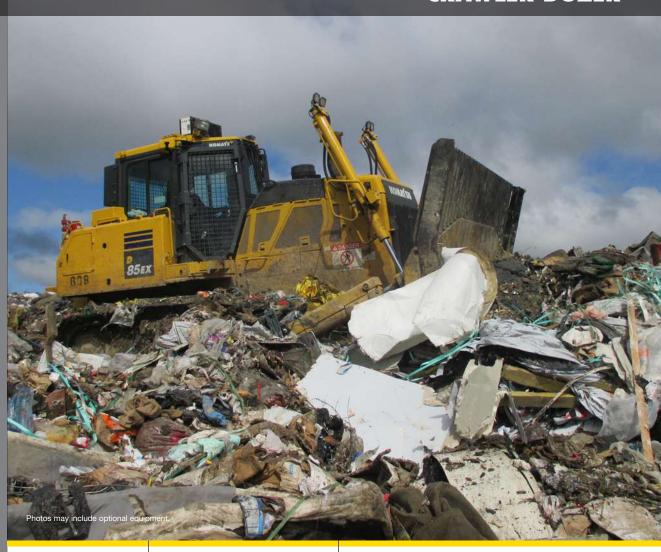


# **D85EX**-18 **D85PX**-18

Tier 4 Final Engine Waste Handler

### **CRAWLER DOZER**

# DIWINI ELISIMI



### **NET HORSEPOWER**

**264 HP @ 1900 rpm** 197 kW @ 1900 rpm

### **OPERATING WEIGHT**

Straight Tilt Dozer
D85PX-18: 70,038 lb 31769 kg
Semi-U Tilt Dozer
D85EX-18: 70,017 lb 31760 kg

### **BLADE CAPACITY**

 Straight Tilt Dozer

 D85PX-18:
 18.4 yd³ 14.1 m³

 Semi-U Tilt Dozer

 D85EX-18:
 18.4 yd³ 14.1 m³

# **WALK-AROUND**



### **NET HORSEPOWER**

**264 HP @ 1900 rpm** 197 kW @ 1900 rpm

### **OPERATING WEIGHT**

Straight Tilt Dozer D85PX-18: **70,038 lb** 31769 kg Semi-U Tilt Dozer

D85EX-18: **70,017 lb** 31760 kg

### **BLADE CAPACITY**

Straight Tilt Dozer

D85PX-18: 18.4 yd3 14.1 m3

Semi-U Tilt Dozer

D85EX-18: 18.4 yd3 14.1 m3



### **OUTSTANDING PRODUCTIVITY & FUEL ECONOMY**

Innovative SIGMADOZER® blade with standard power pitch function for dig and carry dozing reduces digging resistance and smoothly rolls material up for increased blade loads.

Auto shift transmission improves fuel consumption and performance.



**SAA6D125E-7 diesel engine** provides excellent fuel economy. This engine is EPA Tier 4 Final emissions certified.

### Fluid neutral or better

Total Fuel & DEF (Diesel Exhaust Fluid) is less than fuel consumed by the prior model.

Variable Geometry Turbocharger (VGT) uses a hydraulic actuator to provide optimum air flow under all speed and load conditions.

**Includes wide core radiator and coolers** as well as a bowl-type precleaner on the cab air intake for improved performance in dusty conditions. Cooling fan is hydraulically driven and reversible.

Komatsu Diesel Particulate Filter (KDPF) captures 90% of particulate matter and provides automatic regeneration without stopping the machine.

**Selective Catalytic Reduction (SCR)** removes NOx exhaust gases automatically by injecting DEF (diesel exhaust fluid) and is seamless to the operator.

**Auto Idle Shutdown** helps reduce non-productive engine idle time and operating costs.

The KOMTRAX® telematics system is standard on Komatsu equipment with no subscription fees. Using the latest wireless technology, KOMTRAX® transmits valuable information such as location, utilization, and maintenance records to a PC or smartphone app. Custom machine reports are provided for identifying machine efficiency and operating trends. KOMTRAX® also provides advanced machine troubleshooting capabilities by continuously monitoring machine health.

### Integrated ROPS cab features include:

- Large, quiet, pressurized cab
- · Improved visibility with integrated ROPS structure
- New heated air-suspension seat fits a wide range of operators
- Aux plug for audio player and two 12 volt connections

### Large color monitor:

- · Easy-to-read/use, large 7" high-resolution color monitor
- Fuel saving guidance
- · On-board diagnostics

**Rearview Monitoring System (standard)** view behind the machine onto the wide landscape view color monitor screen.

Sealed and Lubricated Tracks seal out dust to prevent clogging and extend service life.

### Parallel Link Undercarriage System (PLUS) (optional):

- Increases wear life up to two times
- · Rotating bushings eliminate the cost and downtime for bushing turns
- Up to 40% lower undercarriage maintenance costs

Triple Labyrinth Final Drive improves durability.

