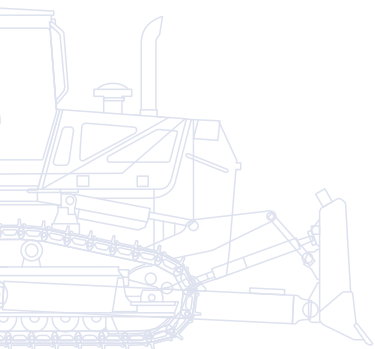


# KOMATSU

**D**  
**155AX**



## Crawler Dozer **D155AX-7**



**ENGINE POWER**  
268 kW / 360 HP @ 1.900 rpm

**OPERATING WEIGHT**  
39.700 kg

# Walk-Around

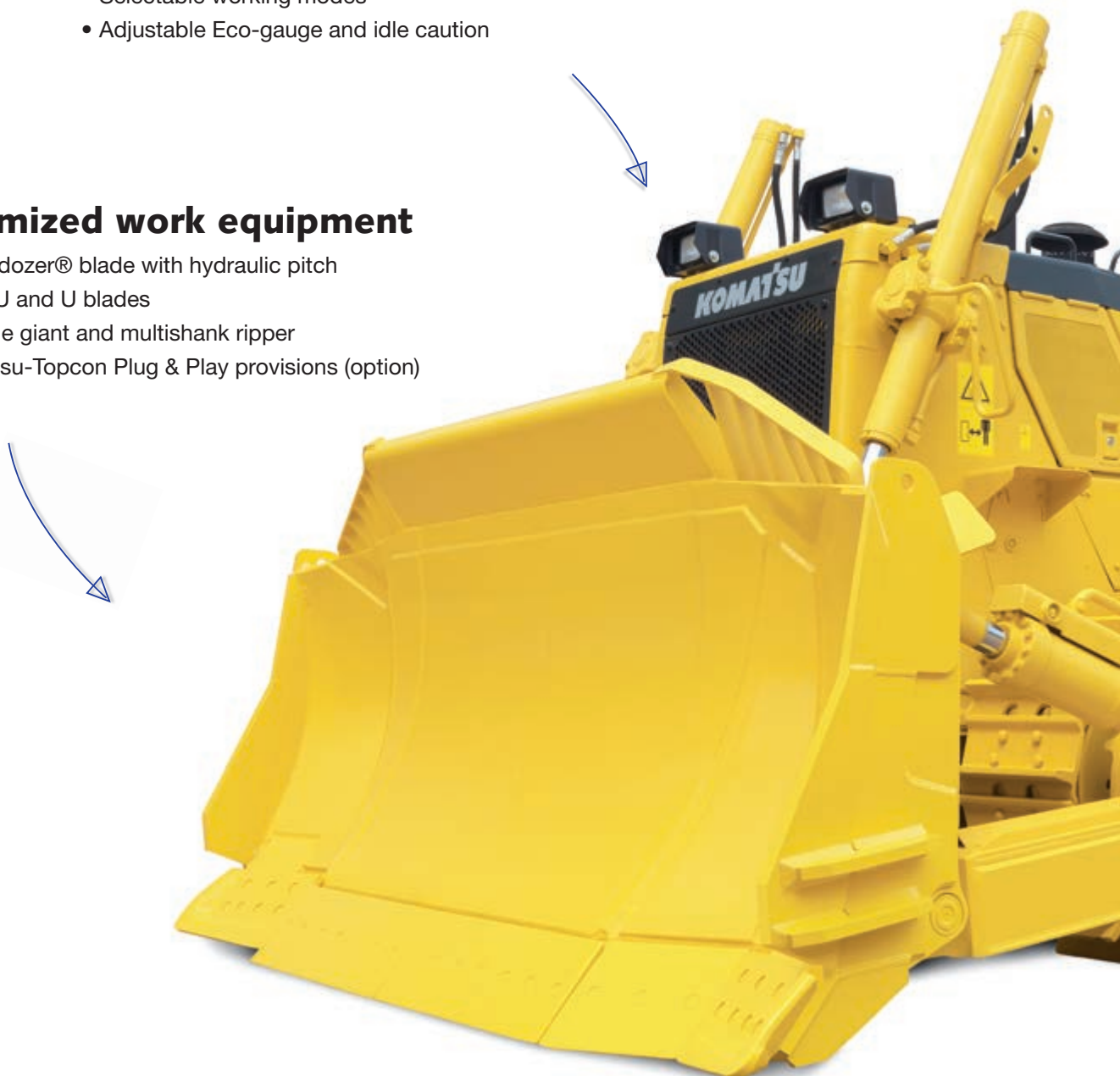
The D155AX-7 dozer integrates well proven Komatsu technology with a powerful and fuel efficient power train, the revolutionary Sigmadozer® blade and a highly efficient automatic transmission with torque converter lock-up. The new EU Stage IIIB engine platform provides it with increased net horsepower and lowers fuel consumption and emissions. An advanced electronic control system manages airflow rate, fuel injection and combustion parameters to optimize performance and to further reduce emissions. Remarkably efficient both for ripping and for dozing, the D155AX-7 is a productive and reliable Komatsu dozer that will quickly become a trusted working partner.

