

# KOMATSU

**D65EX-18**  
**D65EXi-18**  
**D65PX-18**  
**D65PXi-18**  
**D65WX-18**  
Tier 4 Final Engine

**CRAWLER DOZER**



**intelligent** / **2.0**  
**MACHINE CONTROL**

Photos may include optional equipment.

#### NET HORSEPOWER

217 HP @ 1950 rpm  
162 kW @ 1950 rpm

#### OPERATING WEIGHT

**SIGMADOZER® / Semi-u**  
D65EX-18: **46,892 lb** 21270 kg  
D65EXi-18: **46,892 lb** 21270 kg  
D65WX-18: **50,618 lb** 22960 kg

#### Straight Tilt Dozer

D65PX-18: **50,331 lb** 22830 kg  
D65PXi-18: **50,331 lb** 22830 kg

#### BLADE CAPACITY

**SIGMADOZER® / Semi-u**  
D65EX-18: **7.3 yd<sup>3</sup>** 5.6 m<sup>3</sup>  
D65EXi-18: **7.3 yd<sup>3</sup>** 5.6 m<sup>3</sup>  
D65WX-18: **7.7 yd<sup>3</sup>** 5.9 m<sup>3</sup>

#### Straight Tilt Dozer

D65PX-18: **4.8 yd<sup>3</sup>** 3.7 m<sup>3</sup>  
D65PXi-18: **4.8 yd<sup>3</sup>** 3.7 m<sup>3</sup>

D65 / D65i

# WALK-AROUND

## Next-generation intelligence

Enhanced machine efficiency for work ranging from heavy dozing to finish grading with intelligent Machine Control technologies.

### Lift layer control

Achieves consistent lift layers with automatic control.

### Quick surface creation

Creates a temporary design surface with the press of a button.

### Proactive dozing control

Cut and carry work performed with the smoothness of an experienced operator.

### Tilt steering control

Reduces need for constant operator corrections toward target point.

### Two antennas to support multiple global navigation satellite system (GNSS)

Improved satellite signal stability and reception offer more reliability and accuracy.

### Factory installed information and communication technology (ICT) system standard



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D65EX/EXi/PX/PXi/WX-18

## INNOVATIVE. INTEGRATED. INTELLIGENT.



**Standard intelligent Machine Control 2.0**  
Standard factory-installed integrated 3D GNSS intelligent machine control system.

**Improved Machine Control**  
Uses data from previous pass to plan the next pass. Helps new operators perform like experienced operators.

### Factory Installed Machine Control Components

Machine control components are factory installed and designed as an integral part of the base machine for improved durability.

### Komatsu Quality

Machine control components and system validated to Komatsu's rigorous quality & durability standards.

### Industry Standard Compatibility

Machine control system makes use of common industry design data file norms and supports typical base station communication.

### Simple Operator Interface

Simple touch screen control box with multi-color customizable display.

### 3D GNSS Machine Control Standard

All on-machine components standard including control box, GNSS receiver/radio, GNSS antenna, and enhanced inertial measuring unit sensor.

### Finish Grade Performance

Enhanced sensor package and intelligent logic provides for finish grade accuracy in an integrated system without traditional blade mounted sensors.

### Enhanced Inertial Measuring Unit (IMU+)

Chassis mounted enhanced inertial measuring unit (IMU+) and intelligent logic provides for finish grade accuracy without blade mounted sensors.

### Dual Cab Top GNSS Antennas

Load control intelligence controls blade elevation to improve productivity and minimize track slip by adjusting blade load. 1.0' from grade or 0.1' from grade – you can run in auto mode.

### Intelligent Dozing Mode Settings

Operators are able to select between 4 distinct machine control operating modes to optimize performance to the application whether cutting, spreading, or other.

### Operator Selectable Load Settings

Machine control load settings can be adjusted between presets to tailor response to material conditions.

**SAA6D114E-6 diesel engine** provides excellent fuel economy. This engine is EPA Tier 4 Final emissions certified.

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

**Includes a wide core A/C condenser** and bowl-type precleaner on the cab air intake for improved performance in high debris applications.

**Komatsu Diesel Particulate Filter (KDPF) and Selective Catalytic Reduction (SCR) systems** reduce particulate matter and NOx, while providing automatic regeneration that does not interfere with daily operation.

**Auto Engine Idle** reduces machine to low idle during times of inactivity.

### Large color monitor:

- Easy-to-read and use large seven inch high-resolution multi-color monitor
- Ecology guidance
- On-board diagnostics

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

### Integrated ROPS cab features include:

- Large, quiet, and pressurized cab meets ISO 3471 standard
- Improved visibility with integrated ROPS structure
- Heated air-suspension seat with high capacity
- Aux plug for audio player and two 12-volt connections
- New LED worklights
- New Bluetooth/USB compatible radio

**Torqueflow transmission with 4 shift modes** improves fuel economy and productivity:

- Auto shift, torque converter lockup ON
- Auto shift, torque converter lockup OFF
- Manual shift, auto-downshift ON
- Manual shift, auto-downshift OFF

The selected mode remains saved in the monitor at engine key-off/key-on.

**Hydrostatic Steering System (HSS)** has 25% more power for improved turning and counter-rotation.

### Maintenance Free Batteries

**Battery Disconnect Switch with lockout/tagout**  
Eliminates power draw during storage.

# INTELLIGENT MACHINE CONTROL



## intelligent Machine Control (iMC) 2.0

D65EXi/PXi-18 utilizes intelligent Machine Control 2.0 a GNSS\* system that automatically controls the blade to 3-dimensional design data. Machine Control 2.0 utilizes the industry's first Proactive Dozing Control logic, lift layer control, quick surface creation, and tilt steering control. A two-antenna system supporting multiple GNSS, which provides less downtime and more work time. These added features make for improved production and efficiency.

\*GNSS (Global Navigation Satellite System): General term for satellite positioning systems such as GPS, GLONASS, etc.

## Quick surface creation

Operators can create a temporary design surface with the press of a button. Designed to simplify in-field surface creation within the control box, it allows for more utilization of iMC 2.0.



## Tilt steering control

The blade automatically tilts under a heavy load to maintain a straight line of travel, optimizing productivity throughout each pass and reducing operator fatigue.



## Auto/manual switch

A conveniently located on/off switch giving the operator control of when iMC 2.0 is active.