### **Ergonomic Operator Controls**

- Palm Command Control System (PCCS) comfortably fits the operator's hands
- Automatic/manual selectable transmission shift mode
- Forward/reverse shift preset function

### Komatsu designed and manufactured components

**DT-Type Sealed Electrical Connectors** provide high reliability, water and dust resistance.

**Hydrostatic Steering System (HSS)** provides smooth power to both tracks when turning. Counter-rotation is available.

### **Power and Economy Modes**

"Power" can be selected for maximum productivity while "Economy" provides up to an additional 10% fuel savings under moderate loads.

### **Battery Disconnect Switch**

Eliminates power drain when storing the machine.

**Operator Identification System** can track machine operation for up to 100 operators.

# **WASTE HANDLER FEATURES**

### **DURABILITY**

By protecting exposed components, reducing opportunity for debris to enter the engine compartment, the Komatsu D85EX/PX-18 dozer works longer in high debris applications for increased productivity compared to the standard arrangement.

### **Tank Guard**

9.5 mm **0.375"** thick guarding protects the sides and rear of the fuel and hydraulic tank from damage and debris.



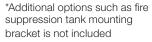
### **Engine Thermal Guard**

The thermal guard covers the exhaust manifold, hot side of the turbocharger, KDPF, and SCR system, reducing the potential for combustible debris to come in contact with hot surfaces.



# Rear Box with Striker Bars and Hitch

Optional rear box housing replaces the counterweight. The rear striker bars mount to the outside of the box. The inside of the box has removable weights to adjust machine balance. The rear box is equivalent to a dozer equipped with the HD counterweight. Vertical ribs in the hitch protect the hitch assembly mounting bolts from contact with debris





### **Final Drive Seal Guards**

Bolt-on and adjustable guards provide an additional layer of protection to the standard triple labyrinth final drive seal design to help minimize debris entering oil seal areas.



# Counterweight with Rear Striker Bars

The 1682 kg **3,708 lb** for the PX model and the 2000 kg **4,409 lb** for the EX model counterweight optimizes machine balance for landfill applications.



### Front Striker Bars

Front striker bars are designed to prevent debris from riding up on the tracks and damaging the chassis or cab glass. The bolt-on design allows for ease of servicing.



# Relocated Hydraulic Cooler

The hydraulic oil cooler is relocated to the rear to increase cooling efficiency. It features a flexible core heat exchanger for easier cleaning and maintenance.



# Roof Mounted AC Condenser with Screen

The AC condenser is mounted to the roof to increase cooling efficiency and includes a screen to protect it from debris.



# Engine Pre-cleaner with Screen

A protective screen is added to the standard centrifugal engine air pre-cleaner to block large particles from the air before they reach the filter elements.



### Metal Fuel/Water Separator Bowl

The standard translucent fuel/water separator bowl is replaced with a metal bowl. In harsh applications, metal bowls can provide increased levels of durability.



# Additional Engine Hood Perforations

Additional perforated material increases air flow to the radiator and prevents large airborne materials from entering the engine compartment.



# Fire Suppression System Ready

The components include mounting locations for two tanks and a ground accessible actuator if the rear box is ordered. There is also an in-cab bracket for mounting an actuator and monitoring system.

\*Requires Rear Box Images may include optional equipment



### Access Step Reinforcement

Support structures reinforce steps on the side of the machine. This reinforcement helps prevent deformation when contact is made with debris.





# 140-Amp Alternator with Optional Pre-Cleaner

The standard 90-amp alternator is upgraded to 140-amp. To help increase the longevity of the alternator, a scavenger tube is routed to a hood mounted pre-cleaner.





### **Engine Door Deflectors**

Inch and a half-angled Deflectors redirect debris on the tracks from wearing across the engine doors and parts of the main frame. There are two deflectors on each side of the machine.





# **WASTE HANDLER FEATURES**

### **SERVICEABILITY**

Maintaining a clean engine compartment is a common challenge for dozers working in landfills. The waste handler package includes features to make the D85EX/PX-18 easier to clean and service, helping to maximize engine performance.

### **Powered Engine Underguard**

The electric winch located on the inside of the main frame lowers and raises the underguard, providing easy access to the engine compartment for cleaning accumulated trash. A seal kit



around the underguard helps prevent debris from entering.

### Two Piece Radiator-**Doors and Auto Reversing Fan**

The two-piece radiator guard doors allow access to the standard wide-core radiator for cleaning. Adjustable fan reversing interval and duration allow the operator to concentrate on productivity, while keeping the radiator clean.



### 30" Track Shoes with Holes (PX)

30" track shoes are available on the D85PX-18. The reduction in ground contact area increases dozer ground pressure, and improves compaction when rolling over trash, compared to a standard



dozer. The additional 3" of clearance between the track shoes and the dozer makes clean out and maintenance procedures



### **OPERATOR ENVIRONMENT**

The cab of the D85EX/PX-18 utilizes viscous cab mounts, reducing noise and vibration for the operator and features a heated, air-suspension seat. The waste handler package offers the following additional features to improve the operating experience.

