

KOMATSU®

D475A-3

NET HORSEPOWER

641 kW 860 HP

OPERATING WEIGHT

103720 kg 228,660 lb

D
475A

CRAWLER DOZER



Photo may include optional equipment.

GALEO

D475A-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.

641 kW **860 HP** turbocharged, aftercooled engine provides plenty of power. See page 6.

Preventative Maintenance

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

See page 8.

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

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

Large Blade Capacities:
25.6 m³ **33.5 yd³** (Semi-U dozer)
and 34.4 m³ **45.0 yd³** (U dozer)

Automatic lockup **torque converter** saves fuel and increases speed and power transmission efficiency on long pushes. See page 7.

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



D475A-3

CRAWLER DOZER

NET HORSEPOWER
641 kW 860 HP @ 2000 rpm

OPERATING WEIGHT
103720 kg **228,660 lb**

BLADE CAPACITY
Semi-U: 25.6 m³ **33.5 yd³**
U: 34.4 m³ **45.0 yd³**

New Hexagonal Designed Cab includes:

- Spacious interior
- Excellent visibility
- High capacity air conditioning system (optional)
- Compact joystick controls
- Pressurized cab (optional)
- Adjustable armrests

See page 4.



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



Rippers (option):

- Variable giant
- Multi-shank

See page 7.

Track shoe slip control system (optional)

reduces operator fatigue. See page 7.

New K-Bogie Undercarriage System

improves traction, component durability, and operator comfort. See page 6.

GALEO

Komatsu's highly productive, innovative technology, environmentally friendly machines built for the 21st century.

WORKING ENVIRONMENT

Operator Comfort

Operator comfort is essential for safe and productive work. The D475A-3 provides the operator with a quiet, comfortable environment where he 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 K-bogie undercarriage, softens shocks for greater operating comfort.
- The compact joystick controls allow smooth entrance and exit from the uncluttered cab. The armrests are 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 dial-type fuel control lever is conveniently located.

Viscous Dampers

D475A-3's cab mount uses a newly designed cab damper mounting which further improves viscous damper and provides excellent shock and vibration absorption capacity with its long stroke



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 ensures excellent machine balance and a low center of gravity. These combine to make the D475A-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 SDA12V140E engine delivers 641 kW **860 HP** at 2000 rpm. These features, together with the heavy machine weight, make the D475A-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.**



K-Bogie Undercarriage System

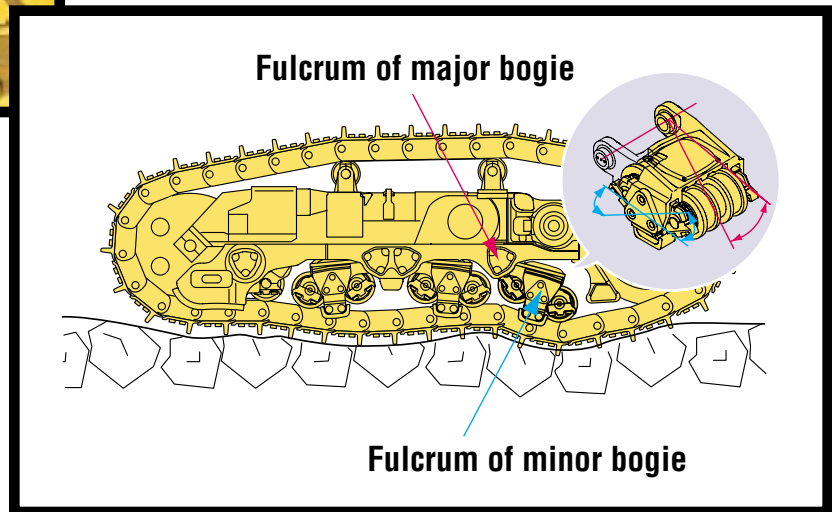
New K-Bogie Undercarriage System maintains prior advantages with new additional features.

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 of K-Bogie Undercarriage System:

- K-bogies are oscillated with two fulcrums, and track roller vertical travel is greatly increased. Impact loading to undercarriage components is 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 25.6 m³ **33.5 yd³** (Semi-U dozer) and 34.4 m³ **45.0 yd³** (U dozer) yield outstanding production. High-tensile-strength steel comprising the front and sides of the blade increases durability.

