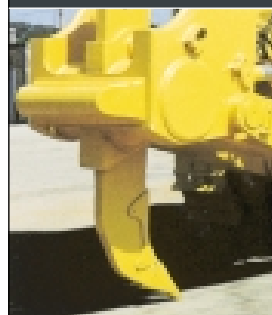


KOMATSU

D

475A-3



D475A-3

D475A-3

BULLDOZER

NET HORSEPOWER
641 kW 860 HP
@ 1.900 rpm

OPERATING WEIGHT
100000 kg

D475A-3 Bulldozer

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.

Preventative Maintenance

- Centralized Service Station
 - Enclosed Hydraulic Piping
 - Modular Power Train Design
 - Oil Pressure Checking Ports
- See page 8.

The **Dual Tilt Dozer** (option) 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 (Semi-U dozer)
and 34.4 m³ (U dozer)

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

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



New Hexagonal Designed Cab includes:

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

Improved engine air intake means cleaner air to the engine.

NET HORSEPOWER
641 kW 860 HP @ 2000 rpm

OPERATING WEIGHT
100000 kg

BLADE CAPACITY
Semi-U: 25.6 m³
Full-U: 34.4 m³



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



Resilient Equalized Undercarriage (REU) improves traction, component durability, and operator comfort. See page 6.

Rippers (option):

- Variable giant
 - Multi-shank
- See page 7.

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 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 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

The cab mounts combine silicone oil and rubber to reduce 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 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 SDA12V140 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**.

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 **25.6 m³** (Semi-U dozer) and **34.4 m³** (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 (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 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 34°–56°.



EASY MAINTENANCE

Preventive Maintenance

Preventive 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 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 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.

Wet disc brakes account for less maintenance.



SPECIFICATIONS



ENGINE

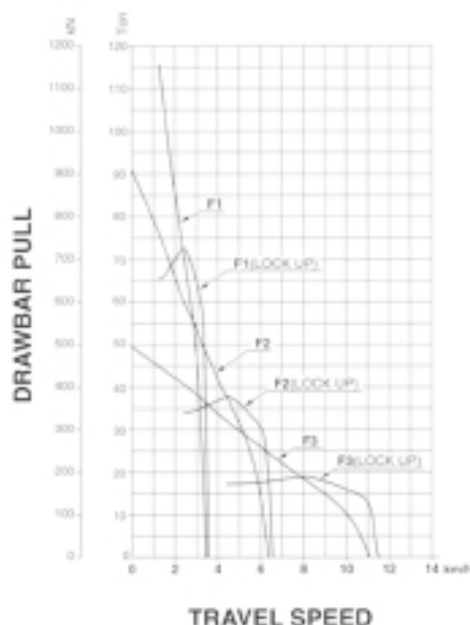
Model	Komatsu SDA12V140
Type	4-stroke, water-cooled, direct injection
Aspiration	Turbocharged, aftercooled
Number of cylinders	12
Bore x stroke	140 mm x 165 mm
Piston displacement	30.48 ltr
Horsepower rating @ 2000 rpm	
Net power (SAE J1349)	641 kW 860 HP
Governor	All-speed, electrical
Lubrication system	
Method	Gear pump, force lubrication
Filter	Full-flow



TORQFLOW TRANSMISSION

Komatsu TORQFLOW transmission consists of a 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	
	No lock up	Lock up	No lock up	Lock up
1st	3.5 km/h	3.6 km/h	4.7 km/h	4.5 km/h
2nd	6.3 km/h	6.5 km/h	8.4 km/h	8.1 km/h
3rd	10.9 km/h	11.6 km/h	14.3 km/h	14.4 km/h



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 4.69 m



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.

Number of shoes (each side) 40

Grouser height:

 Single grouser 105 mm

Shoe width (standard) 710 mm

Ground contact area 61983 cm²

Ground pressure 1.23 kg/cm²

Number of track rollers (each side) 7

Number of carrier rollers (each side) 2

Extreme service shoes	Additional weight	Ground contact area	Tractor ground pressure
810 mm	+840 kg	70713 cm ²	1.08 kg/cm ²
910 mm	+1770 kg	79443 cm ²	0.97 kg/cm ²



COOLANT AND LUBRICANT CAPACITY (REFILL)