### **LED Lights**

The standard halogen cab roof mounted lights are replaced with adjustable LED lights. The lights are positioned for the light beam pattern to fall on the edges of the blade and to the side of the tracks.

The two hood-mounted lights are replaced with four guarded LED work lights mounted on the lift cylinders, shining light in front of the trash rack.





# Cab Air Pre-Cleaner Option

The optional cab air precleaner system provides pre-cleaned, filtered air to the HVAC system and pressurizes the cab, keeping odors out and extending HVAC filter life.



### Trash Rack

The D85EX-18 is available with semi-U blade and trash rack which increases the capacity to 18.4 cyd.

The D85PX-18 is available with straight blade and updated trash rack design which increases capacity to 18.4 cyd.



### Rearview Camera Extension Bracket

To further improve visibility to the rear of the machine and the box, the standard rearview camera has been extended back.



### **Beacon Light**

The cab mounted amber strobe beacon lamp is wired through the master disconnect switch. When the battery master disconnect switch is in the on position, the strobe will flash. The raised lamp is visible from all sides of the machine.



# PERFORMANCE FEATURES

### **KOMATSU NEW ENGINE TECHNOLOGIES**

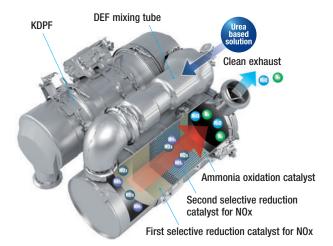
### **New Tier 4 Final Engine**

The Komatsu SAA6D125E-7 engine is EPA Tier 4 Final emissions certified and provides exceptional performance while reducing fuel consumption. Based on Komatsu proprietary technologies developed over many years, this new diesel engine lowers nitrogen oxides (NOx) and particulate matter (PM) by more than 90%, compared to Tier 3 levels. Through the in-house development and production of engines, electronics, and hydraulic components, Komatsu has achieved great advancements in technology, providing high levels of performance and efficiency in virtually all conditions.

### **Technologies Applied to New Engine**

### Heavy-duty aftertreatment system

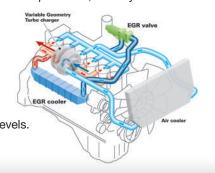
This new system combines a Komatsu Diesel Particulate Filter (KDPF) and Selective Catalytic Reduction (SCR). The SCR NOx reduction system injects the correct amount of DEF at the proper rate, thereby transforming NOx into non-toxic water (H<sub>2</sub>O) and nitrogen gas (N<sub>2</sub>).

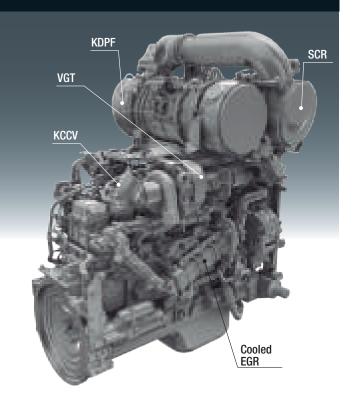


# Heavy-duty cooled Exhaust Gas Recirculation (EGR) system

The system recirculates a portion of exhaust gas into the air intake and lowers combustion temperatures, thereby

reducing NOx emissions.
EGR gas flow has been decreased for Tier 4 Final with the addition of SCR technology. The system dramatically reduces NOx, while helping cut fuel consumption below Tier 3 levels.



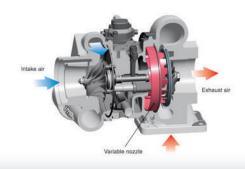


### **Advanced Electronic Control System**

The electronic control system performs high-speed processing of all signals from sensors installed in the vehicle providing total control of equipment in all conditions of use. Engine condition information is displayed via an on-board network to the monitor inside the cab, providing vital operator information. Additionally, managing the information via KOMTRAX helps customers keep up with required maintenance.

### Variable Geometry Turbocharger (VGT) system

The VGT system features proven Komatsu design hydraulic technology for variable control of air-flow and supplies optimal air according to load conditions. The upgraded version provides better exhaust temperature management.



### **Komatsu Auto Idle Shutdown**

Komatsu auto idle shutdown automatically shuts the engine down after idling temporarily to reduce unnecessary fuel consumption and exhaust emissions. The amount of time before the engine is shutdown can be easily programmed from 5 to 60 minutes.



# Secondary Engine Shutdown Switch

A secondary switch is at the side of the front console to shut down the engine.



# Heavy-Duty High-Pressure Common Rail (HPCR) Fuel Injection System

The system is designed to achieve an optimal injection of high-pressure fuel via computerized control, providing close-to-complete combustion to reduce PM emissions. While this technology is already in current engines, the new system uses high pressure injection, thereby reducing both PM emissions and fuel consumption over the entire range of engine operating conditions. The Tier 4 Final engine has advanced fuel injection timing for reduced fuel consumption and lower soot levels.



