

# KOMATSU®

## **D85EXi-18** **D85PXi-18** *Tier 4 Final Engine*

### CRAWLER DOZER



Photos may include optional equipment.

#### **NET HORSEPOWER**

264 HP @ 1900 rpm  
197 kW @ 1900 rpm

#### **OPERATING WEIGHT**

**SIGMADOZER®**  
D85EXi-18: 67,439 lb 30590 kg  
**Straight Tilt Dozer**  
D85PXi-18: 65,080 lb 29520 kg

#### **BLADE CAPACITY**

**SIGMADOZER®**  
D85EXi-18: 9.4 yd³ 7.2 m³  
**Straight Tilt Dozer**  
D85PXi-18: 7.7 yd³ 5.9 m³

# SPECIFICATIONS



## ENGINE

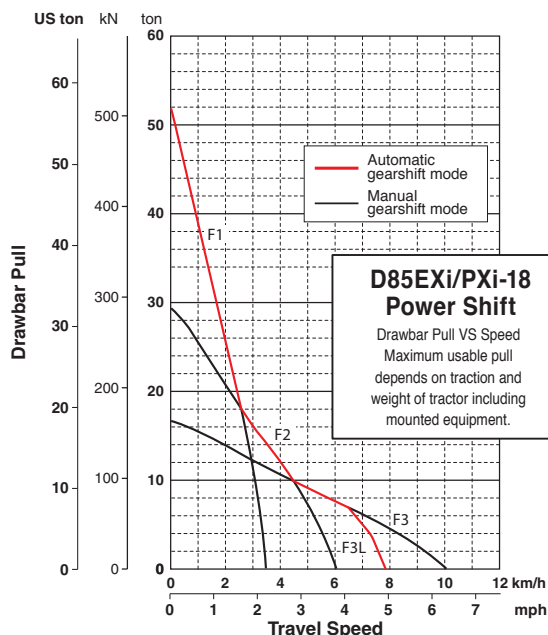
Model.....Komatsu SAA6D125E-7\*  
 Type ..... 4-cycle, water-cooled, direct injection  
 Aspiration..... Komatsu variable geometry turbocharged, air-to-air aftercooled  
 Number of cylinders..... 6  
 Bore x stroke..... 125 mm x 150 mm **4.49" x 5.69"**  
 Piston displacement..... 11.04 ltr **674 in<sup>3</sup>**  
 Governor.....All-speed and mid-range, electronic  
 Horsepower  
     SAE J1995.....Gross 199 kW **267 HP**  
     ISO 9249 / SAE J1349.....Net 197 kW **264 HP**  
 Rated rpm..... 1900 rpm  
 Fan drive type .....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, 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
<b>1st</b>	3.3 km/h <b>2.1 mph</b>	4.4 km/h <b>2.7 mph</b>
<b>2nd</b>	6.1 km/h <b>3.8 mph</b>	8.0 km/h <b>5.0 mph</b>
<b>3rd L</b>	7.8 km/h <b>4.8 mph</b>	9.2 km/h <b>5.7 mph</b>
<b>3rd</b>	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  
 D85EXi-18 ..... 2.0 m **6'6"**  
 D85PXi-18 ..... 2.2 m **7'3"**



## 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 grease gun.

	D85EXi-18	D85PXi-18
Number of track rollers (each side)	7	8
Type of shoes (standard)	Single grouser	Single grouser
Number of shoes (each side)	41	45
Grouser height	mm <b>in</b> 72 <b>2.8"</b>	72 <b>2.8"</b>
Shoe width (standard)	mm <b>in</b> 660 <b>26"</b>	910 <b>36"</b>
Ground contact area	cm <sup>2</sup> 40260	63340
	<b>in<sup>2</sup> 6,240</b>	<b>9,820</b>
Ground pressure (tractor)	kPa 59.5	39.8
	kgf/cm <sup>2</sup> 0.61	0.40
	<b>psi 8.62</b>	<b>5.77</b>
Track gauge	mm <b>ft.in</b> 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>

# SPECIFICATIONS



## 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.



## 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/cm<sup>2</sup> **3,270 psi**

Control valves:

