HORSEPOWER
Gross: 268 kW 360 HP @ 1900 rpm
Net: 264 kW 354 HP @ 1900 rpm

OPERATING WEIGHT
39500 kg 87,100 lb

KOMATSU®

D155AX-6

ecot3

D 155AX

CRAWLER DOZER

Photo may include optional equipment.

WALK-AROUND

OUTSTANDING PRODUCTIVITY & FUEL ECONOMY

Innovative SIGMADOZER reduces digging resistance and demonstrates smooth material roll up to increase blade load.
Blade capacity **9.4 m³** 12.3 yd³. See page 4.

Automatic transmission with lockup torque converter increases speed and power to improve fuel consumption and productivity. See page 5.

SAA6D140E-5 turbocharged after-cooled diesel engine provides an output of **264 kW** 354 HP with excellent productivity. EPA Tier 3 and EU stage 3A emissions certified. See page 6.

Hydraulic drive radiator cooling fan controlled automatically, reduces fuel consumption and operating noise levels. See page 6.

Gull-wing engine side covers
for easy and efficient engine servicing
See page 9.

Blade tilt lines completely protected.

Increased-track length, seven roller undercarriage
ensures outstanding grading ability and stability.

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

K-Bogie undercarriage system
improves traction, component durability, and operator comfort. See page 9.

PCCS (Palm Command Control System)
- Electronic controlled PCCS travel control
- Electronic controlled PCCS blade/ripper control
- Fuel control dial
- Automatic/manual gearshift selectable mode
- Gearshift pattern preset function
- ECMV controlled transmission

See page 7.

Photos may include optional equipment.

New integrated ROPS cab includes:
- Large quiet operator environment
- Comfortable ride with new cab damper
- Excellent visibility without ROPS post
- High capacity air conditioning system (optional)
- Pressurized cab (optional)
- Adjustable armrests and suspension seat

See page 8.

HSS (Hydrostatic Steering System)
provides smooth, quick, and powerful control in various ground conditions.

Modular power train for increased serviceability and durability. Forward mounted pivot shafts isolate final drives from blade loads.
See page 9.

Wet disc brakes require less maintenance.

HORSEPOWER
Gross: 268 kW 360 HP @ 1900 rpm
Net: 264 kW 354 HP @ 1900 rpm

OPERATING WEIGHT
39500 kg 87,100 lb

BLADE CAPACITY
SIGMADOZER: 9.4 m³ 12.3 yd³

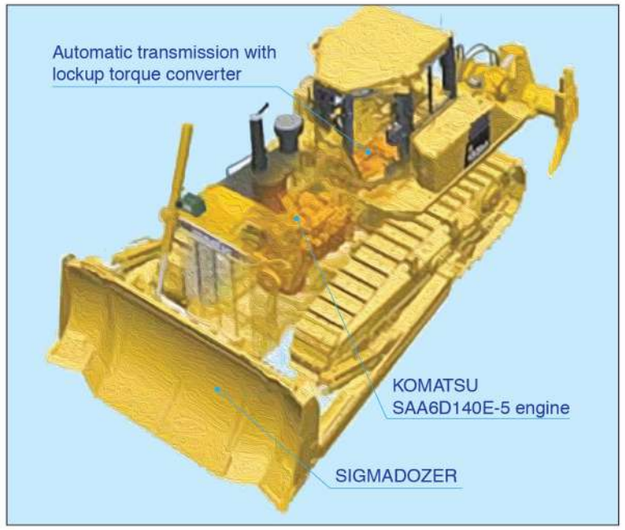
Large TFT LCD monitor
- Easy-to-see and use 7" large multi-color monitor.
- Can be displayed in 10 languages for global support.

TFT : Thin Film Transistor
LCD : Liquid Crystal Display
See page 8.

Newly designed ripper
offers excellent ripper visibility.
See page 8.