## High productivity & low fuel consumption

- Unique torque converter with auto lock-up
- Automatic transmission
- EU Stage IIIB
- Selectable working modes
- Adjustable Eco-gauge and idle caution

## Optimized work equipment

- Sigmadozer® blade with hydraulic pitch
- Semi-U and U blades
- Variable giant and multishank ripper
- Komatsu-Topcon Plug & Play provisions (option)



# D155AX-7

**ENGINE POWER**  
268 kW / 360 HP @ 1.900 rpm

**OPERATING WEIGHT**  
39.700 kg

## First-Class Operator Comfort

- Quiet and comfortable cab
- Fully adjustable air suspension seat
- Superior visibility on blade and ripper
- Less noise and vibrations
- Integrated rear view camera system



## State of the art controls

- Hydrostatic steering system
- Gearshift preset function
- Easy and precise
- Remote safety lock levers
- Large TFT colour multi monitor

## Tough and reliable

- Low-drive undercarriage
- K-Bogie undercarriage system
- Sturdy, rugged design
- Highly reliable electric circuit



Complimentary maintenance  
program for customers



Komatsu Wireless  
Monitoring System

# High Productivity & Low Fuel Consumption

## New Komatsu engine technology

The powerful and fuel-efficient Komatsu SAA6D140E-6 engine in the D155AX-7 delivers 268 kW/360 HP at 1.900 rpm and is EU Stage IIIB certified. To maximise power, fuel efficiency and emission compliance, it is turbo charged and features direct fuel injection, air-to-air after cooling and cooled EGR.

## Automatic transmission

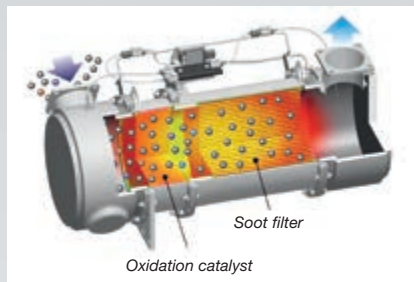
Set by default, the D155AX-7's highly efficient transmission automatically matches the best gear mode for all dozing and ripping operations and includes a travel speed preset function to reduce work time and operator's efforts. Thanks to Komatsu's ECMV (Electronic Controlled Modulation Valves), gear changes are smoothly timed to always keep the power transfer at maximum efficiency.

## Torque converter with auto lock-up

Combined with the automatic transmission, the exclusive Komatsu automatic lock-up torque converter reduces fuel consumption by up to 10% by eliminating unnecessary power loss. When required, the power train control system engages the torque converter, or locks it up to send full engine power directly to the transmission during less torque demanding applications.

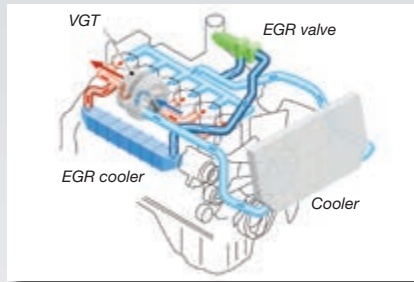
### Komatsu Diesel Particulate Filter (KDPF)

Komatsu's high efficiency DPF captures more than 90% of particulate matter. It includes a special oxidation catalyst with fuel injection system that can incinerate trapped particulates by either active or passive regeneration with no need to interrupt machine operations.



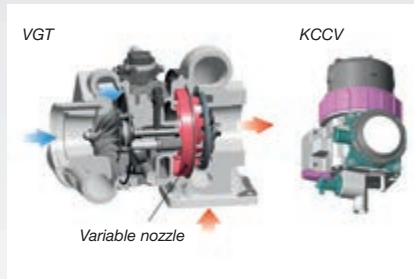
### Exhaust Gas Recirculation (EGR)

Cooled EGR is a technology well-proven in current Komatsu engines. The increased capacity of the EGR cooler now ensures very low NOx emissions and a better engine performance.



### Variable Geometry Turbo (VGT)

The VGT provides optimal air flow to the engine combustion chamber under all speed and load conditions. Exhaust gas is cleaner, fuel economy is improved while machine power and performance are maintained.

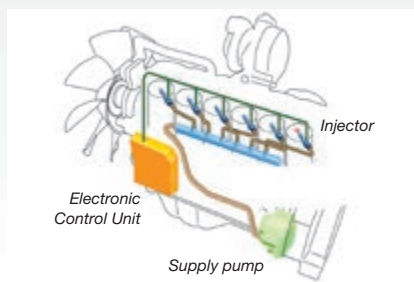


### Komatsu Closed Crankcase Ventilation (KCCV)

Crankcase emissions (blow-by gas) are passed through a CCV filter. The oil mist trapped in the filter is returned back to the crankcase while the filtered gas is returned to the air intake.