# PRODUCTIVITY & FUEL ECONOMY FEATURES

### **Automatic Transmission**

A sharp drop in fuel consumption and greater power train efficiency is achieved by the automatic gearshift transmission. 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 also selectable)

# Fuel consumption reduced by up to 3%

Compared to machine with manual shift transmission

### **Selectable Working Modes**

Select P mode for powerful operation and maximum production. E mode is for general dozing applications with adequate speed and power, while saving energy. For CO2 reduction and energy saving, a switch on the monitor panel can be easily pressed to select the working mode that matches the work at hand.

### P mode (Power mode)

With P mode, the engine outputs its full power, allowing the machine to perform the work requiring large production, heavy-load work, and uphill work.

### E mode (Economy mode)

With E mode, the engine outputs enough power for moderate work without delivering unnecessary power. This mode provides energy saving operation and is suitable for work on ground where the machine may experience excessive shoe slip in moderate power applications such as downhill dozing, leveling and light-load work.

### **Automatic/Manual Gearshift Selectable Mode**

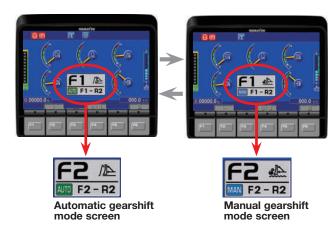
Automatic or manual gearshift modes can be selected with ease to suit the jobsite conditions by simply pressing the switch on the monitor.

### Automatic gearshift mode

The automatic mode is for general dozing. When a high load is encountered, the transmission automatically shifts down, and when the load is released, it automatically shifts up to quickly and efficiently carry the material. This mode optimizes fuel use and production.

### Manual gearshift mode

The manual mode is for dozing and ripping rough ground. When enabled, the transmission automatically shifts down when a high load is encountered, but does not shift up when the load is off. The operator can specify whether the auto shift down function is enabled or disabled in manual gearshift mode by selection in the monitor.

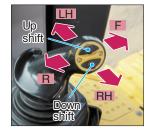




# **CONTROL FEATURES**

# Palm Command Control System (PCCS) Travel 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-R1>, <F2-R2>, <F2-R3L> or <F3L-R3L> in the automatic gearshift mode, the gear automatically shifts to the preset gear when the travel control joystick is set to Forward or Reverse position, reducing round trip repetition work time and operator's efforts. Gearshift pattern <F2-R3L> and <F3L-R3L> are added for high speed leveling.

# Automatic gearshift mode





## Manual gearshift mode

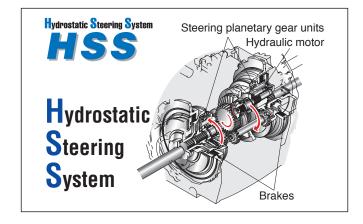
900.0
F1-R1 MODE
Press DOWN switch Press UP switch
F1-R2 MODE
Press DOWN switch
F2-R1 MODE
Press DOWN switch Press UP switch
F2-R2 MODE
Press DOWN switch Press UP switch
F2-R3 MODE

# **Electronic Controlled Modulation Valve (ECMV) Controlled Transmission and Brakes**

The 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 (HSS) -Smooth, Powerful Turning

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



### Selectable Auto Downshift in Manual Mode

Auto downshift can be turned off in manual mode in the mode select section of the monitor. The operator can have full control over the downshift in manual mode.



# WORKING ENVIRONMENT



### **Integrated ROPS Cab**

The D85EX/PX-18 has a strong integrated ROPS cab. High rigidity and superb sealing sharply reduce noise and vibration for the operator and minimizes dust that enters the cab. This

provides the operator a comfortable working environment. Also, there is more side visibility because an additional external ROPS structure and posts are not required.



# Rear View Monitoring System

The operator can view directly behind the machine on the color monitor panel.



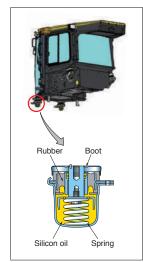


# **Comfortable Ride with New Operator Seat and Cab Damper Mounting**

The new operator seat is equipped with lumbar support, a tilting adjust function and electric heater. It is easy to adjust to the operator's shape and various working conditions and provides comfortable operation. The standard heated seat makes it possible to work comfortably in the winter.

The D85EX/PX-18'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

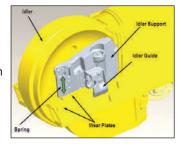
vibration while traveling over rough terrain, which conventional mounting systems are unable to match. The cab damper spring isolates the cab from the machine body, suppressing vibration and providing a quiet, comfortable operating environment.



# **RELIABILITY & MAINTENANCE FEATURES**

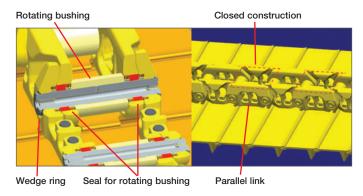
### **Self-adjusting Idler Support**

Self-adjusting idler support applies a constant spring force to the wear plate of the idler guide to eliminate the play of the idler. This results in reduced noise and vibration as well as extended service life of the wear plate.