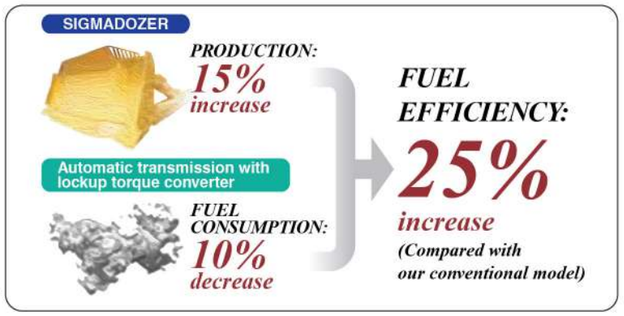
High-rigidity, simple hull frame
and monocoque track frame with pivot shaft for greater reliability.
See page 9.

PRODUCTIVITY & FUEL ECONOMY FEATURES



New fuel efficient bulldozer

New D155AX-6 has achieved both high levels of productivity and fuel economy through usage of SIGMADOZER and automatic transmission with lockup torque converter. SIGMADOZER developed based on completely new digging theory dramatically increases production. New transmission with high power transmission efficiency greatly reduces fuel consumption. This bulldozer significantly improves fuel efficiency compared with our conventional model.



Outstanding productivity

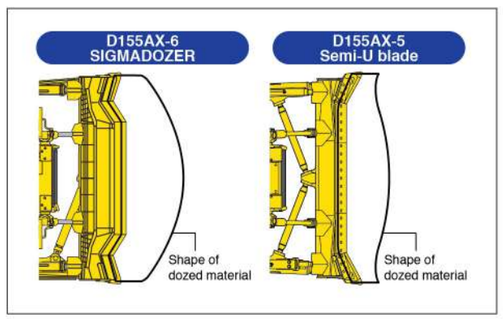
Production increased by 15%
(compared with our conventional model)

SIGMADOZER

Based on a completely new digging theory, SIGMADOZER dramatically improves dozing performance and increases productivity. A new frontal design concept adopted for digging and rolling up at the center of the blade increases soil holding capacity, simultaneously reducing sideway spillage. Reduced digging resistance produces smoother flow of earth, enabling the dozing of larger quantities of soil with less power. In addition, adoption of a new blade linkage system holds the blade closer to the tractor for improved visibility, enhanced digging force and reduced lateral sway of the blade. This is the new generation blade.


SIGMADOZER

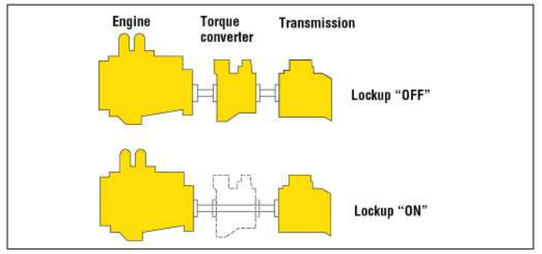

Semi-U blade



Outstanding fuel economy

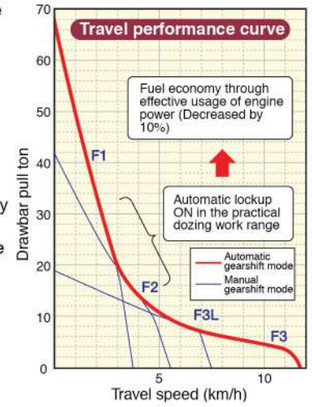
Automatic transmission with lockup torque converter

A sharp reduction in fuel consumption and greater power train efficiency is achieved by the new automatic gearshift transmission and lock up torque converter. The automatic gearshift transmission selects the optimal gear range depending on the working conditions and load placed on the machine. This means the machine is always operating at maximum efficiency. (Manual gearshift mode is selectable with a switch)



Fuel consumption decreased by 10%
(compared with our conventional model)