### High-Pressure Common Rail (HPCR)

To achieve complete fuel burn and lower exhaust emissions, the heavy duty High-Pressure Common Rail fuel injection system is computer controlled to deliver a precise quantity of pressurised fuel into the redesigned engine combustion chamber by multiple injections.



## 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.

## Adjustable Eco-gauge and idle caution

The new Eco-gauge can be set to target a fuel consumption value, encouraging the operator to work as efficiently as possible. And to further avoid wasting fuel when the machine is not actually working, a standard-fit idle caution is displayed if the engine idles for 5 minutes or more.



*Adjustable Eco-gauge and idle caution*



# Optimized Work Equipment

## 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.

## Sigmadozer® blade

The middle section of Komatsu's Sigmadozer® blade acts like a V-shaped bucket with aggressive ground penetration. Its lateral blade edges help to push the rolling material continuously towards the centre. Combined with the blade's deep curve this largely increases effective capacity and reduces spillage and fuel consumption.

The blade's flat cutting edge and the standard pitch function also offer top grading performance. Overall, the Sigmadozer® blade increases dozing productivity by more than 15% compared to a conventional Semi-U blade.

## Komatsu rippers

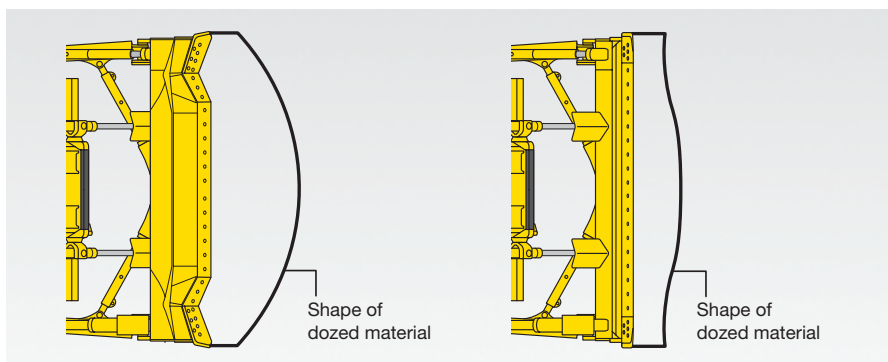
Komatsu's special ripper concept, with all cylinders connected to the ripper shank holder, allows maximum pry-out force. Its key feature is the ripper point movement that lifts up the material during the ripper shank operation to greatly improve overall performance. The shank supplies great penetration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

## Komatsu-Topcon Plug & Play provisions (option)

The D155AX-7 comes factory-fitted with "Plug & Play" provisions for the easy installation of Topcon control systems. Specific brackets and plug-in points on the blade, the machine and in the cab allow the quick mounting of all required components. Komatsu-Topcon machine control systems are an ideal way to automate blade movements. All the information from the laser or GPS systems is constantly available on the in-cab display, clearly showing the slope and elevation.



*The Sigmadozer® blade offers highest material holding capacity*



*Up to 15% higher production with the improved Sigmadozer® blade (left), compared to conventional Semi-U blade (right).*



*Semi-U blade*



# First-Class Operator Comfort

## Quiet and comfortable cab

Operator comfort is essential for safe and productive work. The D155AX-7 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, heated air 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 redesigned ROPS/FOPS integrated cab 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 D155AX-7 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.



*Excellent visibility on ripper*







# State of the Art Controls

## Hydrostatic steering system

The hydrostatic steering system (HSS) offers fast response and more precise turning. Both tracks are powered without interruption allowing smooth, continuous turns and powerful and productive dozing even on soft ground or on slopes.

## 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.

## Easy and precise

The ergonomic Palm Command Control System (PCCS) provides efficient and comfortable steering. The new control levers are fingertip controlled for precise and fatigue-free operating. 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.



Rear view camera system





## Large TFT colour multi monitor

A large user-friendly colour monitor with simple and easy to operate switches enables safe, accurate and smooth work. It displays the status of the Komatsu diesel particle filter and provides other on-hand data to continuously improve productivity and fuel consumption.



# 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

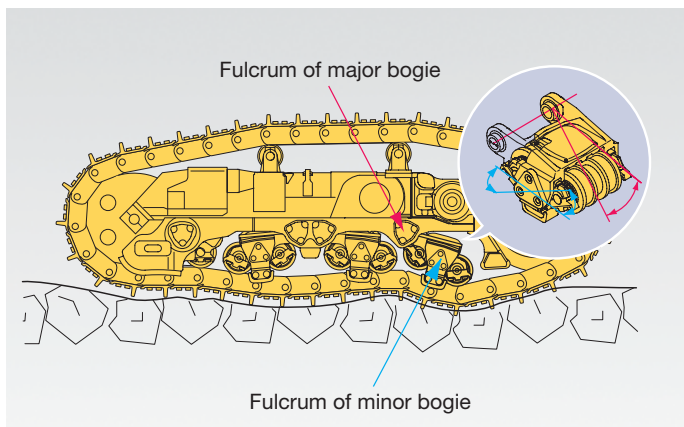
The K-bogie undercarriage is built with flexible mounted bogie systems that allow a high vertical track roller movement. The 7 track roller/K-bogie design supports and guides the tracks on all ground conditions for a much smoother drive and a longer undercarriage life.