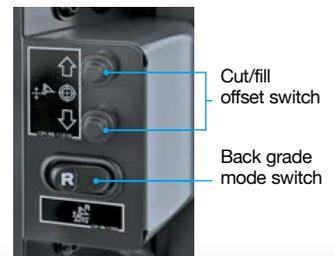
## Function switches

### Cut/fill offset switch

The target surface height can be quickly adjusted by pressing the offset switch (button).

### Back grade mode switch

Allows for automatic control during back grading.

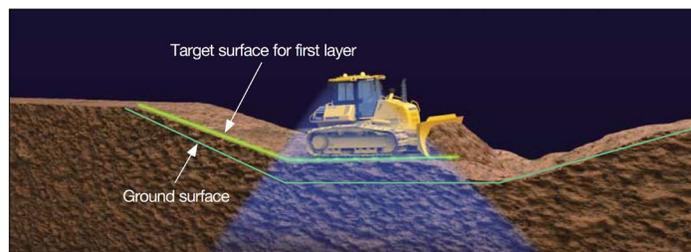


D65EXi/PXi-18



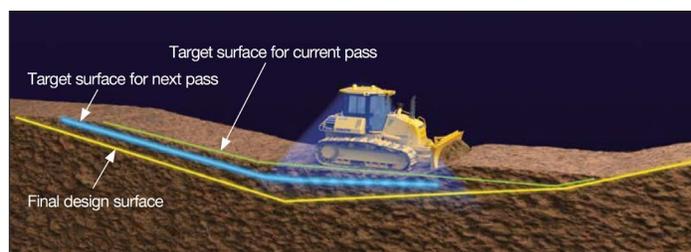
## Lift layer control

Optimize earthwork productivity and maintain compaction quality by automatically controlling lifts to the desired heights with respect to the mapped terrain. Excess fill is eliminated as automatic blade control will follow finish surface once lifts have reached finish grade.



## Proactive dozing control

Operators can utilize automatic blade control from rough grading to finish grading work. Proactive dozing control understands the terrain in the path of each cut, maximizes the blade load throughout the pass, regardless of the terrain ahead, and achieves productivity similar to that of an experienced operator.



## Two antennas supporting multiple GNSS

Work accuracy is improved by two antennas supporting the multiple GNSS.

## Improvement of blade accuracy on slope

Blade accuracy is maintained during slope work.

## Reliability of blade accuracy

Galileo, QZSS, and BeiDou can be used in addition to GPS and GLONASS. Since the satellite capture rate is improved, the machine can be used in any time zone.



## Control box

- 1 L.H. LED indicator 2 Upper LED indicator
- 3 R.H. LED indicator
- 4 Power ON/OFF and menu switch (Press: Display the main menu / Hold down: Turn ON/OFF the power supply)
- 5 Zoom in switch 6 Zoom out switch
- 7 Toggle main view switch (Press: Switch the display of main window / Hold down: Adjust the brightness and sound volume)
- 8 Left window 9 Main window 10 Lower window
- 11 Right window 12 Speed control ON/OFF
- 13 Take a topo shot 14 Simple grading ON/OFF
- 15 Cut depth selection 16 Smooth start ON/OFF
- 17 Tilt steering ON/OFF 18 Toggle As-built mode change view to [none], [cut fill], [pass counts]
- 19 Quick surface creation (Create slope plane surface)
- 20 Lift layer control (Create As-built design surface)
- 21 Elevation control key 22 Slope control key
- 23 GNSS status 24 Radio status 25 Cut/Fill offset
- 26 Cut/Fill reading 27 Tilt of blade
- 28 Design cross-slope 29 Type of control
- 30 AUTO indicator 31 Back Grade mode indicator
- 32 Lift indicator

\*This is a typical main screen of control box.

# INTELLIGENT MACHINE CONTROL

## Automatic dozing from grass to grade

### Benefits of iMC 2.0



#### Improved finish grading

**Applications:** Finish grading

- Analyzes terrain and 3D model to proactively position blade in hard-to-grade areas
- Helps prevent overcutting at finish grade



#### Lift layer control

**Applications:** Lifting, compaction quality control

- Maintain precise lift thickness
- Automatically spreads lift from existing terrain and helps prevent overfill
- Up to double the production of prior model



#### Proactive dozing control

**Applications:** Stripping topsoil, high-production dozing

- Uses data from previous pass to plan the next pass
- Automatically cut/strip from existing terrain
- Helps new operators perform like experienced ones



#### Tilt steering control

- Automatically tilts blade to maintain straight travel while rough dozing
- Maintains consistent power to the ground and track

### Use automation throughout the entire process

Bidding

Stripping topsoil ①

Mass excavation ②

Finish grading ③



\* Compared to previous iMC control methods

\*\* Compared to traditional methods

# PERFORMANCE FEATURES



## KOMATSU NEW ENGINE TECHNOLOGIES

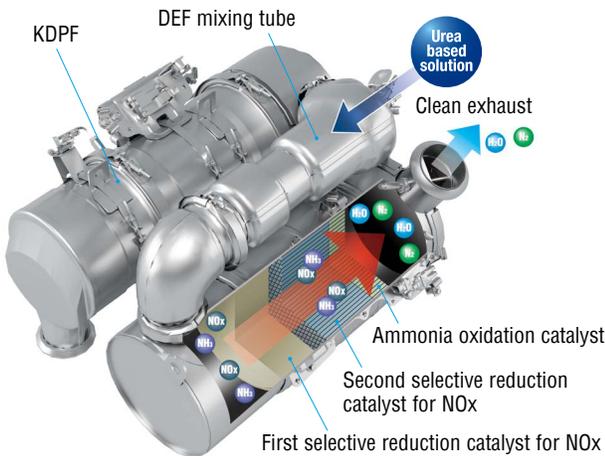
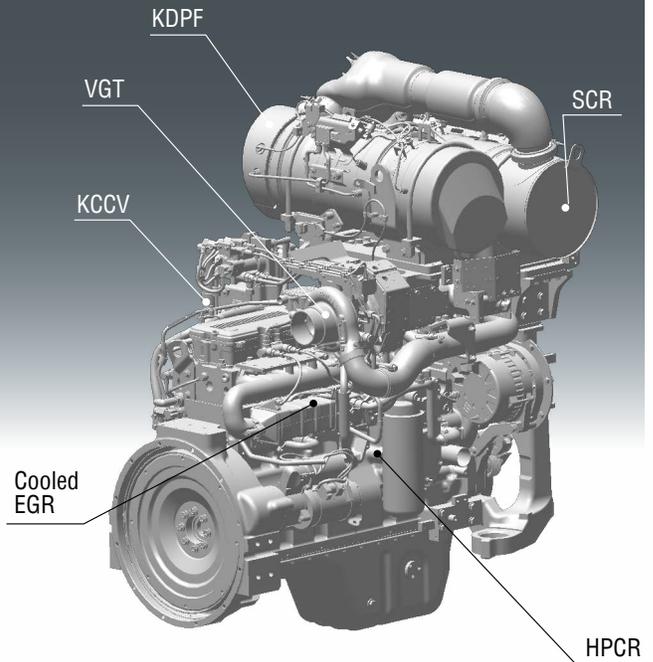
### New Tier 4 Final Engine

The Komatsu SAA6D114E-6 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 reduces nitrogen oxides (NOx) by more than 80% when compared to Tier 4 interim 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 applications.