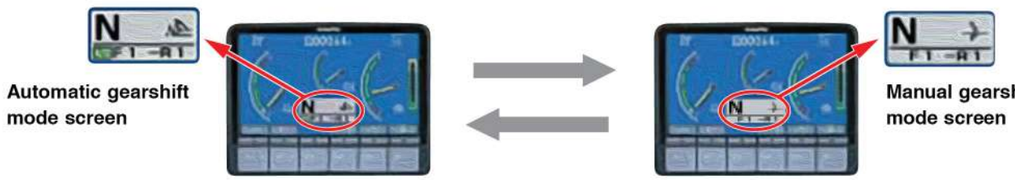
Lockup mechanism of torque converter is automatically actuated to transfer engine power directly to the transmission in usual dozing speed range. Locking up the torque converter eliminates loss of horsepower by 10%. Because the electronically controlled engine is extremely efficient, a decrease in fuel consumption is realized while also maintaining machine power.



Automatic/manual gearshift selectable mode

Automatic or manual gearshift modes can be selected with ease to suit the work at hand by simply pressing the switch on the multi-monitor (selection at neutral).

- **Automatic gearshift mode**
  The mode for general dozing. When a load is applied, the gear automatically shifts down, and when the load is off, it automatically shifts up to a set maximum gear speed. This mode economizes both fuel and production where the torque converter lockup mechanism is actuated according to load, automatically selecting the optimum gear speed.
- **Manual gearshift mode**
  The mode for dozing and ripping rough ground. When loaded, the gear automatically shifts down, but does not shift up when the load is off.



Automatic gearshift mode screen

Manual gearshift mode screen

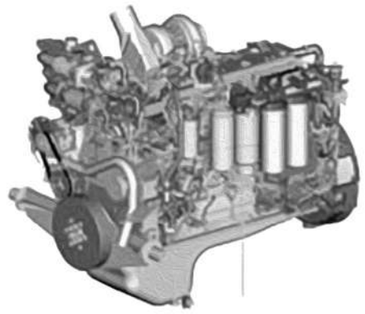
ECOLOGY FEATURES

Komatsu develops and produces all major components, such as engines, electronics and hydraulic components in house.
With this "Komatsu Technology", and adding customer feedback, Komatsu is achieving great advancements in technology.
To achieve high levels of productivity and ecology, Komatsu developed the main components with an advanced control system.
The result is a new generation of high performance and environment friendly machines.

Engine

Fuel efficient electronic controlled engine

The Komatsu SAA6D140E-5 engine delivers **264 kW** 354 HP at 1900 rpm. The fuel-efficient, powerful Komatsu engine makes the D155AX superior in both ripping and dozing operations. The engine is EPA Tier 3 and EU stage 3A emissions certified. The engine is turbocharged and features direct fuel injection and air-to-air aftercooling to maximize power, fuel efficiency and emission compliance.
To minimize noise and vibration, the engine is mounted to the main frame with rubber cushions.



Hydraulic drive radiator cooling fan

The engine cooling fan rotation speed is electronically controlled. The fan rotation speed depends on engine coolant and hydraulic oil temperatures, the higher the temperature the higher the fan speed. This system increases fuel efficiency, reduces the operating noise levels and requires less horsepower than belt driven fan.

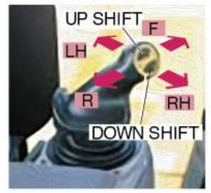
CONTROL FEATURES

Human-Machine Interface PCCS (Palm Command Control System)

Komatsu's ergonomically designed control system "PCCS" creates an operating environment with "complete operator control."

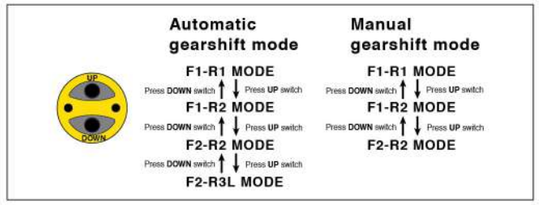
Palm command electronic controlled travel control joystick

Palm command travel joystick provides the operator with a relaxed posture and superb fine control without operator fatigue. Transmission gear shifting is simplified with thumb push buttons.



