

# KOMATSU®

**NET HORSEPOWER**  
63 kW **85 HP** @ 2000 rpm

**OPERATING WEIGHT**  
D37EX: 7410 kg **16,340 lb**  
D37PX: 7770 kg **17,130 lb**

## D37EX-21 D37PX-21



**D**  
**37**

CRAWLER DOZER



Photos may include optional equipment.

# GALEO

# WALK-AROUND

***The Komatsu SAA4D102E-2 turbocharged diesel engine***

provides an output of 63 kW **85 HP**, with excellent productivity.  
This engine is Tier 2 EPA, EU, and Japan emissions certified

***Gull-wing*** engine side doors  
for easy and safer servicing

***Palm Command Control System*** (PCCS)

Left hand controls all tractor motion. Right hand  
controls all blade movements

***Heavy-duty***  
punched grill

***Radiator Nose***

Sound deflection style for  
reduced ambient noise

***New*** design, larger  
diameter shimmed center ball

High capacity  
***Power Angle  
Tilt dozer***

combines the highest  
power in its class  
with outstanding  
productivity



***Komatsu Hydrostatic Transmission*** (KomStat)

offers palm control of speed (3 forward and 3 reverse),  
turning directional changes, and power steering with PPC  
valve control

**Electronic Monitoring System**

prevents minor problems from developing into major ones

**Optional quadrangle design, low noise pressurized ROPS cab**

One-piece front glass window offers exceptional front, side, and rear visibility

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D37EX: 7410 kg **16,340 lb**  
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**BLADE CAPACITY  
PAT DOZER**  
D37EX: 1.75 m<sup>3</sup> **2.25 yd<sup>3</sup>**  
D37PX: 1.91 m<sup>3</sup> **2.50 yd<sup>3</sup>**

**Side compartment doors**

for easy access to battery and hydraulics

**Final drives and travel motors**

are completely protected within the track shoe width

**Bolt-on sprocket**

for ease of maintenance

**Modular power train** for increased serviceability and durability

Photos may include optional equipment.

# GALEO

**Komatsu's highly productive, innovative technology, environmentally friendly machines built for the 21st century.**

**Intermediate speed selection** enables setting of optimum travel speed to job conditions, improving grading accuracy

## ENGINE AND HYDROSTATIC TRANSMISSION

### Komatsu SAA4D102E-2 Turbocharged and Aftercooled Diesel Engine

#### Powerful Engine

A powerful SAA4D102E-2 turbocharged and air-to-air aftercooled diesel engine provides a massive output of 63 kW **85 HP**. This engine is Tier 2 EPA, EU, and Japan emissions certified, without sacrificing power or machine productivity. The engine power is transmitted via a high-efficiency KomStat Hydrostatic Transmission to the final drives.

### KomStat II Hydrostatic Transmission (HST)

#### HST Control

The D37 is equipped with Komatsu's exclusive KomStat Hydrostatic Transmission (HST) that allows for variable speed selection or intermediate speed selection. The D37's HST consists of dual-path closed-circuits with two variable displacement piston pumps and two 3-speed variable displacement travel motors.

#### Palm Command Control System (PCCS)

Palm Command Control System (PCCS) joystick controls all directional movements. Pushing the joystick forward results in forward machine travel, while pulling it rearward reverses the machine. Simply tilt the joystick to the left to make a left turn, and to the right for a right turn. Tilting the joystick fully to the left or right results in counter-rotation. Hydrostatic steering eliminates steering clutches and brakes, providing smooth powerful turns. Fully electronic control enables smooth shockless control.



Left Hand

#### Steering Functions



Forward and reverse



Right and left steering plus counter-rotation



Speed up and speed down control

#### Superb Steering Accuracy

The KomStat steering system offers smooth steering performance even in gradual turns, permitting the D37 to approach dozing objects accurately in corner grading and side wall operations.

#### Variable Speed Selection

When the variable speed selection is engaged, a gradual speed increase is available. Travel speed is adjustable through a 20 increment LED, by utilizing the shift button on the PCCS control to increase or decrease speed gradually. While depressing and holding the shift button on the PCCS control, speed will automatically increase or decrease as activated. Selection of either intermediate or variable speed allows the KomStat II dozers to achieve maximum efficiency during fine or rough grading operations with optimum travel speed to match job conditions.