## 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 D155AX-7'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 Wireless Monitoring System

## The easy way to higher productivity

KOMTRAX™ is the latest in wireless monitoring technology. It delivers insightful and cost saving information about your fleet and equipment and offers you a wealth of information to facilitate peak machine performance. By creating a tightly integrated web of support it allows pro active and preventive maintenance and helps you to efficiently run a business.

## Knowledge

You get quick answers to basic and critical questions about your machines - what they're doing, when they did it, where they're located, how they can be used more efficiently, and when they need to be serviced. Performance data is relayed by satellite from your machine to your computer and to your local Komatsu distributor - who's readily available for expert analysis and feedback.

## Convenience

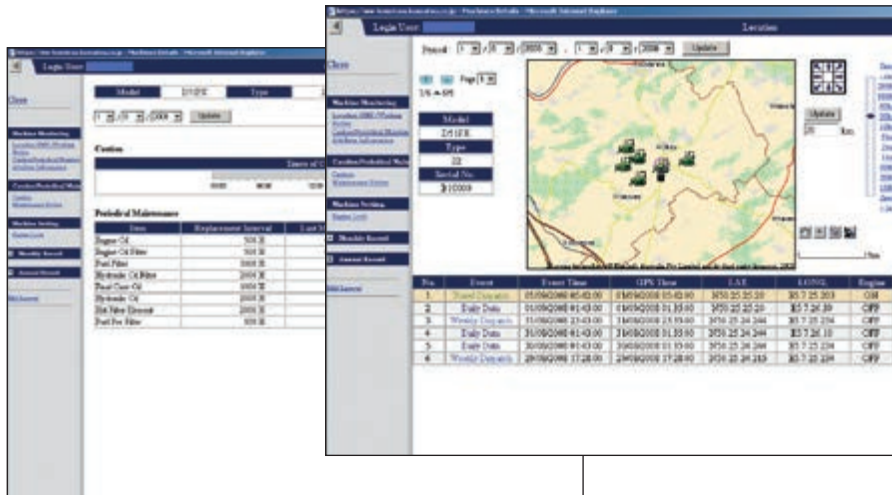
KOMTRAX™ helps to conveniently manage your fleet on the web, wherever you are. Data is analysed and packaged specifically for easy and intuitive viewing in maps, lists, graphs and charts. You can anticipate the type of service and parts your machines could require, or troubleshoot problems before Komatsu technicians arrive on site.