Gearshift pattern preset function

When the gearshift pattern is set to either <F1-R2>, <F2-R2> or <F2-R3L> in automatic gearshift mode, the gear is automatically shifted, reducing round trip repetition work time and operator's efforts.



ECMV (Electronic Controlled Modulation Valve) controlled transmission and brakes

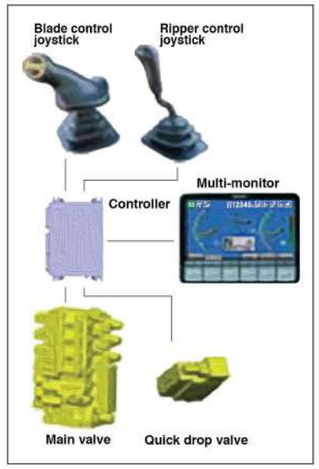
Controller automatically adjusts each clutch engagement depending on travel conditions, providing smooth shockless clutch engagement, improved component life and operator ride comfort.

Hydrostatic Steering System—smooth, powerful turning

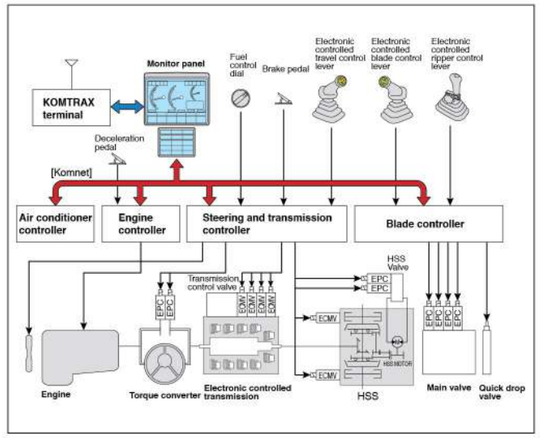
The engine power is transmitted to both tracks without power interruption on the inside track for smooth, powerful turns. Counter-rotation is available for minimum turning radius providing excellent maneuverability.

Palm command electronic controlled blade/ripper control joystick

Electronically-controlled palm command joystick is equipped for blade/ripper control. Combined with the highly reliable Komatsu hydraulic system, superb control is the result.



Outline of electronic control system



WORKING ENVIRONMENT

New integrated ROPS cab

A newly designed cab is integrated with ROPS according to the latest computer analysis. High rigidity and superb sealing performance sharply reduce noise and vibration for the operator and prevents dust from entering the cab. Relaxed operation in comfortable environment. In addition, side visibility is increased because external ROPS structure and posts are not required. Outstanding visibility has been achieved.

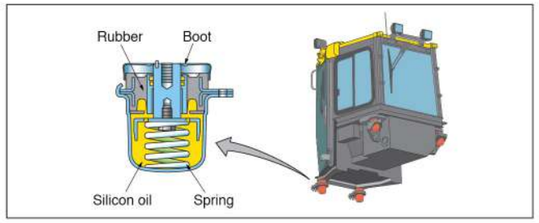
Large multi-lingual LCD color monitor

A large user-friendly color monitor enables safe, accurate and smooth work. Improved screen visibility is achieved by use of TFT liquid crystal display that can easily be read at various angles and lighting conditions. Simple and easy to operate switches. Industry first function keys facilitate multi-function operations.

Display data in 10 languages to globally support operators around the world.