#### Intermediate Speed Selection

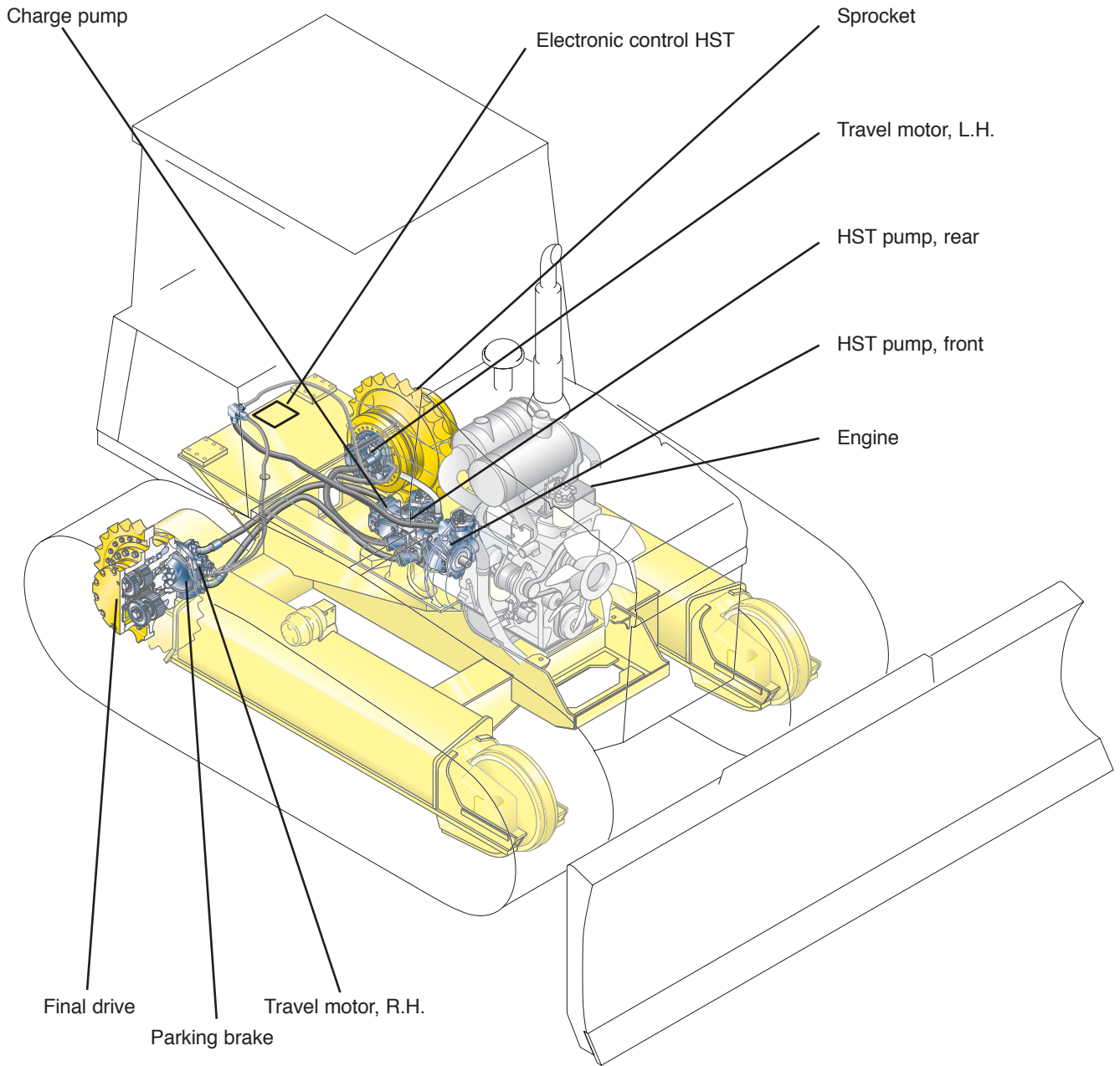
Enables the setting of predetermined ranges. This means the operator can select 1st, 2nd, or 3rd range to correspond with existing job site conditions.

#### Counter-rotation

Allows the operator to correctly position the dozer when side loading the blade or working in a narrow environment.

#### HST Dynamic Brakes

The D37 uses HST dynamic brakes to ensure safe operation. Parking brake is wet, multiple-disc type with a unique drag-prevention control to keep hydraulic oil clean.