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

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 (optional)

- 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 up tough material. The ripping angle is variable, and the depth is adjustable in four stages by a hydraulically controlled pin puller.
- The multi-shank ripper is a hydraulically controlled parallelogram ripper with three shanks. The ripping angle is variable and depth is adjustable in two stages.

Track Shoe Slip Control System (optional)

- Eliminate 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 shoe slip control system will contribute to lower fuel costs, because the engine output is automatically controlled to optimum levels for operation.



EASY MAINTENANCE

Preventative Maintenance

Preventative maintenance is the only way to ensure long service life from your equipment. That's why Komatsu designed the D475A-3 with conveniently located maintenance points to make necessary inspections and maintenance quick and easy.

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.

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 dismantled 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.



SPECIFICATIONS



ENGINE

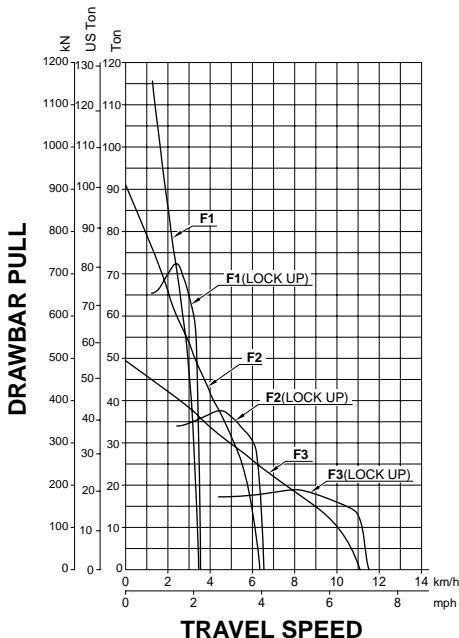
Model Komatsu SDA12V140E
 Type 4-stroke, water-cooled, direct injection
 Aspiration Turbocharged, aftercooled
 Number of cylinders 12
 Bore x stroke 140 mm x 165 mm **5.51" x 6.50"**
 Piston displacement 30.48 ltr **1,860 in³**
 Horsepower rating @ 2000 rpm
 Net power (SAE J1349) 641 kW **860 HP**
 Governor All-speed, electrical
 Lubrication system
 Method Gear pump, force lubrication
 Filter Full-flow and bypass combined



TORQFLOW TRANSMISSION

Komatsu TORQFLOW transmission consists of an air-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	3.5 km/h	2.2 mph	4.7 km/h	2.9 mph
2nd	6.3 km/h	3.9 mph	8.4 km/h	5.2 mph
3rd	10.9 km/h	6.8 mph	14.3 km/h	8.9 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 teeth 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 4.6 m **15'1"**



UNDERCARRIAGE

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 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) 40

Grouser height:

Single grouser 105 mm **4.1"**

Shoe width (standard) 710 mm **28"**

Ground contact area 61983 cm² **9,607 in²**

Ground pressure 164 kPa 1.67 kg/cm² **23.7 psi**

Number of track rollers 7

Number of carrier rollers 2

Extreme service shoes	Additional weight	Ground contact area	Tractor ground pressure
810 mm 32"	840 kg 1,850 lb	70713 cm ² 10,960 in²	106 kPa 1.08 kg/cm ² 15.4 psi
910 mm 36"	1770 kg 3,900 lb	79443 cm ² 12,314 in²	96 kPa 0.98 kg/cm ² 13.9 psi



COOLANT AND LUBRICANT CAPACITY (REFILL)