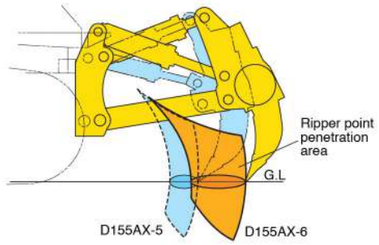
Comfortable ride with cab damper mounting

The D155AX-6's cab mount uses a cab damper which provides excellent shock and vibration absorption capacity with its long stroke. Cab damper mounts soften shocks and vibration while traveling over adverse conditions, which conventional mounting systems are unable to absorb. The cab damper spring isolates the cab from the machine body, suppressing vibration and providing a quiet, comfortable operating environment.



Ripper visibility

Ripper cylinders were reduced from four to two, greatly improving rear visibility during ripping.
Also, expanded ripper movement offers a wider range of operation.



MAINTENANCE FEATURES

Preventative maintenance

Preventative maintenance is the only way to ensure long service life from your equipment. That's why Komatsu designed the D155AX-6 with conveniently located maintenance points to make necessary inspections and maintenance quick and easy.

Multi-monitor with troubleshooting function to prevent critical machine troubles

Various meters, gauges, and warning functions are centrally arranged on the multi-monitor. Offers ease of start-up inspection and promptly warns the operator with a lamp and buzzer if any abnormalities should occur. In addition, countermeasures are indicated in 4 stage codes to ensure safety and prevent the machine from major problems. Replacement times for oil and filters are also indicated.

Easy radiator cleaning with hydraulic drive 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 turning the switch to reverse.

Oil pressure checking ports

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

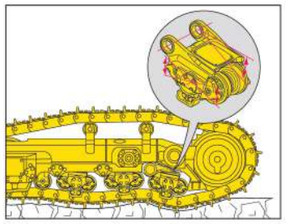
Gull-wing engine side covers

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.

Low maintenance costs

Increased undercarriage component life

K-Bogie track rollers having a large oscillation travel always follow the track link even on uneven ground. This feature keeps the correct alignment between the rollers and links to contribute long undercarriage component life.



Reliable simple hull frame

Simple hull structure main frame design increases durability and reduces stress concentration at critical areas. The track frame has a large cross section and utilizes pivot shaft mounting for greater reliability.

Sealed DT connectors

Main harnesses and controller connectors are equipped with sealed DT connectors providing high reliability, as well as water and dust resistance.

Flat face O-ring seals

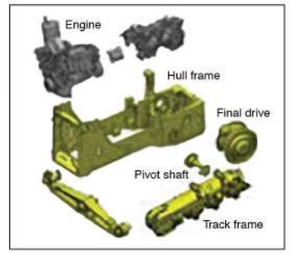
Flat face O-ring seals are used to securely seal all hydraulic hose connections and to prevent oil leakage.

Enclosed hydraulic piping

Hydraulic piping for the blade tilt cylinder is completely housed in the push arm, protecting it from damage.

Modular power train design

Power train components are sealed in a modular design that allows the components to be removed and installed without oil spillage, making servicing work clean, smooth and easy.



Maintenance free disc brakes

Wet disc brakes require less maintenance.

SPECIFICATIONS

ENGINE

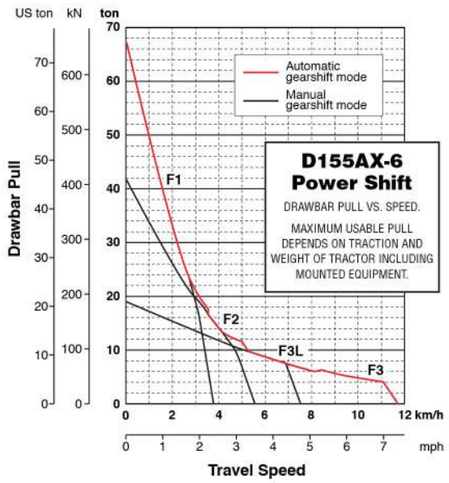
Model . . . . . Komatsu SAA6D140E-5
Type . . . . . 4-cycle, water-cooled, direct injection
Aspiration . . . . . Turbocharged, air-to-air aftercooled, cooled EGR
Number of cylinders 6
Bore x stroke . . . . . **140 mm x 165 mm** 5.51" x 6.50"
Piston displacement . . . . . **15.24 ltr** 930 in³
Governor . . . . . All-speed and mid-range, electronic
Horsepower
SAE J1995 . . . . . Gross **268kW** 360HP
ISO 9249 / SAE J1349* . . . . . Net **264kW** 354HP
Rated rpm 1900rpm
Fan drive type . . . . . Hydraulic
Lubrication system
Method . . . . . Gear pump, force lubrication
Filter . . . . . Full-flow
*Net horsepower at the maximum speed of radiator cooling fan **239kW** 320HP