## EXCELLENT GRADING ABILITY

### Outstanding Stability

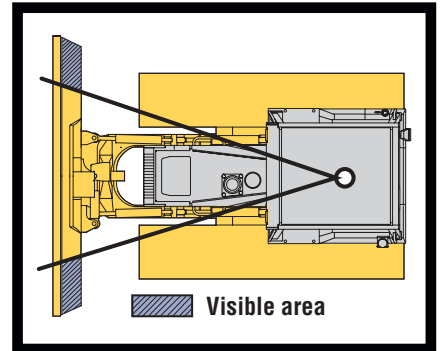
The large ground contact area created by the long tracks and wide track gauges combines with a low center of gravity to make a stable and well-balanced machine that can perform precise grading work on rough or inclined terrain.

### Exceptional Blade Visibility

The slim engine hood and well-located operator seat provide excellent visibility to the blade. This clear blade visibility greatly increases grading efficiency and reduces operator guesswork. Finish grading and rough grading can be performed easily, drastically reducing cycle times.

### Easy-to-Operate, 3-Axis PPC Operated Implement Control Joystick

Newly developed 3-axis PPC valve and ergonomically designed joystick provide light operating effort and excellent blade response.

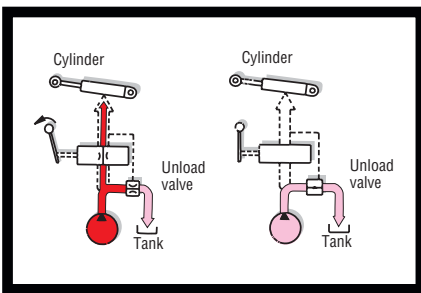


### CLSS Hydraulic System

With the hydraulic Closed-center Load Sensing System (CLSS), blade lever stroke is directly proportional to blade speed, regardless of the load and travel speed. This results in superb, fine controllability.

#### Benefits of CLSS

- More precise and responsive operation due to the pressure compensation valve
- Reduced fuel consumption by discharging only the required amount of oil from the pump
- Compound operations such as blade raise, tilt, and angle are easy due to CLSS parallel circuit with pressure compensation valve



### Blade Geometry

The Komatsu blade geometry is designed to maximize the blade curvature. The large blade radius allows the rolling-up performance of the material to be maximized by utilizing the entire blade. This provides excellent productivity while maintaining the superb grading capabilities of the KomStat II.



Right Hand

### Blade Functions

- ↑ ↓ Lifting and lowering
- ← → Tilting
- ↻ Left and right angling

# OPERATOR'S COMPARTMENT

## Low-Noise Design

For smoother riding comfort, power train components and hydraulic control valves are mounted to the frame with rubber pads to soften vibration and shut out noise. Since the D37 employs joysticks, the walk-through operator compartment is uncluttered for smooth entry and exit. A suspension seat with backrest and retractable seat belt is standard equipment.

## Quadrangle Pressurized Cab (Optional)

This is another added comfort feature. Air filters and a higher internal air pressure combine to prevent external dust from entering the cab. In addition, the cab's design, with a large one-piece front glass window, provides excellent front, side and rear visibility. Rubber isomount cab suspension mounts soften shocks for operator comfort and extend component life. Cab features largest volume in its class, low noise 76 dB(A), and air vents arranged for optimum ventilation.

## Fully Adjustable Suspension Seat With Retractable Seat Belt



Photos may include optional equipment.



## Height Adjustable Armrests

Height adjustable armrests and conveniently located fuel control lever provide comfortable operation and increase leg space.



## ROPS Cab



## MAINTENANCE FEATURES

### Electronic Monitoring System

An electronic monitoring system prevents minor problems from developing into major ones. All meters and gauges are controlled by a microcomputer, which provides a wide indication range for an easier, more precise reading.



- Charge Lamp
- Engine Oil Pressure Caution Lamp
- Engine Water Temperature Gauge
- Fuel Gauge
- HST Speed Range Indicator
- HST Oil Temperature Gauge
- HST Charge Filter Caution Lamp
- Intake Air Heater Lamp
- Maintenance Monitor Display
- Reverse Speed Gauge
- Service Meter



#### Gull-Wing Engine Side Covers

With a gas-spring cylinder that opens 140°, the engine and the auxiliary components can be checked easily.