Fuel tank 1670 ltr

Coolant 295 ltr

Engine 121 ltr

Damper 2.2 ltr

Torque converter, transmission,

 bevel gear, and steering system 210 ltr

Final drive (each side) 75 ltr



FINAL DRIVES

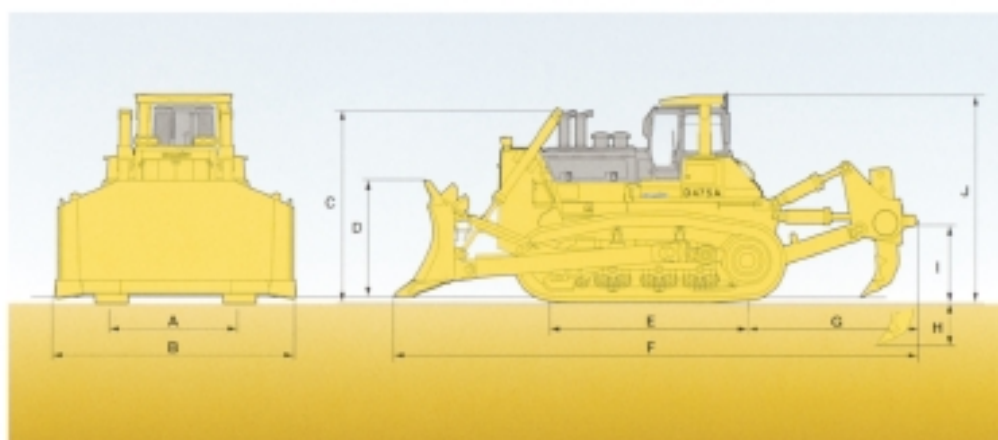
Double-reduction final drive of spur and planetary gear sets to increase tractive effort and reduce gear tooth stresses for long final drive life. Segmented sprocket teeth are bolt-on for easy replacement.



DIMENSIONS

SEMI-U DOZER WITH GIANT RIPPER

A	2770 mm
B	5265 mm
C	4425 mm
D	2610 mm
E	4365 mm
F	11570 mm
G	3720 mm
H	1880 mm
I	1140 mm
J	4570 mm



Ground Clearance: 655 mm



OPERATING WEIGHT

Tractor weight 76495 kg
Including rated capacity of lubricant, coolant, full fuel tank,
operator, and standard equipment.

Operating weight 100000 kg
Including semi-U tilt dozer, giant ripper,
operator, standard equipment, rated capacity of
lubricant, coolant, and full fuel tank.

Ground pressure 1.61 kg/cm²



HYDRAULIC SYSTEM

Hydraulic control unit:

Maximum flow 658 ltr/min
Relief valve setting 20.6 MPa

- 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 semi-U 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	2	180 mm
Blade tilt	1	250 mm
Ripper lift	2	250 mm
Ripper tilt	2	250 mm

Hydraulic oil capacity (refill):

Semi-U dozer or U-dozer 180 ltr
Ripper equipment (additional volume):
Giant ripper 130 ltr
Multi-shank ripper (variable) 130 ltr



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	
Semi-U tilt dozer	8708 mm	25.6 m ³	5265 mm x 2610 mm	1620 mm	800 mm	1230 mm	+16145 kg	1.61 kg/cm ²
U tilt-dozer	9108 mm	34.4 m ³	6205 mm x 2610 mm	1620 mm	800 mm	1345 mm	+19360 kg	1.66 kg/cm ²
Dual tilt Semi-U dozer	8708 mm	25.6 m ³	5265 mm x 2610 mm	1620 mm	800 mm	1410 mm	+16350 kg	1.62 kg/cm ²
Dual tilt U-dozer	9108 mm	34.4 m ³	6205 mm x 2610 mm	1620 mm	800 mm	1660 mm	+19805 kg	1.67 kg/cm ²

*From operating weight



STANDARD EQUIPMENT

- Air conditioner with heater and defroster
- Alternator 100A
- 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

- 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

- Perforated side covers
- Radiator reserve tank
- Seat belt
- Segmented sprockets
- Seven-roller track frames
- Shoes, 710 mm extreme service, single-grouser
- Single lever steering control
- Starting motors 2 x 7.5 kW
- Steel cab
- Sun visor
- TORQFLOW transmissions
- Track roller guards
- Warning horn
- Wet steering clutches



ROPS canopy:*

Weight 880 kg

Roof dimension:

Length 1405 mm

Width 2035 mm

*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

Dimensions:

Length 1790 mm

Width 1455 mm

Height from compartment

floor to ceiling 1530 mm



OPTIONAL EQUIPMENT

- Batteries 200 Ah/2 x 12V
- Counterweight
- Dual tilt dozer
- Fabric seat
- Fire extinguisher
- Hitch
- Hydraulics for ripper

- Light for ripper
- Mirror, rearview
- Perforated radiator mask
- Push plate
- Radiator core protection grid
- Room mirror

- Shoes:
 - 810 mm
 - 910 mm
- Shoe slip control
- Spill guards
- Strengthened Semi-U blade
- Strengthened U blade



Multi-shank ripper:

Hydraulically controlled parallelogram ripper with three shanks. Ripping angle adjustable from 34°–56°.

Weight (including hydraulic control unit) 9720 kg

Beam length 3085 mm

Maximum lift above ground 1140 mm

Maximum digging depth 1180 mm



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) 7360 kg

Beam length 1477 mm

Maximum lift above ground 1140 mm

Maximum digging depth 1800 mm

BULLDOZER



D475A-3

KOMATSU

**Komatsu Europe
International NV**

Mechelsesteenweg 586
B-1800 VILVOORDE (BELGIUM)
Tel. +32-2-255 24 11
Fax +32-2-252 19 81
www: komatsueurope.com