### Technologies Applied to New Engine

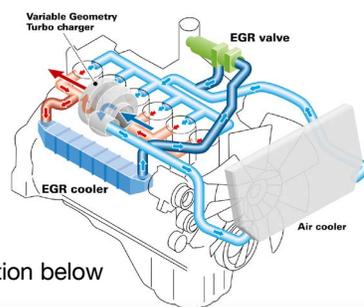
#### Heavy-duty aftertreatment system

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 decomposing 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 achieves a dynamic reduction of NOx, while helping reduce fuel consumption below



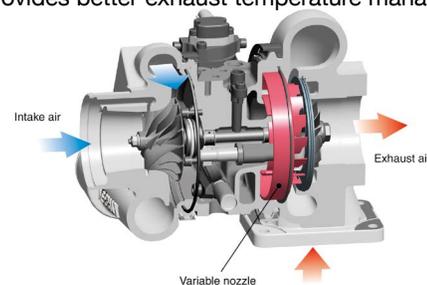
Tier 4 Interim levels.

#### 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 necessary information to the operator. 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.



# PERFORMANCE FEATURES

## Komatsu Auto Idle Shutdown

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



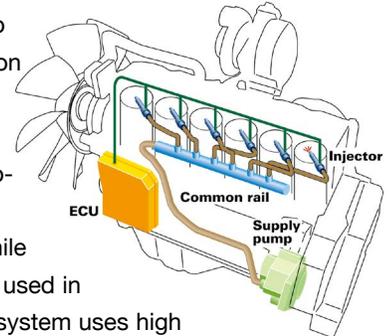
## Secondary Engine Shutdown Switch

The secondary engine shutdown switch is located on the side of the front console.



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

The system is designed to achieve an optimal injection of high-pressure fuel by means of computerized control, providing close-to-complete combustion to reduce PM emissions. While this technology is already used 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.



## Hydraulically Driven Cooling Fan

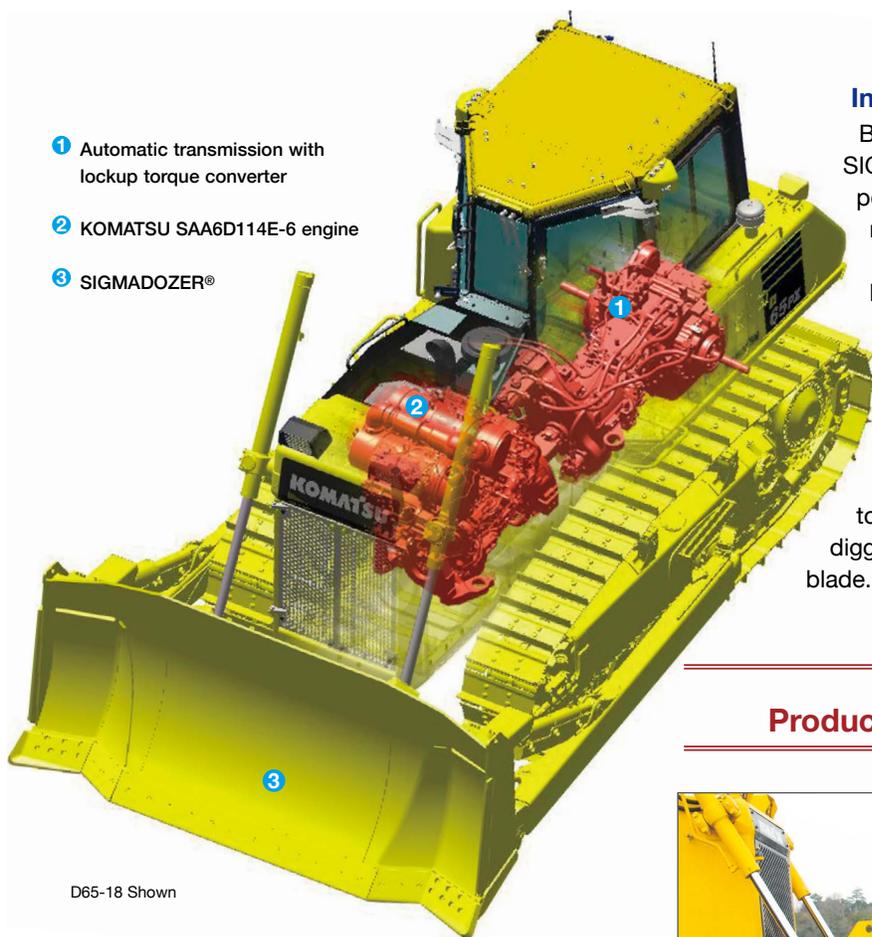
The engine cooling fan speed is electronically controlled. The fan speed depends on engine coolant, powertrain oil and hydraulic oil temperatures. Higher temperatures create higher fan speed. The system increases fuel efficiency, reduces the operating noise levels and requires less horsepower than a belt driven fan. Operators can manually reverse the fan for periodic cleaning.



# PRODUCTIVITY & FUEL ECONOMY FEATURES



- 1 Automatic transmission with lockup torque converter
- 2 KOMATSU SAA6D114E-6 engine
- 3 SIGMADOZER®



D65-18 Shown

## Innovative SIGMADOZER® (optional)

Based on a completely new design, 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 and simultaneously reduces sideway spillage. Reduced digging resistance produces smoother flow of material, enabling the dozing of larger quantities of material 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 next generation of dozer blades.