Daily maintenance items are centralized on left side of engine.



#### Reservoir

A radiator coolant reservoir makes it easier to check the coolant level and eliminates frequent refilling.



#### Improved Towing Hitch

The hitch extends past the track rear to allow maximum angle when towing.

#### Tow Valve

Tow valve opens brake circuit manually to tow tractor when engine is stopped.

#### Long Engine Oil Replacement Interval

Engine oil replacement interval is extended to 500 hours using a high performance engine oil filter.



# UNDERCARRIAGE AND FRAME

## Frame

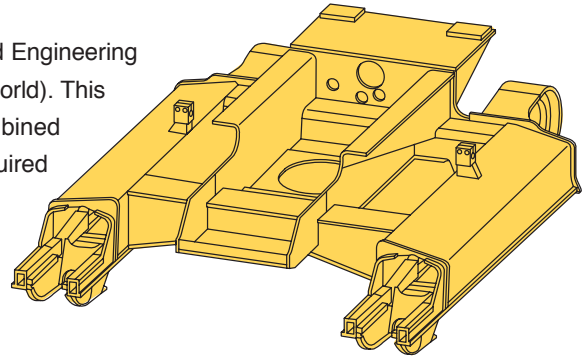
### Durable and Reliable Main Frame

The main frame is designed by the same advanced Computer Aided Engineering (CAE) technology used on the D575A (the largest bulldozer in the world). This main frame structural feature is a main frame and track frame combined with connecting bars by weldments, providing the ideal stiffness required in a small size crawler dozer.



### Protected Travel Motors and Final Drives

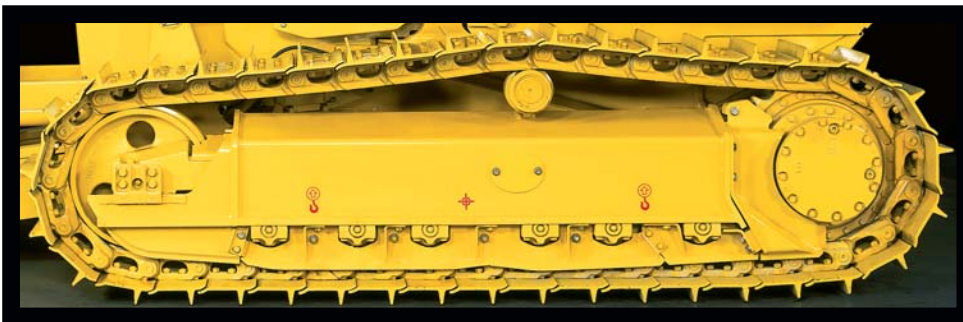
Travel motors and final drives are mounted inside the track shoe for protection from rocks and stumps, and for improved durability.



## Undercarriage

### Durable and Reliable Undercarriage

Life of undercarriage and reliability are greatly extended by use of large size links, pins, bushings, and unique dust seals.



# D37EX/PX-21 CRAWLER DOZER

## SPECIFICATIONS



### ENGINE

Model . . . . . Komatsu SAA4D102E-2  
 Type . . . . . Water-cooled, 4-cycle, emissionized  
 Aspiration . . . . . Turbocharged and air-to-air aftercooled  
 Number of cylinders . . . . . 4  
 Bore . . . . . 102 mm **4.02"**  
 Stroke . . . . . 120 mm **4.72"**  
 Piston displacement . . . . . 3.9 ltr **240 in<sup>3</sup>**  
 Net flywheel horsepower\*:

SAE J1349 . . . . . 63 kW **85 HP** @ 2000 rpm  
 DIN 6270 . . . . . 63 kW **86 PS** @ 2000 rpm  
 Net maximum torque . . . . . 412 N·m 42.0 kg·m **304 lb·ft** @ 1300 rpm  
 Governor . . . . . All-speed, mechanical  
 Filter . . . . . Full-flow

Direct injection fuel system. All-speed mechanical governor.  
 Forced lubrication driven by gear pump. Full-flow for lube purification. Dry-type air cleaner with automatic dust evacuator and dust indicator. 5.5 kW/24 V electrical starter motor.  
 25 A/24 V alternator. 60 Ah/2 x 12 V batteries.

\* Net flywheel horsepower output for standard engine (SAE J1349) including air cleaner, alternator (not charging), water pump, lubricating oil pump, fuel pump, muffler, and fan.