### Parallel Link Undercarriage System (PLUS) (Optional)

Undercarriage wear life is increased by up to two times and the cost of a bushing turn and downtime is eliminated. Undercarriage maintenance costs are lowered by up to 40%.



### **Wide Core Cooling System**

In addition to improved engine compartment sealing, a wide core cooling system is standard. The radiator, oil cooler and charge air cooler use large square-wave fins spaced at 6 fins per inch. This allows more material to pass through, which helps self-cleaning and reduces maintenance.



# Multi-monitor with Troubleshooting Function to Help Prevent Critical Machine Trouble

Various meters, gauges and warning functions are centrally arranged on the multi-monitor.

The monitor simplifies startup inspection and promptly warns the operator with a lamp and buzzer if any abnormalities should occur. In addition, countermeasures



are indicated in 4 levels to help prevent major problems. Replacement times for oil and filters are also indicated.

### **Maintenance Function**

When the machine needs oil and filters, the monitor panel will display lights to inform the operator.

1			
6	Air Cleaner Cleaning / Change	-	-
	Trigine Oil Change	500 h	
	Engine Oil Filler Change	500 h	488
	Fuel Wain Filter Change	1000 h	988
Ļ	B Fuel Pre Filter Change		488

# **Battery Disconnect Switch**

A standard battery disconnect switch allows a technician to disconnect the power supply before servicing the machine.



### **Easy Access DEF Tank**

Located at the right side of the fuel tank, and is accessible from ground level. A convenient sight gauge is also provided.



# KOMATSU PARTS & SERVICE SUPPORT



### **KOMATSU CARE®**

### **Program Includes:**

\*The D85EX/PX-18 comes standard with complimentary factory scheduled maintenance for the first 3 years or 2,000 hours, whichever comes first.

### **Planned Maintenance Intervals at:**

500/1000/1500/2000 hour intervals. (250 hr. initial interval for some products) Complimentary Maintenance Interval includes: Replacement of Oils & Fluid Filters with genuine Komatsu Parts, 50-Point inspection, Komatsu Oil & Wear Analysis Sampling (KOWA) / Travel & Mileage (distance set by distributor; additional charges may apply).

### **Benefits of Using Komatsu CARE**

- Assurance of Proper Maintenance with OEM Parts & Service
- Increased Uptime & Efficiency
- Factory Certified Technicians Performing Work
- Cost of Ownership Savings
- Transferable Upon Resale

### **Complimentary SCR System Maintenance**

The D85EX/PX-18 comes standard with 2 Complimentary KDPF Exchange Units for the first 5 years. Complimentary KDPF Exchange Units are provided at: The suggested KDPF Exchange Units Service Intervals of 4,500 hours and 9,000 hours during the first 5 years. End User must have authorized Komatsu distributor perform the removal and installation of the KDPF.

### **Complimentary SCR System Maintenance**

The D85EX/PX-18 also includes 2 factory recommended services of the Selective Catalytic Reduction (SCR) Diesel exhaust fluid (DEF) system during the first 5 years—including:

 Factory recommended DEF tank flush and strainer cleaning at 4,500 hours and 9,000 hours

KOMATSU CARE D85EX/PX-18						
Interval PM	500	1000	1500	2000		
KOWA SAMPLING - (Engine, Hydraulics, L & R Final Drives)	✓	✓	✓	✓		
LUBRICATE MACHINE, INCLUDING EQUALIZER BAR CENTER AND SIDE PINS	<b>✓</b>	✓	✓	✓		
CHANGE ENGINE OIL	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
REPLACE ENGINE OIL FILTER	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
REPLACE FUEL PRE-FILTER	<b>√</b>	✓	<b>√</b>	<b>√</b>		
REPLACE A/C FRESH & RECIRCULATION FILTERS	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
DRAIN SEDIMENT FROM FUEL TANK	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
CLEAN AIR CLEANER ELEMENT	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
COMPLETE 50 POINT INSPECTION FORM; LEAVE PINK COPY WITH CUSTOMER OR IN CAB	✓	✓	✓	✓		
RESET MONITOR PANEL MAINTENANCE COUNTER FOR APPROPRIATE ITEMS	✓	✓	✓	✓		
REPLACE FUEL MAIN FILTER		✓		<b>√</b>		
REPLACE FUEL TANK BREATHER ELEMENT		<b>√</b>		<b>√</b>		
REPLACE HYDRAULIC TANK BREATHER ELEMENT		$\checkmark$		$\checkmark$		
CHANGE FINAL DRIVE OIL		✓		<b>√</b>		
CHANGE HYDRAULIC OIL				<b>√</b>		
REPLACE HYDRAULIC FILTER				<b>√</b>		
REPLACE HST FILTER				$\checkmark$		
REPLACE KCCV FILTER				<b>√</b>		
CLEAN HYDRAULIC TANK STRAINER				<b>√</b>		
FACTORY TRAINED TECHNICIAN LABOR	<b>√</b>	<b>√</b>	1	1		
2 KDPF Exchanges at 4,500 Hrs and 9,000 Hrs.						
2 SCR System Maintenance Services at 4,500 Hrs. a	nd 9,0	000 Hr	s.			