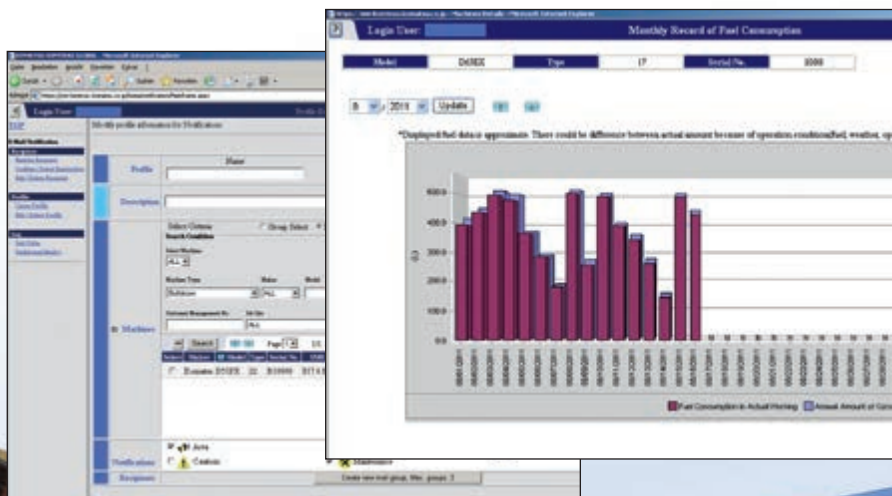


## Power

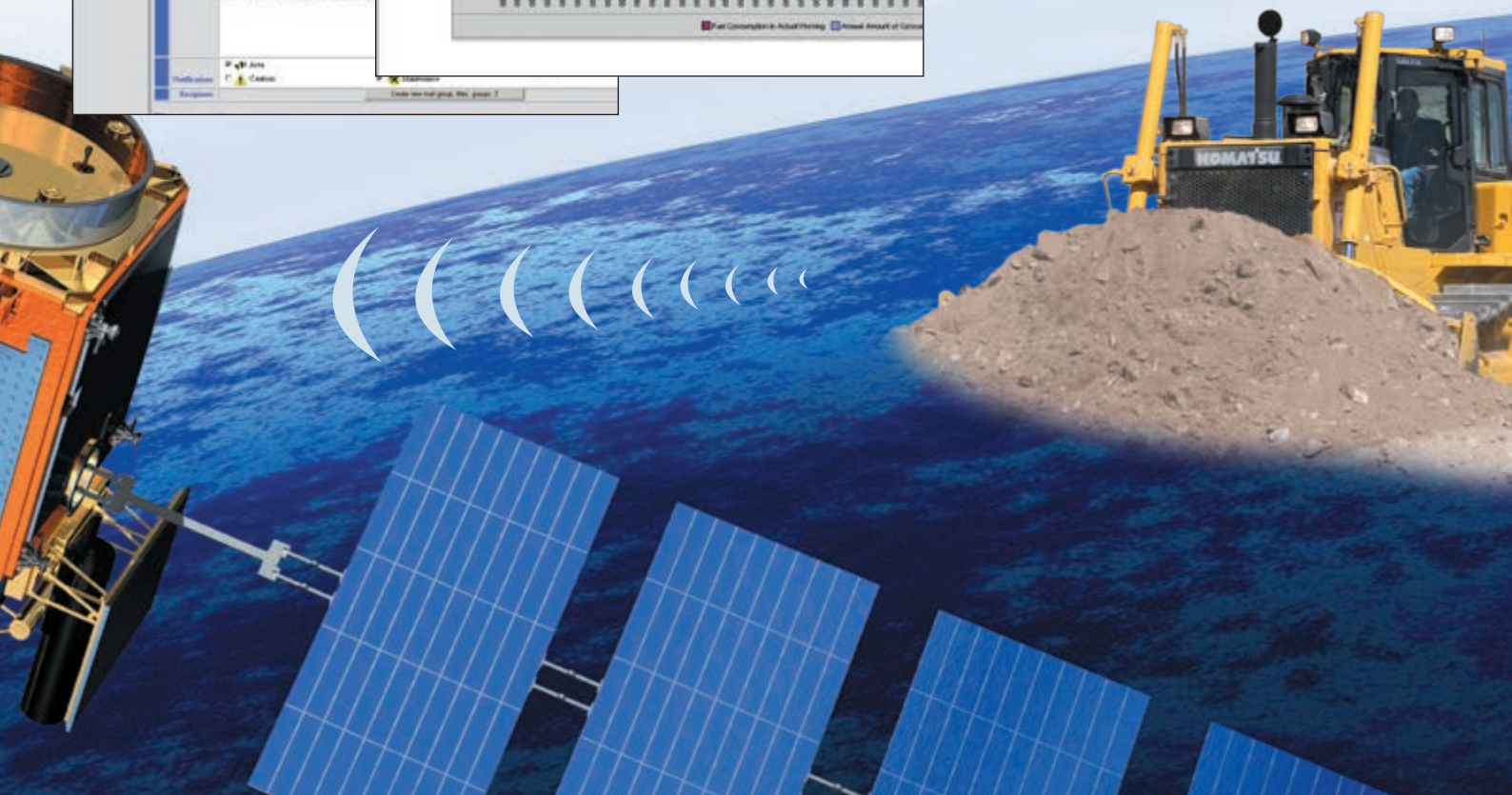
The detailed information that KOMTRAX™ puts at your fingertips 24 hours a day, 7 days a week gives you the power to make better daily and long-term strategic decisions. You can anticipate problems, customize maintenance schedules, minimize downtime and keep your machines where they belong – working on the job site.



Through the web application, a variety of search parameters are available to quickly find information about specific machines based on key factors such as utilization rates, age, various notification messages, and more.



A simple chart shows the machine's fuel consumption and helps you to calculate total costs for a job site and conveniently schedule fuel deliveries.



# Easy Maintenance



Komatsu CARE is a complimentary maintenance program for Komatsu customers that comes as standard with every new Komatsu EU Stage IIIB construction machine. For the first 3 years or 2.000 hours it covers factory-scheduled maintenance, performed by Komatsu-trained technicians with Komatsu Genuine parts. It also offers up to a maximum of 2 complimentary Komatsu Diesel Particulate Filter (KDPF) exchange units and a KDPF warranty for the first 5 years or 9.000 hours.



## Centralised service station

Preventative maintenance is essential to ensure the long life of your equipment. Komatsu designed the D155AX-7 with centralised and conveniently located service points to make necessary inspections and maintenance quick and easy.

## 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 D155AX-7. In addition, when required, counter-measures 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.



## Komatsu diesel particulate filter (KDPF) cleaning

If needed, the Komatsu DPF system is easy to maintain by simply replacing one complete used cartridge with a new one. A replacement cartridge is made available as Reman exchange module, offering a cost effective solution with minimum downtime.

## Reversible radiator fan

The radiator can be easily cleaned by utilization of the reversible, hydraulically driven cooling fan from a touch on the monitor panel. This cleaning reduces fuel consumption and increases overall machine performance.