### KOMSTAT II HYDROSTATIC TRANSMISSION

Dual-path, hydrostatic transmission provides infinite speed change up to 8.5 km/h **5.3 mph**. The variable capacity travel motors allow the operator to select the optimum speed to match specific jobs. Gearshift lock lever and neutral safety switch prevent machine from starting accidentally.

Travel speed (quick shift mode)	Forward	Reverse
1st	0–3.4 km/h <b>0–2.1 mph</b>	0–4.1 km/h <b>0–2.5 mph</b>
2nd	0–5.6 km/h <b>0–3.5 mph</b>	0–6.5 km/h <b>0–4.0 mph</b>
3rd	0–8.5 km/h <b>0–5.3 mph</b>	0–8.5 km/h <b>0–5.3 mph</b>

Travel speed (variable mode)	Forward	Reverse
	0.8 - 8.5 km/h <b>0.5–5.3 mph</b>	0.8–8.5 km/h <b>0.5–5.3 mph</b>

Maximum drawbar pull:

D37EX-21 . . . . . 123 kN 12500 kgf **27,580 lb**  
 D37PX-21 . . . . . 123 kN 12500 kgf **27,580 lb**



### STEERING SYSTEM

Palm Command Control System (PCCS) joystick control for all directional movements. Pushing the joystick forward results in forward machine travel, while pulling it rearward reverses the machine. Simply tilt the joystick to the left to make a left turn. Tilt it to the right for a right turn. Tilting the joystick fully to the left or right activates counter-rotation. Hydrostatic steering eliminates steering clutches and brakes, providing smooth powerful turns. Fully electronic control enables smooth, shockless control. The PCCS utilizes shift buttons to increase and decrease speed.

Minimum turning radius:

D37EX-21 . . . . . 2.35 m **7'9"**  
 D37PX-21 . . . . . 2.60 m **8'6"**

(As measured by track marks on the ground)



### FINAL DRIVE

Two-stage planetary gear integrated into axial piston travel motors. Compact in-shoe mount reduces risk of damage by debris. Bolt-on sprockets for easy replacement.



### UNDERCARRIAGE

Suspension . . . . . Rigid type  
 Track roller frame . . . . . Box section, high-tensile-strength steel structure  
 Rollers and idlers . . . . . Lubricated idlers/carrier rollers, track rollers are sealed with floating seals

Lubricated tracks:

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

	D37EX-21 KomStat II	D37PX-21 KomStat II
Number of carrier rollers (each side)	1	1
Number of track rollers (each side)	6	6
Number of shoes (each side)	41	41
Grouser height	47.0 mm <b>1.9"</b>	47.0 mm <b>1.9"</b>
Shoe width (standard)	400 mm <b>16"</b>	600 mm <b>24"</b>
Ground contact area	17900 cm <sup>2</sup> <b>2,775 in<sup>2</sup></b>	26900 cm <sup>2</sup> <b>4,170 in<sup>2</sup></b>
Ground pressure	40.0 kPa 0.41 kgf/cm <sup>2</sup> <b>5.83 psi</b>	28.0 kPa 0.29 kgf/cm <sup>2</sup> <b>4.12 psi</b>
Track gauge	1450 mm <b>4'9"</b>	1650 mm <b>5'5"</b>
Length of track on ground	2240 mm <b>7'4"</b>	2240 mm <b>7'4"</b>



### COOLANT AND LUBRICANT CAPACITY (REFILL)

Coolant . . . . . 27 ltr **7.1 U.S. gal**  
 Fuel tank . . . . . 165 ltr **43.6 U.S. gal**  
 Engine oil . . . . . 12.5 ltr **3.3 U.S. gal**  
 Hydraulic tank . . . . . 47 ltr **12.4 U.S. gal**  
 Final drive (each side) . . . . . 3.5 ltr **0.9 U.S. gal**



### OPERATING WEIGHT (APPROXIMATE)

Tractor weight:

Including rated capacity of lubricant, coolant, full fuel tank, operator, and standard equipment.

D37EX-21 . . . . . 6010 kg **13,250 lb**  
 D37PX-21 . . . . . 6310 kg **13,910 lb**

Operating weight:

Including power angle tilt dozer, ROPS canopy, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank.