# Komatsu CARE® – Advantage Extended Coverage

- Extended Coverage can provide peace of mind by protecting customers from unplanned expenses that effect cash flow
- Purchasing extended coverage locks-in the cost of covered parts and labor for the coverage period and helps turn these into fixed costs



### **Komatsu Parts Support**

- 24/7/365 to fulfill your parts needs
- 9 parts Distribution Centers strategically located across the U.S. and Canada
- Distributor network of more than 300 locations across U.S. and Canada to serve you
- Online part ordering through Komatsu eParts
- Remanufactured components with same-as-new warranties at a significant cost reduction



### Komatsu Oil and Wear Analysis (KOWA)

- KOWA detects fuel dilution, coolant leaks, and measures wear metals
- Proactively maintain your equipment
- Maximize availability and performance
- Can identify potential problems before they lead to major repairs
- Reduce life cycle cost by extending component life

<sup>\*</sup> Certain exclusions and limitations apply. Refer to the customer certificate for complete program details and eligibility. Komatsu® and Komatsu Care® are registered trademarks of Komatsu Ltd. Copyright 2020 Komatsu America Corp.

# **KOMTRAX EQUIPMENT MONITORING**



KOMTRAX is

on all Komatsu construction products

standard equipment

- KOMTRAX is Komatsu's remote equipment monitoring and management system
- KOMTRAX continuously monitors and records machine health and operational data
- Information such as fuel consumption, utilization, and a detailed history lowering owning and operating cost



- Know when your machines are running or idling and make decisions that will improve your fleet utilization
- Detailed movement records ensure you know when and where your equipment is moved
- Up to date records allow you to know when maintenance is due and help you plan for future maintenance needs





- KOMTRAX data can be accessed virtually anywhere through your computer, the web or your smart phone
- Automatic alerts keep fleet managers up to date on the latest machine notifications





- Knowledge is power make informed decisions to manage your fleet better
- Knowing your idle time and fuel consumption will help maximize your machine efficiency
- Take control of your equipment - any time, anywhere







For construction and compact equipment.

For production and mining class machines.

# **SPECIFICATIONS**



### ENGINE

Model	Komatsu SAA6D125E-7*
Туре	4-cycle, water-cooled, direct injection
Aspiration	Variable geometry
	turbocharged, air-to-air aftercooled
Number of cylinders	6
Bore x stroke	125 mm x 150 mm <b>4.49" x 5.69"</b>
Piston displacement	11.04 ltr <b>674 in<sup>3</sup></b>
Governor	All-speed and mid-range, electronic
Horsepower	
SAE J1995	Gross 199 kW <b>267 HP</b>
ISO 9249 / SAE J1349.	Net 197 kW <b>264 HP</b>
Rated rpm	1900 rpm
Fan drive type	Hydraulic
Lubrication system	
Method	Gear pump, force lubrication
F34	F. II fla

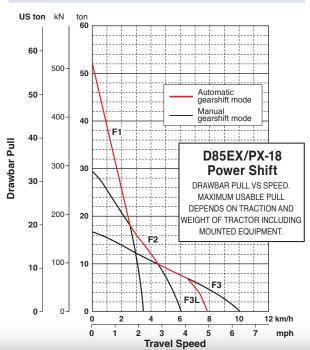
\*\*EPA Tier 4 Final emissions certified



### **TORQFLOW TRANSMISSION**

Komatsu TORQFLOW transmission consists of a water-cooled, 3-element, 1-stage, 1-phase and a planetary gear, multiple-disc clutch transmission which is electronically controlled, hydraulically actuated and force-lubricated for optimum heat dissipation. Shift lock lever and neutral safety switch.

Travel speed	Forward	Reverse
1st	3.3 km/h <b>2.1 mph</b>	4.4 km/h <b>2.7 mph</b>
2nd	6.1 km/h <b>3.8 mph</b>	8.0 km/h <b>5.0 mph</b>
3rd L	7.8 km/h <b>4.8 mph</b>	9.2 km/h <b>5.7 mph</b>
3rd	10.1 km/h <b>6.3 mph</b>	13.0 km/h <b>8.1 mph</b>





### STEERING SYSTEM

Palm Command Control 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 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 a hydraulic pump and motor. Counter-rotation turns are also available. Wet, multiple-disc, pedal-controlled service brakes are spring-actuated and hydraulically released. Gear shift lock lever also applies parking brake.