**Production increased by 15%**

Compared to conventional Semi-U blade



SIGMADOZER®



Semi-U blade

## Innovative Fuel Efficient Bulldozer

The D65EX/EXi/PX/PXi/WX-18 achieves high levels of productivity with the SIGMADOZER® blade, automatic transmission with lockup torque converter and Tier 4 Final engine. The SIGMADOZER® blade, based on a completely new design theory, dramatically increases production. Also, this bulldozer significantly improves fuel efficiency compared with our conventional model.

SIGMADOZER®



Automatic transmission with lockup torque converter



Tier 4 Final engine



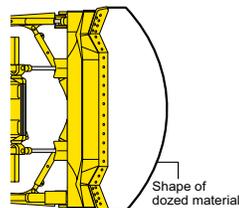
**FUEL EFFICIENCY:**  
**30% increase**

Compared to machine with Semi-U blade and manual shift transmission

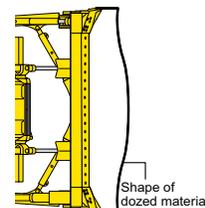
Production Increased By

**15%**

(compared with a conventional Semi-U blade model)



SIGMADOZER®

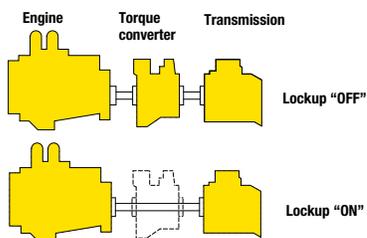


Semi-U blade

# PRODUCTIVITY & FUEL ECONOMY FEATURES

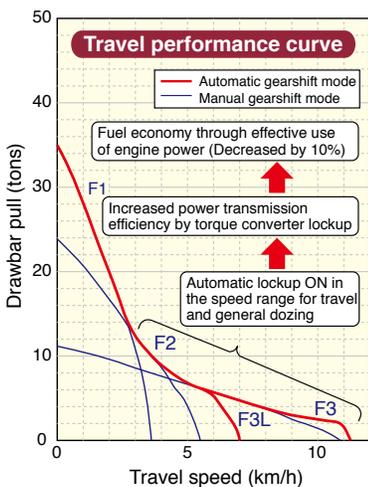
## Automatic Transmission with Lockup Torque Converter

The automatic gear shift transmission and lockup torque converter creates a sharp reduction in fuel consumption and greater power train efficiency. Travel speed is automatically selected depending on working conditions and load. This allows the machine to operate at maximum efficiency. Operators can select manual shift mode with the flip of a switch.



## Fuel consumption reduced by 10%

Compared to machine with manual shift transmission



Lockup clutch of torque converter is automatically engaged 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.

## Selectable Working Mode

Working Mode P aims for powerful operation and maximum production. E Mode is for general dozing applications with adequate speed and power while saving fuel. The monitor panel allows the operator to switch the working mode with ease depending on the work at hand.

### P Mode (Power mode)

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

### E Mode (Economy mode)

With E mode, the engine generates the power needed without delivering unnecessary power. The mode allows for fuel efficient operation and is best matched to work that may cause shoe slip and work not requiring maximum power, such as downhill dozing, leveling and light load work.

## Automatic/Manual Gearshift Modes

Operators can select from two automatic and two manual gearshift modes to suit the work at hand. Change mode by simply pressing a monitor button. The selected shift mode remains saved at engine ignition key-off/key-on.

### Auto shift torque converter lockup OFF

Newly added mode for heavy dozing. The transmission quickly upshifts and downshifts automatically to maximize productivity under the heaviest loads.

### Auto shift torque converter lockup ON

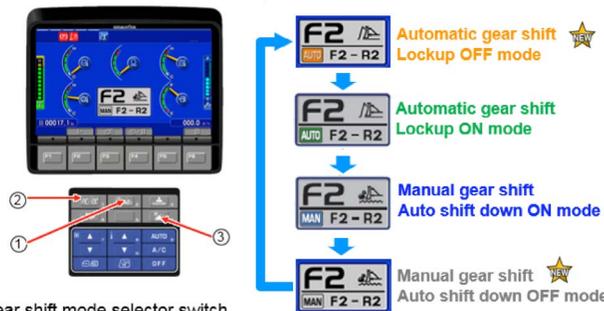
General dozing mode to optimize fuel economy, the transmission upshifts and downshifts automatically based on load. Under certain conditions, the torque converter lockup clutch actuates to create a direct connection between the engine and tracks.

### Manual shift auto-downshift ON

In this heavy dozing and ripping mode the transmission automatically shifts down to avoid overheating, but does not shift up when the load is off.

### Manual shift auto-downshift OFF

When finish grading, this mode causes the transmission to remain in the selected travel gear until another gear is selected. Smooth and precise grading work can be achieved.

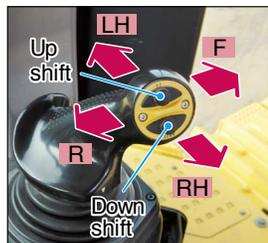


- ① Gear shift mode selector switch
- ② Working mode selector switch (P mode ↔ E mode)
- ③ Reverse slow mode selector switch

# CONTROL FEATURES

## Palm Command Electronic Controlled Travel Control Joystick

The palm command travel joystick allows the operator to adopt a relaxed posture and offers superb fine control without operator fatigue. Transmission gear shifting is simplified with thumb push buttons.



## Travel Speed Preset Function

Forward and reverse travel speeds can be preset when the travel joystick is placed in neutral. Available F-R preset patterns are shown in the diagram below. The transmission automatically shifts to the preset gear when the travel lever moves to the Forward or Reverse position, thereby avoiding repeated manual upshifts and operator fatigue.



Automatic gearshift mode	Manual gearshift mode
<b>F1-R1 MODE</b> Press DOWN switch ↑ ↓ Press UP switch	<b>F1-R1 MODE</b> Press DOWN switch ↑ ↓ Press UP switch
<b>F1-R2 MODE</b> Press DOWN switch ↑ ↓ Press UP switch	<b>F1-R2 MODE</b> Press DOWN switch ↑ ↓ Press UP switch
<b>F2-R1 MODE</b> Press DOWN switch ↑ ↓ Press UP switch	<b>F2-R1 MODE</b> Press DOWN switch ↑ ↓ Press UP switch
<b>F2-R2 MODE</b> Press DOWN switch ↑ ↓ Press UP switch	<b>F2-R2 MODE</b> Press DOWN switch ↑ ↓ Press UP switch
<b>F2-R3L MODE</b> Press DOWN switch ↑ ↓ Press UP switch	<b>F2-R3 MODE</b>
<b>F3L-R3L MODE</b>	

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

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

## Enhanced Hydrostatic Steering System (HSS) -Smooth, Powerful Turning

Engine power is transmitted to both tracks as the dozer turns. Steering power has been increased 25% by a larger HSS motor, increased hydraulic pump flow, and increased engine horsepower while steering. The result is quicker, tighter turns and improved counter-rotation.



