downhill travel, etc.

Effect of ECMV Steering Clutches/Brake Control

When dozing and turning, ECMV automatically controls stroke ratio of steering clutches and brakes depending on degree of load, enabling smooth dozing and turning

Preset Travel Speed Selection Function

Preset travel speed selection function is standard equipment, enabling the operator to select fore and aft travel speed among three preset patterns, F1-R2, F2-R2 and manual shift. When F1-R2 or F2-R2 preset pattern is selected, and travel control joystick moves from forward to reverse direction, the machine travels forward/reverse with F1/R2 or F2/R2 speed automatically. This function reduces gear shifting time during repeated round trip operations.



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Auto Downshift Function

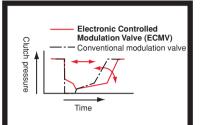
Controller monitors engine speed, travel gear and travel speed. When load is applied and machine travel speed is reduced, the controller automatically downshifts to optimize gear speed to provide high fuel efficiency. This function provides comfortable operation and high productivity without manual downshifting.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

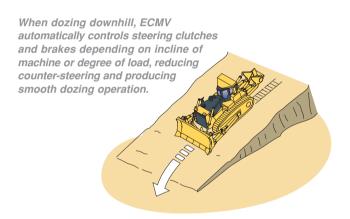


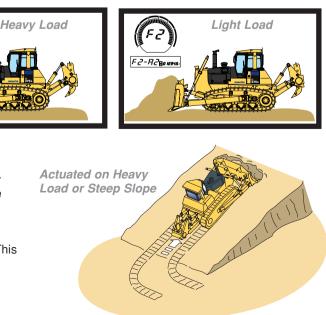
Left-hand Joystick











PRODUCTIVITY **LEVINGS**

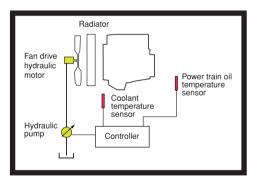
Engine

The Komatsu SDA6D140E engine delivers 306 kW 410 HP at 2000 rpm. The fuel-efficient Komatsu engine, together with the heavy machine weight, make the D275A-5 a superior crawler dozer in both ripping and dozing production. The engine is designed to surpass EPA/CARB Tier II, 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.



Undercarriage

K-Bogie System

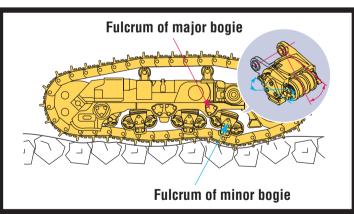
New K-Bogie Undercarriage System retains prior advantages, with new additional features.

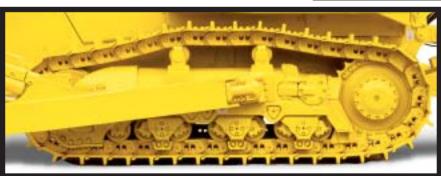
Current features:

- Effective length of track on ground is consistent. Shoe slippage is minimized; therefore, high traction is obtained.
- The idler does not oscillate under load, providing excellent machine balance. Blade and ripper penetration force remains stable for increased productivity.

New features on K-Bogie Undercarriage System:

- K-bogies oscillate with two fulcrums, and track roller vertical travel is greatly increased. Impact loading on all undercarriage components has been reduced and durability of components is improved since track rollers are always in contact with track link.
- Undercarriage life is improved due to better control of track chain alignment with track rollers.
- Riding comfort is improved by reducing vibration and shock when traveling over rough terrain.





Large Blade

Capacities of 13.7 m³ 17.9 yd³ (Semi-U dozer) and 16.6 m³ 21.7 yd³ (U dozer) yield outstanding production. High-tensile-strength steel has been incorporated into the front and sides of the blade for increased 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, dozing (carry), and dumping (spreading) are easy and smooth with less operator fatigue.
- Dozer tilt angle and tilt speed are twice that of a conventional single tilt system.

Rippers

- 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 in 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.







MORICING ENVRONMENT

Operator Comfort

Operator comfort is essential for safe and productive work. The D275A-5 provides a quiet, comfortable environment where the operator can concentrate on the work at hand.