Minimum turning radius	
D85EX-182.0 m <b>6'</b>	6"
D85PX-182.2 m <b>7</b> '	3"



### UNDERCARRIAGE

Suspension	Oscillating equalizer bar and pivot shaft
Track roller frame	Monocoque, large section,
	durable construction
Rollers and idlers	Lubricated

Track shoes

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

		D85EX-18	D85PX-18
Number of track rollers (each side)		7	8
Type of shoes (standard)(no h	oles)	Single grouser	Single grouser
Number of shoes (each side)		41	45
Grouser height	mm in	72 <b>2.8"</b>	72 <b>2.8"</b>
Shoe width (standard)	mm in	660 <b>26"</b>	760 <b>30"</b>
Ground contact area	cm <sup>2</sup>	45920	59014
(no holes) (ISO 16754)	in <sup>2</sup>	7,118	9,147
Ground pressure (tractor) (no holes) (ISO 16754)	kPa	52.1	41.5
(no noles) (ISO 16754)	kgf/cm <sup>2</sup>	0.53	0.42
	psi	7.55	6.02
Track gauge	mm ft.in	2000 <b>6'7"</b>	2250 <b>7'5"</b>
Length of track on ground	mm <b>ft.in</b>	3050 <b>10'0"</b>	3480 <b>11'5"</b>



### 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. Triple labyrinth protects seals and improves durability.



### SERVICE REFILL CAPACITIES

Fuel tank	124.1 U.S. gal
DEF tank	6.2 U.S. gal
Coolant	17.2 U.S. gal
Engine	10.0 U.S. gal
Damper case 1.6 ltr	0.42 U.S. gal
Torque converter, transmission,	
bevel gear, and steering system 60 ltr	15.8 U.S. gal
Final drive (each side)	
D85EX-1826 ltr	6.9 U.S. gal
D85PX-18 36 ltr	9.5 U.S. gal



### **HYDRAULIC SYSTEM**

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

Hydraulic control units:

All spool valves externally mounted beside the hydraulic tank. Piston type hydraulic pump with capacity (discharge flow) of 331 ltr/min **87.4 U.S. gal/min** at rated engine rpm.

Relief valve setting ...... 22.6 MPa 230 kg/cm² **3,270 psi** Control valves:

Spool control valves for semi-u tilt or straight tilt dozer

	Number of cylinders	
	Straight Tilt Dozer Semi-U Tilt Dozer	Bore
Blade lift	2	100 mm <b>4.0"</b>
Blade tilt	1	150 mm <b>5.9"</b>
Blade angle	-	150 mm <b>5.9"</b>
Ripper lift	2	130 mm <b>5.1"</b>
Pitch angle	52° - 58°	-

Hydraulic oil capacity (refill):69 ltr	18.2 U.S. gal
Ripper equipment (additional volume):	
Multi-shank ripper11 ltr	2.9 U.S. gal



### **DOZER EQUIPMENT**

Blade capacities are based on the SAE recommended practice J1265. Use of high tensile strength steel in moldboard for strengthened blade construction.

	Overall Length W/Rear Box mm ft.in	Blade Capacity m³ yd³	Blade Width x Height mm ft.in	Max. Lift Above Ground mm ft.in	Max. Drop Below Ground mm ft.in	Max. Tilt Adjustment mm ft.in	Weight Dozer equipment kg lb	Ground Pressure* kPa kg/cm² psi
<b>D85EX-18</b> Strengthened Semi-U Tilt Dozer	6514 <b>21' 4"</b>	14.1 <b>18.4</b>	3635 x 2180 11' 11" x 7' 2"	1175 <b>3' 10"</b>	530 <b>1' 9"</b>	735 <b>2' 5"</b>	4143 <b>9130</b>	71.6 / 0.73 / <b>10.39</b>
<b>D85PX-18</b> Straight Tilt Dozer	6514 <b>21' 4"</b>	14.1 <b>18.4</b>	4355 x 2134 <b>14' 4" x 7'</b>	1230 <b>4' 0"</b>	560 <b>1' 10"</b>	500 <b>1' 8"</b>	3561 <b>7851</b>	54.4 / 0.56 / <b>7.90</b>

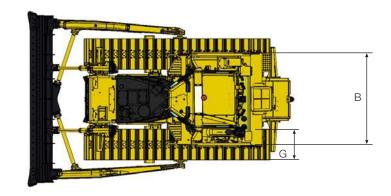
<sup>\*</sup>Ground pressure shows tractor, ROPS cab, full fluids, operator, standard waste handler equipment and applicable blade (EX or PX).