# WORKING ENVIRONMENT



D65-18 Shown

## Integrated ROPS Cab

The D65EX/EXi/PX/PXi/WX-18 cab meets:

ROPS standard ISO 3471:2008

FOPS Level 2 standard ISO 3449:2005

High rigidity and superb sealing reduces noise and vibration for the operator. The pressurized, climate controlled cab helps provide the operator with a fresh and clean working environment. Also, operators enjoy more side visibility because additional external ROPS posts are not required.



## Rearview Monitoring System

The operator can view the rear of the machine on a color monitor. The camera can be synchronized with the travel lever to display rearview when in reverse.



## Comfortable Ride with Heated Seat

The operator seat features an air-suspension, lumbar support, a tilt adjust function and electric heater. The seat easily adjusts to fit operator shape and working conditions. Also the heated seat allows operators to work comfortably in the winter.

## LED Lights

LED lights are equipped on of the machine. The visibility under low light environment is improved, and work at night with ease.



## Multifunction Audio

Has functions of AM/FM radio and AUX, USB and Bluetooth® wireless technology enabled products can be connected.



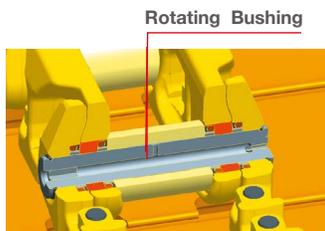
D65EX/EXi/PX/PXi/WX-18

# RELIABILITY & MAINTENANCE FEATURES



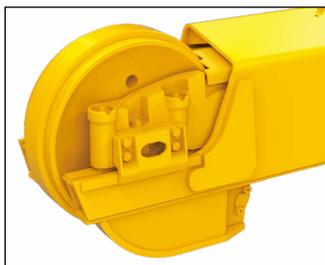
## Parallel Link Undercarriage System (PLUS)

Komatsu's innovative Parallel Link Undercarriage System features a rotary bushing that demonstrates high durability in any working condition. Allowing the bushing to rotate virtually eliminates bushing wear, resulting in doubled service life of the undercarriage when compared with the conventional undercarriage. In addition, wear limits of the link and carrier roller are increased to balance with the extended service life of the bushing.



## Self-adjusting Idler Support

The self-adjusting idler support provides constant and even tension on idler guide plates reducing noise and vibration and increasing undercarriage life.



## Oil Pressure Checking Ports

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

## Easy Sampling

New sampling ports for engine, hydraulic, and power line oil.

## Wide Core Cooling System

In addition to improved engine compartment sealing, a wide core cooling system is standard. 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.



## Equalizer Bar Side Pins

Remote grease nipple located on the outside of track-frame, so you can grease equalizer bar side pins easily.



## Multi-Monitor with Troubleshooting Function to Minimize Down Time

Various meters, gauges and warning functions are centrally arranged on the multi-monitor. The monitor simplifies start-up inspection and promptly warns the operator with a lamp and buzzer if any abnormalities should occur. In addition, countermeasures are indicated in four levels to help prevent major problems. Replacement times for oil and filters are also indicated.



## Maintenance

When the machine reaches the replacement interval for oil and filters, the monitor panel will display lights to inform the operator.



## Battery Disconnect Switch with Lockout

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



## Tie-offs

Anchor points of tie-off are installed. They are used to connect the safety belts of workers for maintenance and cleaning work.



# KOMATSU PARTS & SERVICE SUPPORT



## KOMATSU CARE®

### Program Includes:

\*The D65EX/EXi/PX/PXi/WX-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

### 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 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

## KOMATSU CARE D65EX/EXi/PX/PXi/WX-18

Interval PM	500	1000	1500	2000
KOWA SAMPLING – (Engine, Hydraulics, L & R Final Drives)	✓	✓	✓	✓
LUBRICATE MACHINE	✓	✓	✓	✓
CHANGE ENGINE OIL	✓	✓	✓	✓
REPLACE ENGINE OIL FILTER	✓	✓	✓	✓
REPLACE FUEL PRE-FILTER	✓	✓	✓	✓
CLEAN FUEL STRAINER	✓	✓	✓	✓
REPLACE POWER TRAIN OIL FILTER	✓	✓	✓	✓
DRAIN FUEL TANK SEDIMENT	✓	✓	✓	✓
REPLACE A/C FRESH & RECIRCULATION FILTERS	✓	✓	✓	✓
CLEAN AIR CLEANER ELEMENT	✓	✓	✓	✓
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		✓		✓
CHANGE POWER TRAIN OIL		✓		✓
CLEAN POWER TRAIN STRAINER		✓		✓
CLEAN SCAVENGING PUMP STRAINER		✓		✓
CHECK DAMPER CASE OIL LEVEL		✓		✓
CHANGE FINAL DRIVE OIL		✓		✓
REPLACE HYDRAULIC TANK BREATHER ELEMENT		✓		✓
REPLACE FUEL TANK BREATHER ELEMENT		✓		✓
REPLACE DEF TANK BREATHER ELEMENT		✓		✓
CLEAN POWER TRAIN CASE BREATHER		✓		✓
CHANGE HYDRAULIC OIL				✓
REPLACE HYDRAULIC FILTER				✓
CLEAN HYDRAULIC TANK STRAINER				✓
CHANGE DAMPER CASE OIL				✓
REPLACE KCCV FILTER				✓
REPLACE DEF FILTER				✓
FACTORY TRAINED TECHNICIAN LABOR	✓	✓	✓	✓

### 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



\* 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 2021 Komatsu America Corp.