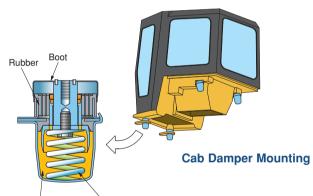
Hexagonal Pressurized Cab (optional)

- 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

D275A-5's cab mount uses a newly designed cab damper which provides excellent shock and vibration absorption capacity with its long stroke. Cab damper mounts combined with new K-bogie undercarriage, softens shocks and vibration while traveling over adverse conditions, that are impossible to absorb with conventional cab mounting methods. The soft spring of cab damper isolates the cab from machine body, suppressing vibration and providing a quiet, comfortable operating environment.



Silicon oil Sprina

New suspension seat

D275A-5 uses a newly designed suspension seat. Fore and

aft sliding rails and suspension spring have been newly designed to increase strength and rigidity, reducing movement of seat components. The new seat provides excellent support, improving riding comfort. Fore and aft seat travel has been designed for all operator sizes.



EASY WULLEUVIGE

Preventative Maintenance

Preventative maintenance is the only way to ensure long service life from your equipment. That's why Komatsu designed the D275A-5 with conveniently located maintenance points to make necessary inspections and maintenance quick and easy.

Centralized Service Station

To assure convenient maintenance, the power train oil filter. power train oil level gauges and hydraulic tank are arranged on the right side of the machine.



All warning and monitor lights are lit for photo shooting.

Monitor With Self-Diagnostic Function

With the starting switch turned ON, the monitor displays P on the display, check-before-starting and caution items appear on the right lower part of the panel. The monitor finds abnormalities, corresponding warning light 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 high importance user code is displayed, the caution light 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.

Low Maintenance Costs

New Track Link Design

New D275A-5 track links feature increased link tread and link height and track guiding guard shape is improved. The result is improved undercarriage life and reduced cost through maintenance man-hours when turning pins and bushings.



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.

Oil Pressure Checking Ports

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



Maintenance Free Disc Brakes

Wet disc brakes require less maintenance.

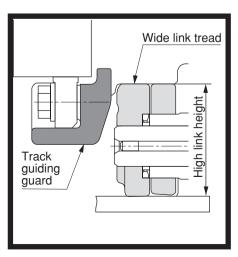
Enlarged Engine Room

Engine room space is enlarged by increasing engine hood height, facilitating maintenance of the engine and related equipment.

Gull-wing Engine Side Covers (optional)

The opening area is further enlarged when gull-wing engine side covers are opened, facilitating engine maintenance and filter replacement. Side covers have been changed to a thick one-piece structure with a bolt-on catch to improve durability.





SHECHLOUS

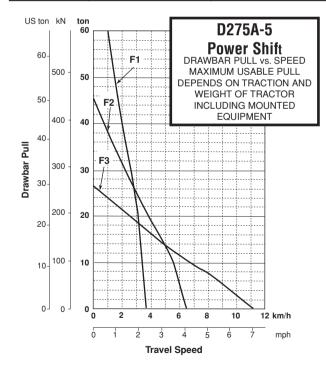
INGINE

Type	
	140 mm x 165 mm 5.51" x 6.50"
	15.24 ltr 930 in ³
Flywheel horsepower	
SAE J1349	306 kW 410 HP at 2000 rpm
DIN 6270	306 kW 416 PS at 2000 rpm
Governor	All-speed, electronic
Lubrication system	
Method	Gear pump, force lubrication
Filter	

FORQFLOW 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 hydraulically-actuated and force-lubricated for optimum heat dissipation. Gearshift lock lever and neutral safety switch prevent accidental starts.

Gear	Forv	Forward		erse
1st	3.8 km/h	2.4 mph	4.9 km/h	3.0 mph
2nd	6.7 km/h	4.2 mph	8.7 km/h	5.4 mph
3rd	11.2 km/h	7.0 mph	14.9 km/h	9.3 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.



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

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





Suspension Oscillating equalizer bar and pivot shaft 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 roller frame with a series of K-bogies whose oscillating motion is cushioned by rubber pads.

Extreme Service 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 aun.