EPA Tier 3 and EU Stage 3A emissions certified.

TORQFLOW TRANSMISSION

Komatsu's automatic 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 machine from accidental starts.

Travel speed	Forward	Reverse
1st	**3.8 km/h** 2.4 mph	**4.6 km/h** 2.9 mph
2nd	**5.6 km/h** 3.5 mph	**6.8 km/h** 4.2 mph
3rd L	**7.5 km/h** 4.7 mph	**9.2 km/h** 5.7 mph
3rd	**11.6 km/h** 7.2 mph	**14.0 km/h** 8.7 mph



FINAL DRIVES

Double-reduction, spur and planetary final drives increase tractive effort. Segmented sprockets are bolt-on for easy in-the-field replacement.

STEERING SYSTEM

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 the left to make a left turn. Tilt it to the right for a right turn.

Hydrostatic steering system (HSS) is powered by steering planetary units and an independent hydraulic pump and motor. Counter-rotation turns are also available. Wet, multiple-disc, pedal-controlled service brakes are spring-actuated and hydraulically released. Gearshift lock lever also applies parking brakes.

Minimum turning radius . . . . . **2.14 m** 7'0"

UNDERCARRIAGE

Suspension . . . . . Oscillation-type with equalizer bar and forward mounted pivot shafts
Track roller frame . . . . . Monocoque, high-tensile-strength steel construction

K-Bogie undercarriage
Lubricated track rollers are resiliently mounted the track frame with a bogie suspension system whose oscillating motion is cushioned by rubber pads.

Track shoes
Lubricated tracks. Unique dust seals for preventing entry of foreign abrasives into pin-to-bushing clearance for extended service. Track tension easily adjusted with grease gun.

Number of shoes (each side) 42
Grouser height . . . . . **80 mm** 3.1"
Shoe width (standard/maximum) . . . . . **560 mm** 22"/**710 mm** 28"
Ground contact area . . . . . **36680 cm²** 5,685 in²
Ground pressure (tractor only) . . . . . **82.4 kPa** 0.84 kg/cm² 11.9 psi
Number of track rollers (each side) 7
Number of carrier rollers (each side) 2

COOLANT AND LUBRICANT CAPACITY (REFILL)

Fuel tank	**625 ltr**	165 U.S. gal
Coolant	**82 ltr**	21.7 U.S. gal
Engine oil	**37 ltr**	9.8 U.S. gal
Damper	**1.5 ltr**	0.4 U.S. gal
Transmission, bevel gear and steering system	**90 ltr**	23.8 U.S. gal
Final drive (each side)	**31 ltr**	8.2 U.S. gal

OPERATING WEIGHT

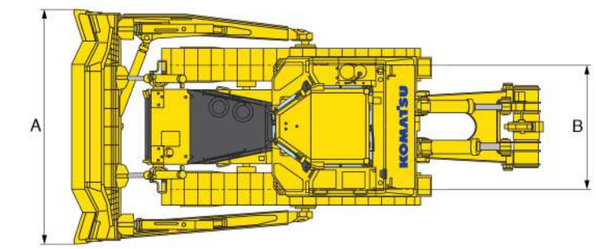
Tractor weight . . . . . **31000 kg** 68,350 lb
Including rated capacity of lubricant, coolant, full fuel tank, operator and standard equipment

Operating weight . . . . . **39500 kg** 87,100 lb
Including strengthened SIGMADOZER, giant ripper, ROPS cab, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank.