D65EX/EXi/PX/PXi/WX-18

# KOMTRAX EQUIPMENT MONITORING



GET THE WHOLE STORY WITH  
**KOMTRAX**<sup>®</sup>

✓ **WHAT**

- 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**

✓ **WHEN**

- 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

✓ **WHERE**

- 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

✓ **WHO**

- KOMTRAX is **standard** equipment on all Komatsu construction products



✓ **WHY**

- 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 SAA6D114E-6\*  
 Type..... 4-cycle, water-cooled, direct injection  
 Aspiration.....Variable geometry turbocharged, air-to-air aftercooled  
 Number of cylinders..... 6  
 Bore x stroke..... 114 mm x 144.5 mm **4.49" x 5.69"**  
 Piston displacement ..... 8.85 ltr **540 in<sup>3</sup>**  
 Governor.....All-speed and mid-range, electronic  
 Horsepower  
 SAE J1995..... Gross 164 kW **220 HP**  
 ISO 9249 / SAE J1349.....Net 162 kW **217 HP**  
 Rated rpm..... 1950 rpm  
 Fan drive type ..... Variable speed hydraulic  
 Lubrication system  
 Method ..... Gear pump, force lubrication  
 Filter..... Full-flow

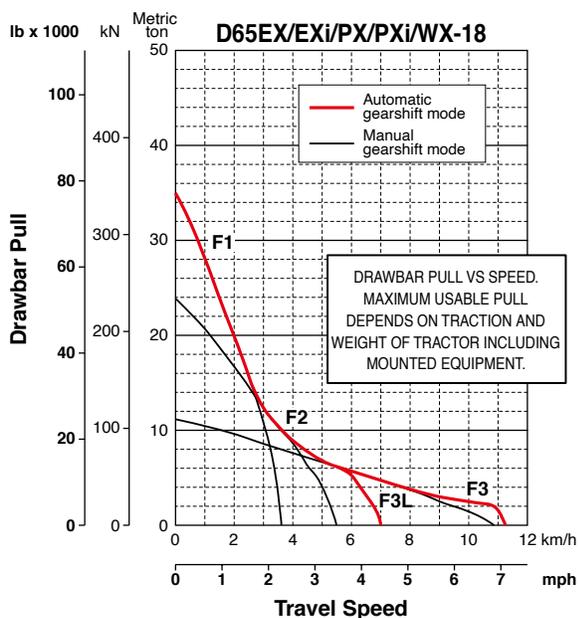
\*\*EPA Tier 4 Final emissions certified



## TORQFLOW TRANSMISSION

Komatsu TORQFLOW transmission consists of a water-cooled, 3-element, 1-stage, 2-phase, torque converter with lockup clutch, 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
<b>1st</b>	3.7 km/h <b>2.3 mph</b>	4.5 km/h <b>2.8 mph</b>
<b>2nd</b>	5.6 km/h <b>3.5 mph</b>	6.7 km/h <b>4.2 mph</b>
<b>3rd L</b>	7.3 km/h <b>4.5 mph</b>	8.7 km/h <b>5.4 mph</b>
<b>3rd</b>	11.3 km/h <b>7.0 mph</b>	13.6 km/h <b>8.5 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 the left for a left turns, tilt it right for right turns.

Hydrostatic Steering System (HSS) power has been increased 25% by a larger HSS motor, greater hydraulic pump flow, and more engine power while steering. The result is more powerful turns and quicker counter-rotation. Wet, multiple-disc, pedal-controlled service brakes are spring-actuated and hydraulically released. Gear shift lock lever also applies parking brake.

Minimum turning radius

D65EX-18.....	1.9 m <b>6'3"</b>
D65EXi-18.....	1.9 m <b>6'3"</b>
D65PX-18.....	2.2 m <b>7'3"</b>
D65PXi-18.....	2.2 m <b>7'3"</b>
D65WX-18.....	2.1 m <b>6'11"</b>



## UNDERCARRIAGE

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

Rollers and idlers ..... Lubricated  
 Track shoes

Parallel Link Undercarriage System (PLUS) with lubricated rotating bushings for extended system wear life and lower maintenance costs. Track tension is easily adjusted with a grease gun.

### Tractor for outside mounted blade (Straight Tilt, Semi-U, SIGMADOZER®)\*

	D65EX/EXi-18	D65PX/PXi-18	D65WX-18
Number of track rollers (each side)	7	8	7
Type of shoes (standard)	MS PLUS	MS PLUS	MS PLUS
Number of shoes (each side)	42	45	42
Grouser height	mm in 65 <b>2.6"</b>	65 <b>2.6"</b>	65 <b>2.6"</b>
Shoe width (standard)	mm in 610 <b>24"</b>	915 <b>36"</b>	760 <b>30"</b>
Ground contact area (ISO 16754)	cm <sup>2</sup> 40910 in <sup>2</sup> <b>6,341</b>	66946 <b>10,377</b>	50969 <b>7,900</b>
Ground pressure (tractor) (ISO 16754)	kPa 44.1 kgf/cm <sup>2</sup> 0.45 psi <b>6.4</b>	29.6 0.3 <b>4.29</b>	38.4 0.39 <b>5.57</b>
Track gauge	mm 1880 <b>6'2"</b> ft.in	2050 <b>6'9"</b>	2050 <b>6'9"</b>
Length of track on ground	mm 2970 <b>9'9"</b> ft.in	3275 <b>10'9"</b>	2970 <b>9'9"</b>

### Tractor with inside mounted PAT blade (requires Waste Package)\*

	D65PX-18
Number of track rollers (each side)	8
Type of shoes (standard)	ES PLUS clipped
Number of shoes (each side)	45
Grouser height	mm in 65 <b>2.6"</b>
Shoe width (standard)	mm in 760 <b>30"</b>
Ground contact area (ISO 16754)	cm <sup>2</sup> 55605 in <sup>2</sup> <b>8,619</b>
Ground pressure (tractor) (ISO 16754)	kPa 38 kgf/cm <sup>2</sup> 0.39 psi <b>5.51</b>
Track gauge	mm ft.in 2230 <b>7'4"</b>
Length of track on ground	mm ft.in 3275 <b>10'9"</b>

\*See page 17 for tractor/blade combinations.

MS: Moderate Service shoe, ES: Extreme Service shoe, Clipped: Clipped grouser

D65EX/EXi/PX/PXi/WX-18



## FINAL DRIVES

Double-reduction planetary gear final drives increase drawbar pull and reduce stresses for longer life. Segmented sprocket teeth are bolt-on for easy replacement. Triple labyrinth housing protects the final drive seals.