## ENGINE

Model ..... Komatsu SAA6D140E-6  
 Type ..... Common rail direct injection, water-cooled, emissionised, turbocharged, after-cooled diesel  
 Engine power  
 at rated engine speed ..... 1.900 rpm  
 ISO 14396 ..... 268 kW / 360 HP  
 ISO 9249 (net engine power) ..... 264 kW / 354 HP  
 No. of cylinders ..... 6  
 Bore x stroke ..... 140 x 165 mm  
 Displacement ..... 15,24 ltr  
 Fan drive type ..... Hydraulic  
 Lubrication system  
 Method ..... Gear pump, force lubrication  
 Filter ..... Full flow

## TORQFLOW TRANSMISSION

Type ..... Komatsu TORQFLOW  
 Torque converter ..... 3-element, 1-stage, 1-phase, water-cooled, automatic lock-up  
 Transmission ..... Planetary 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	4,3 km/h
2nd	5,6 km/h	6,8 km/h
3rd L	7,5 km/h	9,2 km/h
3rd	11,6 km/h	14,0 km/h

## STEERING SYSTEM

Type ..... Hydrostatic Steering System (HSS)  
 Steering control ..... PCCS-lever  
 Service brakes ..... Wet, multiple-disc, pedal-controlled, spring-actuated and hydraulically released  
 Minimum turning radius (counter-rotation)  
 (as measured by track marks on ground) ..... 2,14 m

## UNDERCARRIAGE

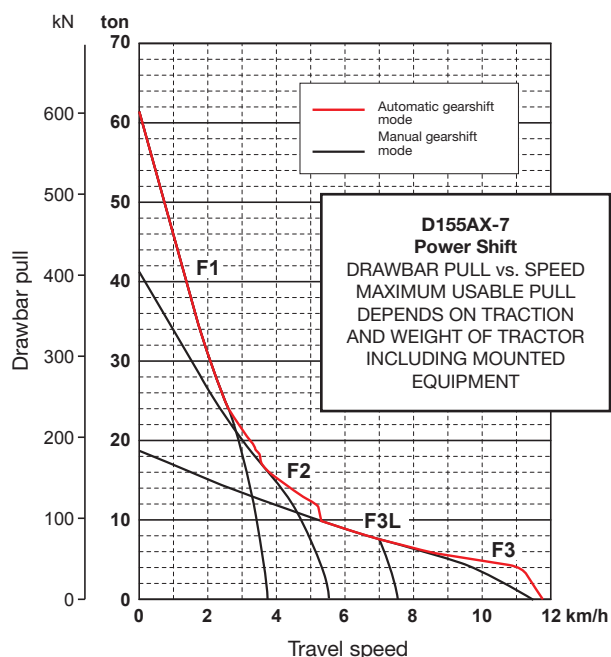
Suspension ..... Oscillating equaliser bar and pivot shaft  
 Track roller frame ..... Monocoque, large section, durable construction  
 K-Bogie undercarriage ..... Lubricated track rollers are resiliently mounted on the track frame with a bogie suspension system  
 Tracks ..... Lubricated tracks, fully sealed  
 Track tension ..... Combined spring and hydraulic unit  
 Number of shoes (each side) ..... 42  
 Grouser height (single grouser) ..... 80 mm  
 Shoe width (standard) ..... 610 mm  
 Ground contact area ..... 39.955 cm<sup>2</sup>  
 Track rollers (each side) ..... 7  
 Carrier rollers (each side) ..... 2

## OPERATING WEIGHT (APPR.)

Including strengthened Sigmadozer®, giant ripper, steel cab, ROPS, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank  
 Operating weight ..... 39.700 kg

## SERVICE REFILL CAPACITIES

Fuel tank ..... 625 ltr  
 Radiator ..... 103,5 ltr  
 Engine oil ..... 37 ltr  
 Damper ..... 1,5 ltr  
 Torque converter, transmission, bevel gear and steering system ..... 90 ltr  
 Final drive (each side) ..... 31 ltr  
 Dozer blade hydraulics ..... 91,5 ltr  
 Giant ripper (additional capacity) ..... 37 ltr  
 Multishank ripper (additional capacity) ..... 37 ltr



# Specifications

## FINAL DRIVE

Type ..... Planetary gear, double-reduction  
 Sprocket ..... Segmented sprocket teeth  
 are bolt-on for easy replacement

## HYDRAULIC SYSTEM

Type ..... CLSS (closed-centre load sensing system)  
 All spool valves externally mounted beside the hydraulic tank.  
 Main pump ..... Variable displacement piston pump  
 Maximum steering pump flow ..... 325 ltr/min  
 Relief valve setting ..... 390 kg/cm<sup>2</sup>  
 Maximum implement pump flow ..... 180 ltr/min  
 Relief valve setting ..... 280 kg/cm<sup>2</sup>  
 Spool control valve positions  
 Blade lift ..... Raise, hold, lower, and float  
 Blade tilt ..... Right, hold, and left  
 Additional control valve positions for ripper  
 Ripper lift ..... Raise, hold, and lower  
 Ripper tilt ..... Increase, hold, and decrease  
 Hydraulic cylinders ..... Double-acting, piston  
 No. of cylinders × bore  
 Blade lift ..... 2 × 110 mm  
 Blade tilt ..... 2 × 160 mm  
 Ripper lift ..... 1 × 180 mm  
 Ripper tilt ..... 1 × 200 mm