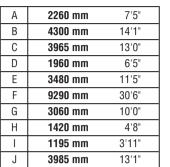
No. of shoes (each side)	9
Grouser height:	
Single grouser	5 "
Shoe width (standard) 610 mm 24	1"
Ground contact area 42456 cm ² 6,580 ir	1 ²
Ground pressure (bulldozer) 118 kPa 1.20 kg/cm ² 17.1 ps	si
No. of track rollers	7
No. of carrier rollers	2

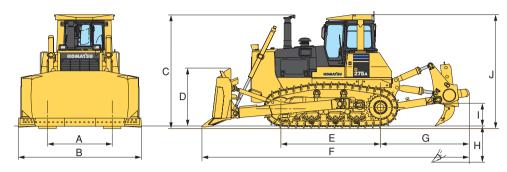
Extreme service shoes	Additional weight	Ground contact area	Ground pressure
710 mm 28"	570 kg 1,260 lb	49416 cm² 7,659 in²	102 kPa 1.04 kg/cm² 14.8 psi
760 mm 30"	850 kg 1,870 lb	52,896 cm² 9,642 in²	96 kPa 0.98 kg/cm ² 13.9 psi

COOLANT AND LUBRICANT CAPACITY (REFILL)

Fuel tank. 840 ltr Coolant. 130 ltr Engine. 52.0 ltr Torque converter, transmission. 52.0 ltr	34.3 U.S. gal
bevel gear, and steering system	23.8 U.S. gal
Final drive (each side)	10.6 U.S. gal

DIMENSIONS





Ground Clearance: 507 mm 1'8"



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



Closed-center load sensing system (CLSS) designed for precise and responsive control, and for efficient simultaneous operation.

Hvdraulic control units:

All spool valves externally mounted beside the hydraulic tank. Plunger type hydraulic pump with capacity (discharge flow) of 230 ltr 60.8 U.S. gal/min at rated engine rpm.

Relief valve setting 27.5 MPa 280 kg/cm² 3,980 psi

Control valves:

Spool control valves for Semi-U t	ilt dozer and Full-U tilt dozer
Positions: Blade lift	Raise, hold, lower, and float
Blade tilt	Right, hold, and left

Additional control valve required for variable digging angle multishank ripper and giant ripper.

Positions:	Ripper lift	Raise, hold, and lower
	Ripper tilt	Increase, hold, and decrease



Blade capacities are based on the SAE recommended practice J1265.

	Overall			Maximum	Maximum	Maximum	We	ight	
	length with	Blade	Blade	lift above	drop below	tilt	Dozer	Hydraulic	Ground
	dozer	capacity	length x height	ground	ground	adjustment	equipment	oil	pressure*
Semi-U tilt	6930 mm	13.7 m³	4300 mm x 1960 mm	1450 mm	640 mm	1000 mm	7478 kg	29 kg	118 kPa
dozer	22'9"	17.9 yd ³	14'1" x 6'5"	4'9"	2'1"	3'3"	16,490 lb	64 lb	1.20 kgf/cm² 17.1 psi
U tilt dozer	7265 mm	16.6 m³	4615 mm x 1973 mm	1450 mm	640 mm	1070 mm	8404 kg	29 kg	120 kPa
	23'10"	21.7 yd ³	15'2" x 6'6"	4'9"	2'1"	3'6"	18,530 lb	64 lb	1.22 kgf/cm² 17.3 psi
Dual tilt	6930 mm	13.7 m³	4300 mm x 1960 mm	1450 mm	640 mm	1140 mm	7555 kg	35 kg	118 kPa
Semi-U dozer	22'9"	17.9 yd ³	14'1" x 6'5"	4'9"	2'1"	3'9"	16,660 lb	77 lb	1.20 kgf/cm² 17.1 psi
Dual tilt	7265 mm	16.6 m³	4615 mm x 1973 mm	1450 mm	640 mm	1220 mm	8481 kg	35 kg	118kPa
U-dozer	23'10"	21.7 yd ³	15'2" x 6'6"	4'9"	2'1"	4'0"	18,700 lb	77 lb	1.22 kgf/cm² 17.3 psi

* Ground pressure shows tractor, cab, ROPS canopy operator, giant ripper standard equipment and applicable blade.

SEMI-U DOZER WITH GIANT RIPPER

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

Hydraulic cylinders Double-acting, piston

	Number of cylinders	Bore
Blade lift	2	120 mm 4.72"
Blade tilt	1	180 mm 7.09"
Ripper lift	2	180 mm 7.09"
Ripper tilt	2	160 mm 6.30"

Hydraulic oil capacity (refill):	
Semi-U tilt dozer	34.3 U.S. gal
U tilt dozer 130 ltr	34.3 U.S. gal
Ripper equipment (additional volume):	
Giant ripper 38 Itr	10.0 U.S. gal
Multi-shank ripper 38 Itr	10.0 U.S. gal