## SERVICE REFILL CAPACITIES

Fuel tank .....	415 ltr	<b>109.6 U.S. gal</b>
DEF tank .....	23.5 ltr	<b>6.2 U.S. gal</b>
Coolant .....	49 ltr	<b>12.9 U.S. gal</b>
Engine.....	30.5 ltr	<b>8.1 U.S. gal</b>
Torque converter, transmission, bevel gear, and steering system .....	48 ltr	<b>12.7 U.S. gal</b>
Final drive (each side).....	27 ltr	<b>7.1 U.S. gal</b>



## 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 248 ltr/min **65.5 U.S. gal/min** at rated engine rpm.

Relief valve setting ..... 27.9 MPa 285 kg/cm<sup>2</sup> **4,050 psi**

Control valves:

Spool control valves for SIGMADOZER®, Semi-U, or straight tilt dozer

- Positions: Blade lift ..... Raise, hold, lower, and float
- Blade tilt ..... Right, hold, and left
- Rear attachment ..... Raise, hold, and lower

Spool control valves for Power Angle Tilt dozer

- Positions: Blade lift ..... Raise, hold, lower, and float
- Blade tilt ..... Right, hold, and left
- Blade angle ..... Right, hold, and left
- Rear attachment ..... Raise, hold, and lower

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

	Number of cylinders	Bore
		SIGMADOZER® Straight Tilt Dozer
Blade lift	2	85 mm <b>3.3"</b>
Blade tilt	1	125 mm <b>4.9"</b>
Blade angle	2	N/A
Ripper lift	1	125 mm <b>4.9"</b>
Pitch angle	1	39° - 53°



## DOZER EQUIPMENT

Blade capacities per SAE J1265. Moldboard constructed from high tensile abrasion resistant steel.

	Overall Length With Dozer mm ft.in	Blade Capacity m <sup>3</sup> yd <sup>3</sup>	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** ISO 16754 kPa kg/cm <sup>2</sup> psi
<b>D65EX-18</b>	5490	5.61	3410 x 1425	1135	500	870	2390	50.0/0.51/7.25
SIGMADOZER®	<b>18'0"</b>	<b>7.34</b>	<b>11'2" x 4'8"</b>	<b>3'9"</b>	<b>1'8"</b>	<b>2'10"</b>	<b>5,260</b>	
<b>D65EX-18</b>	5330	5.61	3470 x 1425	1105	430	870	2375	50.0/0.51/7.25
Semi-U Dozer	<b>17'6"</b>	<b>7.34</b>	<b>11'5" x 4'8"</b>	<b>3'8"</b>	<b>1'5"</b>	<b>2'10"</b>	<b>5,236</b>	
<b>D65EXi-18</b>	5490	5.61	3410 x 1425	1135	500	870	2390	50.0/0.51/7.25
SIGMADOZER®	<b>18'0"</b>	<b>7.34</b>	<b>11'2" x 4'8"</b>	<b>3'9"</b>	<b>1'8"</b>	<b>2'10"</b>	<b>5,260</b>	
<b>D65EXi-18</b>	5330	5.61	3470 x 1425	1105	430	870	2375	50.0/0.51/7.25
Semi-U Dozer	<b>17'6"</b>	<b>7.34</b>	<b>11'5" x 4'8"</b>	<b>3'8"</b>	<b>1'5"</b>	<b>2'10"</b>	<b>5,236</b>	
<b>D65PX-18</b>	5680	3.69	3970 x 1100	1130	535	890	2100	32.8/0.33/4.76
Straight Tilt Dozer	<b>18'8"</b>	<b>4.83</b>	<b>13'0" x 3'7"</b>	<b>3'8"</b>	<b>1'9"</b>	<b>2'11"</b>	<b>4,630</b>	
<b>D65PX-18*</b>	5790	4.42	4010 x 1235	1170	695	520	2990	40.8/0.42/5.91
Power Angle Tilt Dozer	<b>19'0"</b>	<b>5.78</b>	<b>13'2" x 4'1"</b>	<b>3'10"</b>	<b>2'3"</b>	<b>1'8"</b>	<b>6,590</b>	
<b>D65PXi-18</b>	5680	3.69	3970 x 1100	1130	535	890	2100	32.8/0.33/4.76
Straight Tilt Dozer	<b>18'8"</b>	<b>4.83</b>	<b>13'0" x 3'7"</b>	<b>3'8"</b>	<b>1'9"</b>	<b>2'11"</b>	<b>4,630</b>	
<b>D65WX-18</b>	5500	5.90	3580 x 1425	1135	500	770	2500	43.3/0.44/6.28
SIGMADOZER®	<b>18'1"</b>	<b>7.72</b>	<b>11'9" x 4'8"</b>	<b>3'9"</b>	<b>1'8"</b>	<b>2'6"</b>	<b>5,510</b>	

\* PX PAT blade machine available only when ordered with waste package

\*\*Ground pressure shows tractor, ROPS cab, full fluids, operator, standard equipment and applicable blade.

Ground pressure per ISO 16754

# SPECIFICATIONS

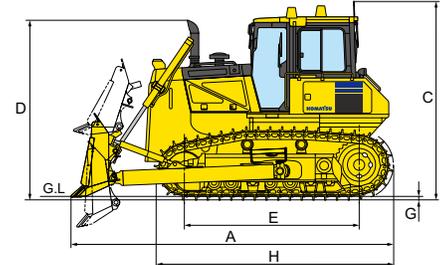
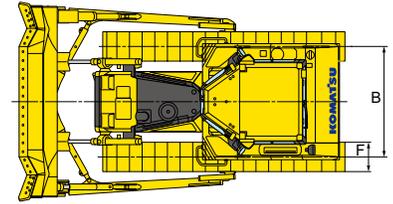


## DIMENSIONS – OUTSIDE MOUNTED DOZER BLADE

	D65EX-18 SIGMADOZER®		D65EXi-18 SIGMADOZER®		D65PX-18 Straight Tilt Dozer		D65PXi-18 Straight Tilt Dozer		D65WX-18 SIGMADOZER®	
A	5490 mm	18'0"	5490 mm	18'0"	5680 mm	18'8"	5680 mm	18'8"	5500 mm	18'1"
B	1880 mm	6'2"	1880 mm	6'2"	2050 mm	6'9"	2050 mm	6'9"	2050 mm	6'9"
C	3160 mm	10'5"*	3330 mm	10'11"	3160 mm	10'5"*	3330 mm	10'11"	3160 mm	10'5"*
D	3085 mm	10'1"	3085 mm	10'1"	3085 mm	10'1"	3085 mm	10'1"	3085 mm	10'1"
E	2970 mm	9'9"	2970 mm	9'9"	3275 mm	10'9"	3275 mm	10'9"	2970 mm	9'9"
F	610 mm	24"	610 mm	24"	915 mm	36"	915 mm	36"	760 mm	30"
G	65 mm	2.6"	65 mm	2.6"	65 mm	2.6"	65 mm	2.6"	65 mm	2.6"
H	4065 mm	13'4"	4065 mm	13'4"	4370 mm	14'4"	4370 mm	14'4"	4065 mm	13'4"

\*3350 mm 11'0" is overall height if Komatsu sweeps are installed.