Fuel tank 1670 ltr **441 U.S. gal**

Coolant 295 ltr **77.9 U.S. gal**

Engine 121 ltr **32.0 U.S. gal**

Torque converter, transmission,

bevel gear, and steering system 210 ltr **55.5 U.S. gal**

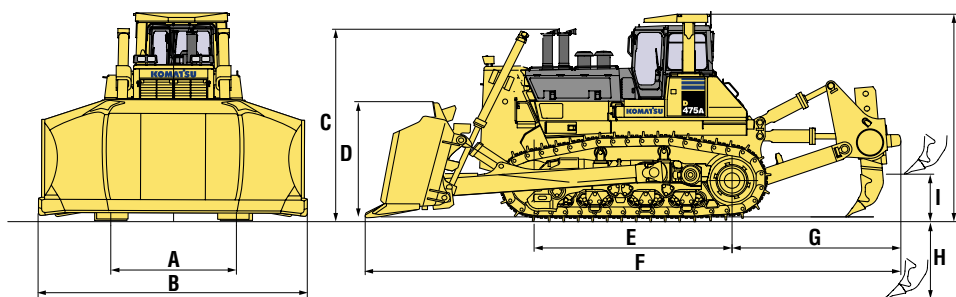
Final drive (each side) 75 ltr **19.8 U.S. gal**



DIMENSIONS

U DOZER WITH GIANT RIPPER

A	2770 mm	9'1"
B	6205 mm	20'4"
C	4425 mm	14'6"
D	2610 mm	8'7"
E	4365 mm	14'4"
F	11920 mm	39'1"
G	3720 mm	12'2"
H	1800 mm	5'11"
I	1140 mm	3'9"
J	4570 mm	15'0"



Ground Clearance: 655 mm 2'2"



OPERATING WEIGHT

Tractor weight 75700 kg **166,890 lb**
Including rated capacity of lubricant, coolant, full fuel tank, operator, and standard equipment.

Operating weight 103720 kg **228,660 lb**
Including U tilt dozer, giant ripper, steel cab, ROPS, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank.

Ground pressure 164 kPa 1.67 kg/cm² **23.7 psi**



HYDRAULIC SYSTEM

Hydraulic control unit:

Maximum flow 658 ltr **173.8 U.S. gal**
Relief valve setting 20.6 MPa 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 type

	Number of cylinders	Bore
Blade lift, large	2	200 mm 7.9"
Blade tilt	1	250 mm 9.8"
Ripper lift	2	250 mm 9.8"
Ripper tilt	2	250 mm 9.8"

Hydraulic oil capacity (refill):

Semi-U dozer or U dozer 180 ltr **47.6 U.S. gal**
Ripper equipment (additional volume):
Giant ripper 130 ltr **34.3 U.S. gal**
Multi-shank ripper (variable) 130 ltr **34.3 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	Ground pressure*
							Dozer equipment	
Semi-U dozer	8700 mm 28'7"	25.6 m ³ 33.5 yd³	5265 mm x 2610 mm 17'3" x 8'7"	1620 mm 5'4"	800 mm 2'7"	1250 mm 4'1"	16145 kg 35,594 lb	159 kPa 1.62 kg/cm ² 23.0 psi
U dozer	9060 mm 29'9"	34.4 m ³ 45.0 yd³	6205 mm x 2610 mm 20'4" x 8'7"	1620 mm 5'4"	800 mm 2'7"	1345 mm 4'5"	19360 kg 42,680 lb	164 kPa 1.67 kg/cm ² 23.7 psi
Dual tilt Semi-U dozer	8700 mm 28'7"	25.6 m ³ 33.5 yd³	5265 mm x 2610 mm 17'3" x 8'7"	1620 mm 5'4"	800 mm 2'7"	1410 mm 4'8"	16590 kg 36,575 lb	160 kPa 1.63 kg/cm ² 23.2 psi
Dual tilt U dozer	9060 mm 29'9"	34.4 m ³ 45.0 yd³	6205 mm x 2610 mm 20'4" x 8'7"	1620 mm 5'4"	800 mm 2'7"	1660 mm 5'5"	19805 kg 43,660 lb	165 kPa 1.68 kg/cm ² 23.9 psi