## DOZER EQUIPMENT

	Overall length with blade	Blade capacity	Blade width × height	Max. lift above ground	Max. drop below ground	Max. tilt adjustment	Additional weight
Sigmaxdozer® dual tilt	6.225 mm	9,4 m <sup>3</sup>	4.060 × 1.850 mm	1.320 mm	617 mm	880 mm	5.020 kg
Strengthened Sigmaxdozer® dual tilt	6.225 mm	9,4 m <sup>3</sup>	4.060 × 1.850 mm	1.320 mm	617 mm	880 mm	5.450 kg
Semi-U blade dual tilt	6.275 mm	9,4 m <sup>3</sup>	4.130 × 1.790 mm	1.255 mm	593 mm	890 mm	5.050 kg
Strengthened Semi-U blade dual tilt	6.275 mm	9,4 m <sup>3</sup>	4.130 × 1.790 mm	1.255 mm	593 mm	890 mm	5.710 kg
U-Blade dual tilt	6.695 mm	11,9 m <sup>3</sup>	4.225 × 1.790 mm	1.255 mm	593 mm	930 mm	5.720 kg
Strengthened U-Blade dual tilt	6.695 mm	11,9 m <sup>3</sup>	4.225 × 1.790 mm	1.255 mm	593 mm	930 mm	6.435 kg

Blade capacities are based on the SAE recommended practice J1265.

## ENVIRONMENT

Engine emissions ..... Fully complies with EU Stage IIIB  
 exhaust emission regulations  
 Noise levels  
 LwA external ..... 111 dB(A) (2000/14/EC)  
 LpA operator ear ..... 77 dB(A) (ISO 6396 dynamic test)  
 Vibration levels (EN 12096:1997)\*  
 Hand/arm ..... ≤ 2,5 m/s<sup>2</sup> (uncertainty K = 1,58 m/s<sup>2</sup>)  
 Body ..... ≤ 0,5 m/s<sup>2</sup> (uncertainty K = 0,50 m/s<sup>2</sup>)  
 \* for the purpose of risk assessment under directive 2002/44/EC,  
 please refer to ISO/TR 25398:2006.

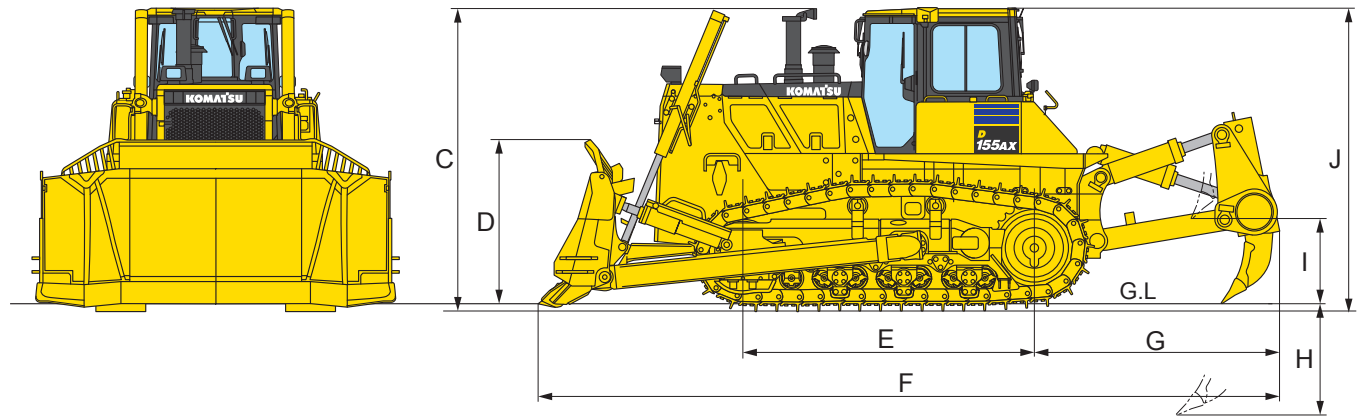
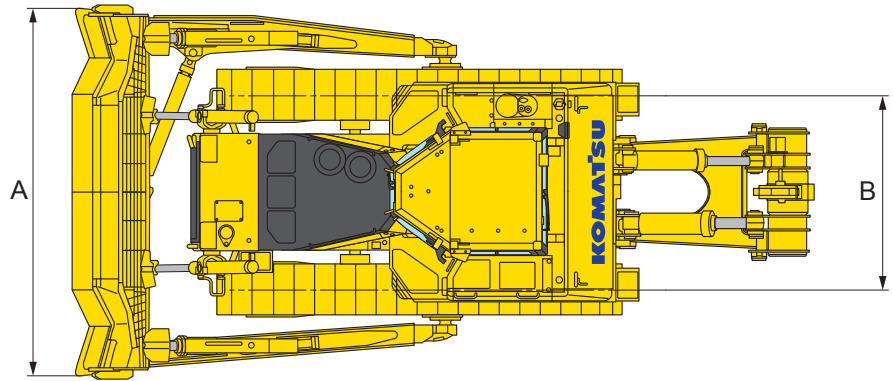
## RIPPER EQUIPMENT