Ground clearance..... 415 mm 16"



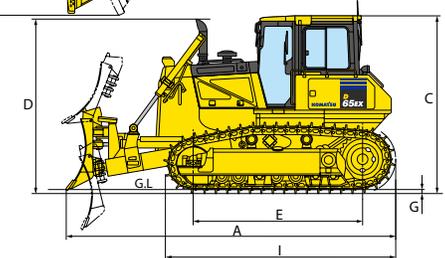
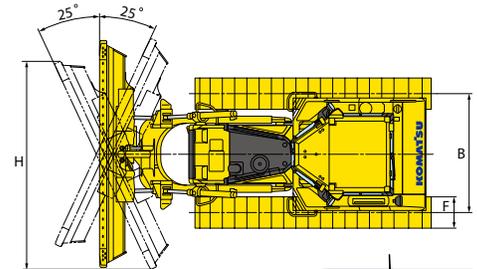
## DIMENSIONS – PAT DOZER BLADE (requires Waste Package)

	D65PX-18 PAT Dozer	
A	5790 mm	19'0"
B	2230 mm	7'4"
C	3160 mm	10'5"*
D	3085 mm	10'1"
E	3275 mm	10'9"
F	760 mm	30"
G	65 mm	2.6"
H	3627 mm	11'11"
I	4370 mm	14'4"

\*3350 mm 11'0" is overall height if Komatsu sweeps are installed.

Ground clearance..... 415 mm 16"

Shown with D65EXi-18 SIGMADOZER® single grouser shoe.



## OPERATING WEIGHT

Tractor shipping weights:

Shipping weight includes blade lift cylinders (C-frame for PAT), ROPS cab, standard track, lubricants, coolant.

EX Sigmadozer/SU.....	18780 kg	<b>41,403 lb</b>
EXi Sigmadozer®.....	18780 kg	<b>41,403 lb</b>
WX Sigmadozer.....	20360 kg	<b>44,886 lb</b>
PX straight.....	20610 kg	<b>45,437 lb</b>
PXi Straight.....	20610 kg	<b>45,437 lb</b>
PX PAT.....	21950 kg	<b>48,391 lb</b>

Operating Weights:

Operating weight includes blade, hitch, ROPS cab, standard track, lubricants, coolant, full fuel tank, and operator.

EX Sigmadozer/SU.....	21270 kg	<b>46,892 lb</b>
EXi Sigmadozer®.....	21270 kg	<b>46,892 lb</b>
WX Sigmadozer.....	22960 kg	<b>50,618 lb</b>
PX straight.....	22830 kg	<b>50,331 lb</b>
PXi Straight.....	22830 kg	<b>50,331 lb</b>
PX PAT.....	23570 kg	<b>51,963 lb</b>

## EQUIPMENT



## STANDARD EQUIPMENT FOR BASE MACHINE\*

- Air cleaner, double element with dust indicator
- Alternator, 90 ampere/24V
- Auto idle shutdown function
- Backup alarm
- Batteries, 200 Ah/2 x 12V
- Battery disconnect switch with lockout/tagout
- Blade lift cylinders
- Color monitor, LCD
- Curved exhaust pipe
- Decelerator pedal
- Engine hood
- Engine intake centrifugal precleaner
- Engine, gull-wing side covers
- Engine shutdown secondary switch
- Fenders
- Front pull hook
- High mount foot rests
- Horn, warning
- Hydraulic driven radiator cooling fan with reverse clean mode
- Hydraulics for rear equipment
- KOMTRAX® Level 5
- Komatsu Diesel Particulate Filter (KDPF)
- Variable Geometry Turbocharger (VGT)
- Locks, filler caps and covers
- Oil pressure check ports for power train
- Oil sampling ports for Engine, Trans, Hydraulics
- Operator ID function
- PM service connector
- Radiator mask, heavy-duty, hinged, perforated
- Rear cover
- ROPS cab\*\*
  - 75 dB operator ear noise level
  - Air conditioner with fresh air pre-cleaner
  - Cab accessories
    - 12V power supply (2 ports)
    - Cup holder
    - Rearview mirror
    - Rearview monitoring (1 camera)
    - Radio, Bluetooth/USB compatible
  - Shovel holder
  - Work lights, LED type
    - 2 front, hood mounted
    - 2 front, cab mounted
    - 1 rear, left fender mounted
    - 2 rear, cab mounted
- 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
- Secondary engine shutoff switch
- Starting motor, 11.0 kW/24V
- Steering system:
  - Hydrostatic Steering System (HSS)
- Tie-off points standard ISO 14567
- Torque converter with auto lock-up
- Track roller guards, center and end sections
- Track shoe assembly
  - Heavy-Duty lubricated rotary bushing (PLUS) track
    - 610 mm **24"** MS shoe (EX/EXi with outside mount blade)
    - 760 mm **30"** MS shoe (WX with outside mount blade)
    - 760 mm **30"** ES shoe (PX PAT requires Waste Package)
    - 915 mm **36"** MS shoe (PX/PXi with outside mount blade)
- 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



**OPTIONAL EQUIPMENT**

- Dozer assembly
- Drawbar, long type
- Hitch
- Rear counterweight 850 kg **1,870 lb**
- Straight tilt frame for use with allied blades
- Track roller guard, full length
- Waste Package, available with EX semi-u, PX straight, PX PAT



- Multi-shank ripper (for D65EX/EXi/WX-18)**
- Weight..... 1920 kg **4,230 lb**
  - Beam length..... 2170 mm **7'1"**
  - Maximum lift above ground..... 640 mm **2'1"**
  - Maximum digging depth ..... 590 mm **1'11"**



**ALLIED MANUFACTURER'S ATTACHMENTS (SHIPPED LOOSE)**

- Guarding - Medford
  - Front sweeps (open top) 299 kg **660 lb**
  - Front sweeps (w/ top cover plate) 481 kg **1060 lb**
  - Hinged cab side screens 79 kg **175 lb**
  - Hinged cab rear screen 91 kg **200 lb**
  - Tank guards 404 kg **890 lb**
- Hydraulic winch - Allied H6H 1325 kg **2,900 lb**
- Mechanical angle blade - Rockland 1100 kg **2,425 lb**



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