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



STANDARD EQUIPMENT

- Air cleaner, dry-type with automatic dust evacuator and dust indicator
- Air conditioning with heater/defroster
- Alternator, 75 A/24 V
- AM-FM radio
- Armrests, adjustable
- Auto priming pump
- Back-up alarm
- Batteries, 200 Ah/4 x 12 V
- Cab, enclosed, sound suppressed includes:
 - floor mat
 - inside rearview mirror, sun visor
 - wipers (front, left, and right door)
 - heater/defroster
- Carrier roller, 2 each side
- Decelerator pedal
- Dial control throttle
- Dual-tilt blade control
- Electronic monitor with service mode/display system
- Electronic unit injection pump
- Engine hood and side covers, perforated
- Fast fuel provision
- Final drive case wear guard
- Heavy duty wiring and connectors
- Joystick control, steering, transmission, adjustable
- Lighting system, including 2 rear and 6 front lights
- PPC work equipment lever
- Radiator guard, hinged
- ROPS canopy
- Seat (fabric) with seat belt, oil-suspension
- Sprockets, segmented
- Starter, 15 kW (7.5 kW x 2), 24 V
- Steering clutches and wet multiple-disc brakes
- TORQFLOW transmission with lockup torque converter
- Track adjusters, hydraulic
- Track, 7 roller
- Track roller guards
- Track shoes, 710 mm 28" single grouser
- Tracks, sealed and lubricated
- Two-way, radio-ready, 12 V access
- Underguard with hook, hinged
- Vandalism protection locks



OPTIONAL EQUIPMENT

- Brake connected with decelerator
- Circuit breaker panel
- Coal stockpile bucket
- Counterweight
- Dust (Silica) suppression
- Fire extinguisher
- Heater, additional
- HI-Strength 40 glass package
- Hydraulic oil level caution lamp
- Lights, supplemental
- ProVision™ High Precision GPS
- Pushblock, for single-shank ripper
- Quick change oil system for quick service (hyd/trans/engine/radiator)
- Sight gauge, coolant level
- Sound suppression
- Spill guard
- Track shoe slip control system
- Working light for ripper



ROPS canopy* (standard):
Weight 880 kg **1,940 lb**

Roof dimension:
Length 1405 mm **4'7"**
Width 2035 mm **6'8"**

*Meets ISO 3471, SAE J1040, and SAE J395 ROPS standards, as well as ISO 3449 FOPS standards

Steel cab (standard):
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"**



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

Weight (including hydraulic control unit) 7360 kg **16,230 lb**
Beam length 1477 mm **4'10"**
Maximum lift above ground . . 1140 mm **3'9"**
Maximum digging depth . . . 1800 mm **5'11"**

Multi-shank ripper (optional):
Hydraulically controlled parallelogram ripper with three shanks. Ripping angle variable and depth adjustable in two stages.

Weight (including hydraulic control unit) 9720 kg **21,430 lb**
Beam length 3085 mm **10'1"**
Maximum lift above ground . . 1140 mm **3'9"**
Maximum digging depth . . . 1180 mm **3'10"**

SUPPORT

Count on Komatsu and your local distributor for the support you deserve. Our success depends on satisfying your need for productive equipment and supporting that equipment. That's why we have one of the largest and strongest heavy-equipment distributor organizations in North America. Their personnel are not only trained to help you select the equipment that is best-matched for your business but to support that equipment.



Finance Through its finance company, Komatsu can offer you a wide variety of financing alternatives designed to meet your needs. Programs include municipal leases for governmental agencies, conditional sales contracts, and leases with \$1 purchase options for customers interested in owning their equipment. Ask your distributor about Komatsu leasing. We offer finance and operating leases and the unique *Advantage Lease* which offers you predetermined purchase, return, and renewal options.



Parts Three computer-linked parts distribution centers provide fast access to anywhere in the U.S. and Canada. Most parts are available overnight. Plus, Komatsu distributors keep a large assortment of commonly used parts in stock for immediate access.



Remanufactured parts

Save money and still have the same warranty as new parts at a fraction of the cost with like-new remanufactured parts.



Maintenance

Take advantage of the experience we have gained and ask your distributor about our factory-supported programs including: regular scheduled maintenance, oil and wear analysis, diagnostic inspections, undercarriage inspections, training, special service tools, parts programs, and even a special software program to help your distributor keep track of and manage service-related data.

KOMATSU[®]

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