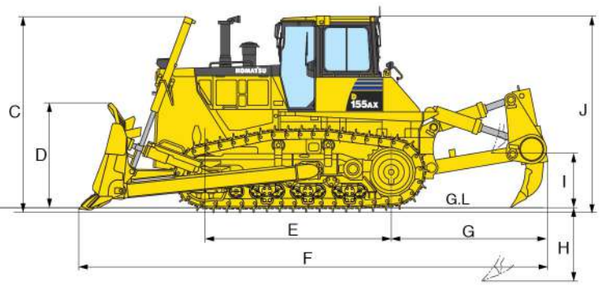
Ground pressure . . . . . **106 kPa** 1.08 kg/cm² 15.4 psi

DIMENSIONS

A	**4060 mm**	13'4"
B	**2140 mm**	7'
C	**3385 mm**	11'1"
D	**1850 mm**	6'1"
E	**3275 mm**	10'9"
F	**8225 mm**	27'
G	**2745 mm**	9'
H	**1240 mm**	4'1"
I	**950 mm**	3'1"
J	**3395 mm**	11'2"



Ground clearance: **500 mm** 1' 8"



HYDRAULIC SYSTEM

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

Hydraulic control unit:
All spool control valves externally mounted beside the hydraulic tank. Variable piston pump with capacity (discharge flow) of **325 ltr/min** 85.9 U.S. gal/min for steering and **180 ltr/min** 47.6 U.S. gal/min for imlement at rated engine rpm.

Relief valve setting . . . for implement **27.5 MPa** 280 kg/cm² 3,980 psi
. . . . . for steering **38.2 MPa** 390 kg/cm² 5,550 psi

Control valves:
Spool control valve for SIGMADOZER, Semi-U tilt 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 multi-shank ripper and giant ripper.
Positions: Ripper lift . . . . . Raise, hold, and lower
Ripper tilt . . . . . Increase, hold, and decrease

Hydraulic cylinders . . . . . Double-acting, piston

	Number of cylinders	Bore
Blade Lift	2	**110 mm** 4.33"
Blade Tilt	1	**160 mm** 6.30"
Ripper Lift	1	**180 mm** 7.09"
Ripper Tilt	1	**200 mm** 7.87"

Hydraulic oil capacity (refill):
Semi-U tilt dozer . . . . . **85 ltr** 22.5 U.S. gal
U-tilt dozer . . . . . **85 ltr** 22.5 U.S. gal
Ripper equipment (additional volume):
Multi-shank ripper . . . . . **37 ltr** 9.8 U.S. gal
Giant ripper . . . . . **37 ltr** 9.8 U.S. gal

DOZER EQUIPMENT

Use of high-tensile-strength steel in moldboard for strengthened blade construction. Blade tilt hose piping is mounted inside the dozer push arm to protect from damage.

	Overall length with dozer	Blade capacity	Blade length x height	Maximum lift above ground	Maximum drop below ground	Maximum tilt adjustment	Additional weight
SIGMADOZER	**6125 mm** 20'1"	**9.4 m³** 12.3 yd³	**4060 mm x 1850 mm** 13'4" x 6'1"	**1320 mm** 4'4"	**617 mm** 2'	**920 mm** 3'	**4940 kg** 10,890 lb
Strengthened SIGMADOZER	**6125 mm** 20'1"	**9.4 m³** 12.3 yd³	**4060 mm x 1850 mm** 13'4" x 6'1"	**1320 mm** 4'4"	**617 mm** 2'	**920 mm** 3'	**5360 kg** 11,820 lb
Semi-U Tilt Dozer	**6175 mm** 20'3"	**9.4 m³** 12.3 yd³	**4130 mm x 1790 mm** 13'7" x 5'10"	**1255 mm** 4'1"	**593 mm** 1'11"	**953 mm** 3'	**4960 kg** 10,936 lb
Full-U Tilt Dozer	**6590 mm** 21'7"	**11.9 m³** 15.6 yd³	**4225 mm x 1790 mm** 13'10" x 5'10"	**1255 mm** 4'1"	**593 mm** 1'11"	**970 mm** 3'2"	**5630 kg** 12,420 lb
Angle Dozer	**6743 mm** 22'1"	**4.6 m³** 6.0 yd³	**4850 mm x 1205 mm** 15'11" x 3'11"	**1562 mm** 5'1"	**664 mm** 2'2"	**520 mm** 1'8"	**5170 kg** 11,400 lb