Multishank ripper  
 Type ..... Hydraulically controlled variable ripper  
 No. of shanks ..... 3  
 Weight (including hydraulic control unit) ..... 3.760 kg  
 Beam length ..... 2.320 mm  
 Maximum lift above ground ..... 950 mm  
 Maximum digging depth ..... 900 mm  
 Giant ripper  
 Type ..... Hydraulically controlled variable ripper  
 No. of shanks ..... 1  
 Weight (including hydraulic control unit) ..... 2.440 kg  
 Beam length ..... 1.400 mm  
 Maximum lift above ground ..... 950 mm  
 Maximum digging depth ..... 1.240 mm



## DIMENSIONS

	D155AX-7
A	4.060 mm
B	2.140 mm
C	3.385 mm
D	1.850 mm
E	3.275 mm
F	8.325 mm
G	2.745 mm
H	1.240 mm
I	950 mm
J	3.390 mm



Ground clearance: 500 mm

# Crawler Dozer

## D155AX-7

### Standard and Optional Equipment

#### ENGINE AND RELATED PARTS

Komatsu SAA6D140E-6 Common rail direct injection diesel engine, turbocharged	●
EU Stage IIIB	●
Fuel pre-filter (10 micron) and fuel filter (2 micron)	●
Intake pipe with rain cap	●
Starting motor 24 V/11 kW	●
Alternator 24 V/90 A	●
Batteries 2 × 12 V/136 Ah	●
Gull wing engine side covers	●
Cooling fan, hydrostatic driven with reversing function	●
Damper	●
Fuel tank inlet strainer	●
Electric type engine oil and coolant heater	○
High-capacity batteries 2 × 12 V/220 Ah	○

#### TRANSMISSION AND BRAKES

Automatic hydroshift transmission	●
Torque converter with automatic lock-up	●
Quick shift selection system	●
HSS hydrostatic steering system	●
Decelerator pedal	●
Palm lever steering control (PCCS)	●

#### SAFETY EQUIPMENT

Steel cab, meets ISO 3471 and SAE J1040, APR88 ROPS standards, as well as ISO 3449 FOPS standards	●
Back-up alarm	●
Warning horn	●
Rear view camera system	●
Locks, filter caps and covers	●
Fire extinguisher	○
First aid kit	○
Emergency steering	○

#### CABIN

Suspension seat: fabric, reclining, high backrest, turnable with headrest	●
Seat belt with visible alert	●
High mount footrest	●
Air conditioner	●
Radio	●
Auxiliary input (MP3 jack)	●
2 × 12 Volt power supply (120 W)	●
1 × 24 Volt power supply	●
Viscous cab mounts	●
Wiper front and rear window	●
Wipers doors	●
Rear-view mirror (inside cab)	●
Heated rear window	●
Sun visor (rear)	●
Cup holder	●
Lunch box holder	●

#### SERVICE AND MAINTENANCE

Dry type air cleaner, double element with dust indicator and evacuator	●
Water separator	●
Multi-function video compatible colour monitor with Equipment Management and Monitoring System (EMMS) and efficiency guidance	●
Provisions for fast fueling system	●
KOMTRAX™ - Komatsu wireless monitoring system	●
Komatsu CARE	●
Tool kit	●

#### UNDERCARRIAGE

Single grouser heavy-duty shoes (610 mm)	●
Heavy-duty link assembly, sealed and lubricated	●
Segmented sprockets	●
K-Bogie system	●
Hydraulic track adjusters	●
Single grouser heavy-duty shoes (560 mm, 660 mm, 710 mm)	○
Full length track roller guard	○

#### HYDRAULIC SYSTEM

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

#### LIGHTING SYSTEM

2 working light, rear	●
4 cab lights, front and rear	●
2 head lights	●
1 ripper working light	●

#### ATTACHMENTS

Front pull hook	●
Rigid drawbar	●
Counterweight + hitch	○

#### DOZER EQUIPMENT

Strengthened Sigmadozer® dual tilt, 9,4 m <sup>3</sup>	●
Sigmadozer® dual tilt, 9,4 m <sup>3</sup>	○
Strengthened Semi-U blade dual tilt, 9,4 m <sup>3</sup>	○
Semi-U blade dual tilt, 9,4 m <sup>3</sup>	○
Strengthened U blade dual tilt, 11,9 m <sup>3</sup>	○
U blade dual tilt, 11,9 m <sup>3</sup>	○
Multishank variable angle ripper	○
Giant variable angle ripper	○

#### AUTOMATIC MACHINE CONTROL

Komatsu-Topcon Plug & Play provisions	○
Komatsu-Topcon machine control systems	○

Further equipment on request

- standard equipment
- optional equipment

Your Komatsu partner:

# KOMATSU

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