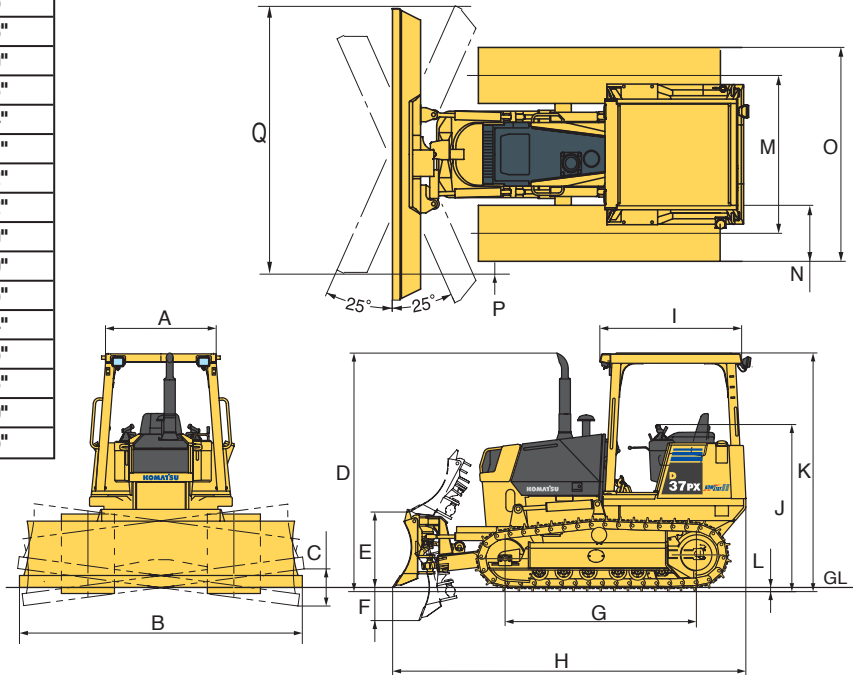
D37EX-21 . . . . . 7410 kg **16,340 lb**  
 D37PX-21 . . . . . 7770 kg **17,130 lb**



**DIMENSIONS (POWER ANGLE TILT DOZER)**

	D37EX-21		D37PX-21	
A	1255 mm	4'1"	1255 mm	4'1"
B	2720 mm	8'11"	3250 mm	10'8"
B*	N/A	N/A	2875 mm	9'5"
C	375 mm	1'3"	445 mm	1'6"
D	2645 mm	8'8"	2645 mm	8'8"
E	860 mm	2'10"	855 mm	2'10"
F	385 mm	1'3"	380 mm	1'3"
G	2240 mm	7'4"	2240 mm	7'4"
H	4015 mm	13'2"	3995 mm	13'1"
I	1605 mm	5'2"	1605 mm	5'2"
J	1890 mm	6'2"	1890 mm	6'2"
K	2700 mm	8'10"	2700 mm	8'10"
L	47 mm	1.9"	47 mm	1.9"
M	1450 mm	4'9"	1650 mm	5'5"
N	400 mm	16"	600 mm	24"
O	1850 mm	6'1"	2250 mm	7'5"
P	160 mm	6.3"	210 mm	8.3"
Q	2505 mm	8'3"	2985 mm	9'9"
Q*	N/A	N/A	2605 mm	8'6"

Ground clearance ..... 384 mm 15.1"



\* Narrow Blade (available on D37PX Model only)



**HYDRAULIC SYSTEM**

Closed-center Load Sensing System (CLSS) designed for precise and responsive control and for efficient simultaneous operation.

**Hydraulic control unit:**

All-spool control valves externally mounted beside the hydraulic tank. Gear-type hydraulic pump with capacity (discharge flow) of 76 ltr/min **20.1 U.S. gal/min** at rated engine rpm.

Relief valve setting ..... 20.6 MPa 210 kg/cm<sup>2</sup> **2,990 psi**

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

	Number of Cylinders	Bore
Blade lift	2	85 mm <b>3.35"</b>
Blade tilt	1	90 mm <b>3.54"</b>
Blade angle	2	75 mm <b>2.95"</b>

**Hydraulic oil capacity (refilling):**

Power angle tilt dozer ..... 47 ltr **12.4 U.S. gal**

**Control valves:**

3-spool control valve 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

Additional control valve required for ripper.