# **SPECIFICATIONS**

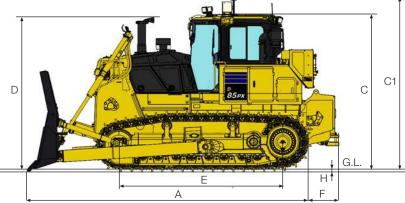


### **DIMENSIONS**

	D85EX-18 Semi-U Dozer with Rear box		D85PX-18 Straight Tilt Dozer with Rear box		
Α	5924 mm	19'5"	5924 mm	19'5"	
В	2000 mm	6'7"	2250 mm	7'5"	
С	3322 mm	10'11"	3322 mm	10'11"	
C1	3760 mm	12'4"	3760 mm	12'4"	
D	3290 mm	10'10"	3290 mm	10'10"	
Е	3050 mm	10'0"	3480 mm	11'5"	
F	590 mm	1'11"	590 mm	1'11"	
G	660 mm	2'2"	760 mm	2'6"	
Н	72 mm	2.8"	72 mm	2.8"	
Ground clearance					







Dimension with straight tilt dozer (D85PX-18) single grouser shoe.



### **OPERATING WEIGHT**

### Tractor weight:

Including ROPS cab, rated capacity of lubricant, hydraulic control unit, coolant, full fuel tank, operator, and standard equipment. 30" no holes (PX)

D85EX-18	. 24390 kg	53,770 lb
D85PX-18	24993 kg	55,100 lb

### Operating weight:

Including Semi-U (EX) or straight tilt dozer (PX) 30" holes, rear box, rear striker bars, standard waste handler equipment, ROPS cab, rated capacity of lubricant, hydraulic control unit, coolant, and full fuel tank.

D85EX-18	31760 kg <b>70,017 lk</b>
D85PX-18	31769 kg <b>70,038 lk</b>

# **NOTES**



### STANDARD EQUIPMENT FOR BASE MACHINE\*

- 2 piece radiator door
- Air cleaner, double element with dust indicator
- Auto idle shutdown function
- Backup alarm
- Batteries, 200 Ah/2 x 12V
- Battery disconnect switch
- Blade lift cylinders
- Color monitor, LCD
- Decelerator pedal
- Engine hood
- Engine intake centrifugal precleaner
- Engine, gull-wing side covers
- Engine shutdown secondary switch
- Exhaust pipe with raincap
- Fenders
- Front pull hook
- High mount foot rests
- Horn, warning
- Hydraulics for rear attachment
- KOMTRAX® Level 5
- Komatsu Diesel Particulate Filter (KDPF)
- Variable Geometry Turbocharger (VGT)
- Locks, filler caps and covers
- Oil pressure check ports for power train
- Operator ID function
- PM service connector

- Radiator mask, heavy-duty, hinged, perorated
- Radiator reserve tank
- Rear cover
- ROPS cab\*\*
- 75 dB operator ear noise level
- Air conditioner
- Cab accessories
  - 12V power supply (2 ports)
- Cup holder
- Rearview mirror
- Rear view monitoring (1 camera) AM/FM Radio w/remote AUX plug
- (3.5 mm) ■ Work lights
- 2 front, cab mounted
- 1 rear, left fender mounted
- 2 rear, cab mounted
- 1 ripper point (EX only)
- Seat, air suspension, fabric, heated low back, rotates 12.5° to right, headrest
- Seat belt, 76 mm 3", retractable
- Seat belt indicator
- Sealed electrical connectors
- Single tilt, manual pitch
- Starting motor, 11.0 kW/24V
- Steering system:
- Hydrostatic Steering System (HSS)
- Torque converter

- Track roller guards, center and end sections
- Track shoe assembly
  - Heavy-Duty sealed and lubricated track
  - 660 mm **26"** extreme service single grouser shoe (EX)
  - 910 mm **36"** moderate service single grouser shoe (PX)
- Transmission with auto/manual shift modes
- Underguards, heavy duty
- Hinged belly pan
- Transmission
- Water separator
- Wide core cooling package
- Dozer assembly and rear mounted equipment are not included in base machine standard equipment
- \*\* Cab meets OSHA/MSHA ROPS and FOPS Level 2 standards (ROPS standards ISO 3471, SAE J/ISO 3471; FOPS standards ISO 3449)



### STANDARD WASTE HANDLER PACKAGE EQUIPMENT

- Trash rack
- Rear attachment (with striker bars)counterweight (PX) 1682 kg 3,708 lb
- counterweight (EX) 2000 kg 4,409 lb
- rear box 1883 kg **4,151 lb**
- Deflector bars
- Front striker bars Rear striker bars
- 140 Amp alternator/24 V

- Engine air cleaner
- Cab air cleaner
- Tank guards
- Roof mounted AC
- Engine thermal wraps
- Relocated oil cooler
- Additional work lights
- 4 cylinder mounted LED lights with guard
- Additional perforations
- Auto reversing fan
- Powered belly pan winch
- Camera extension
- 30" shoes (PX)
- Beacon lamp
- Metal water separator bowl
- Final drive seal guards



### **OPTIONAL EQUIPMENT**

- Alternator precleaner kit
- Powered cab air precleaner
- Track shoe hole

AESS923-01

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AD05(Electronic View Only)

05/20 (EV-1)



Note: All comparisons and claims of improved performance made herein are made with respect to the prior Komatsu model unless otherwise specifically stated.

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