STANDARD EQUIPMENT FOR BASE MACHINE

- Air cleaner, double element with dust indicator
- Alternator, 50 ampere
- Backup alarm
- Batteries, 2 x 12V 170 Ah
- Blower cooling fan
- Color monitor
- Decelerator pedal
- Fenders
- Horn, warning
- Hydraulics for dozer
- Hydrostatic steering (HSS) system
- Lighting system (includes 2 front, 1 rear)
- Muffler with rain cap
- Palm lever steering control
- Radiator with reserve tank
- Rear cover
- Starting motor, 11kW/24V
- Suspension seat
- Track roller guard, end sections
- Track shoe assembly
  – Sealed and lubricated track
- Underguards, oil pan and transmission
- **560 mm** 22" single grouser shoe

ROPS cab

- Additional weight: **700 kg** 1,545 lb
- All-weather, enclosed pressurized cab
- Dimensions:
  —Length: **1735 mm** 5'8"
  —Width: **1755 mm** 5'9"
  —Height from floor: **1635 mm** 5'4"
- Meets ISO 3471, SAE J/ISO 3471 ROPS standards, and ISO 3449 FOPS standard.

OPTIONAL EQUIPMENT

Variable multi-shank ripper

- Additional weight (including hydraulic control unit): **3760 kg** 8,290 lb
- Beam length: **2320 mm** 7'7"
- Hydraulically-controlled parallelogram-type ripper with three shanks. Digging angle infinitely adjustable. Standard digging angle*: 49°
- Maximum digging depth: **900 mm** 2'11"
- Maximum lift above ground: **950 mm** 3'1"

Variable giant ripper

- Additional weight (including hydraulic control unit): **2440 kg** 5,380 lb
- Beam length: **1400 mm** 4'7"
- Hydraulically-controlled parallelogram-type ripper with one shank. Digging angle infinitely adjustable. Standard digging angle*: 49°
- Maximum digging depth: **1240 mm** 4'1"
- Maximum lift above ground: **950 mm** 3'1"

* Measured with ripper point on ground and shank vertical.

Shoes

Shoes (optional)	Additional weight		Ground contact area	
560 mm 22" single-grouser shoes	**0 kg**	0 lb	**36680 cm²**	5,685 in²
610 mm 24" single-grouser shoes	**+200 kg**	+440 lb	**39955 cm²**	6,193 in²
660 mm 26" single-grouser shoes	**+410 kg**	+905 lb	**43230 cm²**	6,700 in²
710 mm 28" single-grouser shoes	**+620 kg**	+1,370 lb	**46505 cm²**	7,208 in²
560 mm 22" extreme service shoes	**+460 kg**	1,015 lb	**36680 cm²**	5,685 in²
610 mm 24" extreme service shoes	**+700 kg**	+1,545 lb	**39955 cm²**	6,193 in²
660 mm 26" extreme service shoes	**+940 kg**	+2,070 lb	**43230 cm²**	6,700 in²

Other

- Air conditioner
- Cab heater and defroster
- Engine side cover
- Locks, filler caps and covers
- Rear view monitoring system
- Rigid drawbar
- Tool kit

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