Positions:

- Ripper lift ..... Raise, hold, and lower



**DOZER EQUIPMENT**

Blade	Overall Length With Dozer	Blade Capacity (SAE)	Blade Width x Height	Maximum Lift Above Ground	Maximum Drop Below Ground	Maximum Tilt Adjustment	Blade Angle
D37EX -21 Power Angle Tilt Dozer	4015 mm <b>13'2"</b>	1.75 m <sup>3</sup> <b>2.25 yd<sup>3</sup></b>	2720 mm x 865 mm <b>8'11" x 2'10"</b>	860 mm <b>2'10"</b>	385 mm <b>1'3"</b>	375 mm <b>1'3"</b>	25°
D37PX-21 Power Angle Tilt Dozer	3995 mm <b>13'1"</b>	1.91 m <sup>3</sup> <b>2.50 yd<sup>3</sup></b>	3250 mm x 830 mm <b>10'8" x 2'8"</b>	855 mm <b>2'10"</b>	380 mm <b>1'3"</b>	445 mm <b>1'6"</b>	25°
D37PX-21 Power Angle Narrow Blade	3995 mm <b>13'1"</b>	1.70 m <sup>3</sup> <b>2.23 yd<sup>3</sup></b>	2875 mm x 830 mm <b>9'5" x 2'8"</b>	855 mm <b>2'10"</b>	380 mm <b>1'3"</b>	395 mm <b>1'4"</b>	25°



## STANDARD EQUIPMENT

- Air cleaner, double element with dust indicator
- Alternator, 35 ampere
- Backup alarm
- Batteries, 60 Ah/2 x 12 V
- Blower cooling fan
- Decelerator pedal
- Electronic instrument monitor panel
- Engine hood and gull-wing side covers
- Fenders
- Front pull hook
- High-mount footrests
- Intake pipe with precleaner
- Integrated double flange rollers
- Lighting system (includes 2 front, 1 rear)
- Muffler with curved exhaust pipe
- Palm Command Control System (PCCS)
- Radiator core protective grid
- Radiator guard door, bolt on
- Radiator reserve tank
- Rear cover
- Rearview mirror
- ROPS mounting brackets
- Seat belt, 76 mm **3"** retractable
- Starting motor, 5.5 kW/24 V
- Suspension seat, reclining with headrest
- Track roller guard, end section
- Track shoe assembly
  - Sealed and lubricated track
    - 400 mm **16"** single grouser shoe (D37EX)
    - 600 mm **24"** single grouser shoe (D37PX)
- Underguards, oil pan and transmission
- Water separator



## OPTIONAL EQUIPMENT

- Air conditioner
- Cab accessories
  - Lunch box holder
  - Radio, AM/FM
- Hitch
- Hydraulics for ripper (D37EX)
- Multi-shank ripper (D37EX)
  - Additional weight (including hydraulic control unit) 575 kg **1270 lb**
  - Beam length 1530 mm **5'0"**
  - Maximum digging depth 315 mm **12.4"**
  - Maximum lift above ground 435 mm **1'5"**
- Open ROPS heater
- ROPS cab
  - Additional weight\*, 650 kg **1,430 lb**
  - Meets ISO 3471, SAE J1040 APR88, and ISO 3449 FOPS standards.
  - All-weather, enclosed pressurized cab
  - Dimensions
    - Length: 1575 mm **5'2"**
    - Width: 1255 mm **4'1"**
    - Height: 1625 mm **5'4"**
    - Height from floor to ceiling 1515 mm **5'0"**
- \*Including weight of air conditioner
- ROPS canopy
  - Additional weight 310 kg **680 lb**
  - Meets ISO 3471, SAE J1040 APR88, and ISO 3449 FOPS standards
  - Roof dimension
    - Length: 1575 mm **5'2"**
    - Width: 1255 mm **4'1"**
    - Height from operator compartment floor 1575 mm **5'2"**
- Suspension seat
  - Reclining with fabric material and headrest (cab only)
- Sweeps and screens
- Track shoe assembly
  - Sealed and lubricated track
    - 600 mm **24"** swamp shoe (D37PX)
- Track guard, full length, segmented
- Vandalism protection cover for instrument panel

ROPS canopy or ROPS cab must be ordered for all machines.

# KOMATSU®

440 N. Fairway Dr.  
P.O. Box 8112  
Vernon Hills, IL 60061