Spool control valves for SIGMADOZER® or straight tilt dozer

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



## SERVICE REFILL CAPACITIES

Fuel tank .....	470 ltr	<b>124.1 U.S. gal</b>
DEF tank .....	23.5 ltr	<b>6.2 U.S. gal</b>
Coolant .....	65 ltr	<b>17.2 U.S. gal</b>
Engine.....	38 ltr	<b>10.0 U.S. gal</b>
Damper case .....	1.6 ltr	<b>0.42 U.S. gal</b>
Torque converter, transmission, bevel gear, and steering system .....	60 ltr	<b>15.8 U.S. gal</b>
Final drive (each side)		
D85EXi-18 .....	26 ltr	<b>6.9 U.S. gal</b>
D85PXi-18.....	36 ltr	<b>9.5 U.S. gal</b>

	Number of cylinders		Bore
	SIGMADOZER®	Straight Tilt Dozer	
Blade lift	2	2	100 mm <b>4.0"</b>
Blade tilt	1	1	150 mm <b>5.9"</b>
Blade angle	1	-	150 mm <b>5.9"</b>
Ripper lift	2	2	130 mm <b>5.1"</b>
Pitch angle	45° - 51°	52° - 58°	-

Hydraulic oil capacity (refill): ..... 69 ltr **18.2 U.S. gal**

Ripper equipment (additional volume):

Multi-shank ripper ..... 11 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 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* kPa kg/cm <sup>2</sup> psi
<b>D85EXi-18</b> Strengthened Single Tilt Power Pitch SIGMADOZER®	5810 <b>19' 1"</b>	7.2 <b>9.4</b>	3575 x 1665 <b>11' 9" x 5' 5"</b>	1225 <b>4' 0"</b>	580 <b>1' 11"</b>	700 <b>2' 4"</b>	4030 <b>8880</b>	80.4 / 0.82 / <b>11.7</b>
<b>D85PXi-18</b> Straight Tilt Dozer	6025 <b>19' 9"</b>	5.9 <b>7.7</b>	4355 x 1400 <b>14' 4" x 4' 7"</b>	1240 <b>4' 0"</b>	550 <b>1' 10"</b>	500 <b>1' 8"</b>	3140 <b>6920</b>	45.6 / 0.46 / <b>6.6</b>

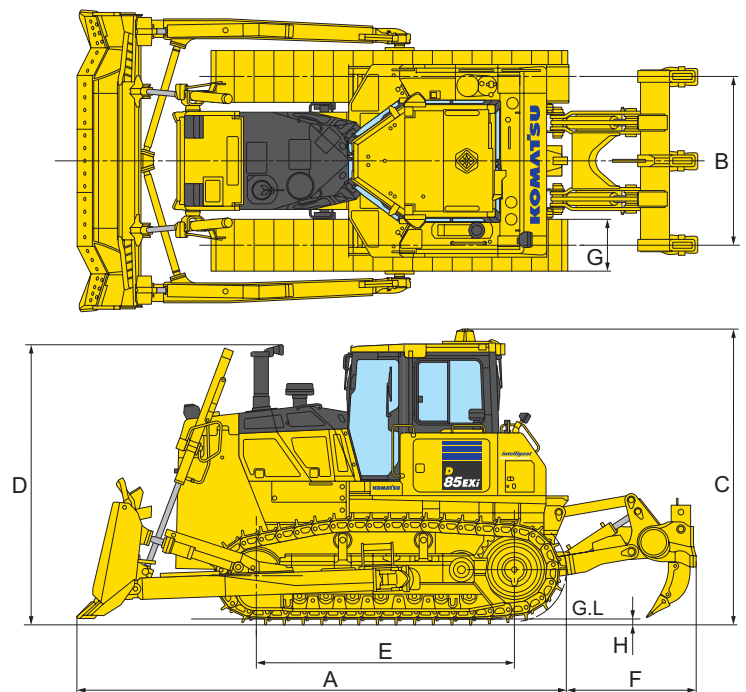
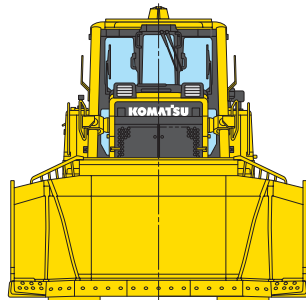
\*Ground pressure is based on machine operating weight with blade shown and fixed ripper (EX) or long drawbar (PX)



## DIMENSIONS

	D85EXi-18 SIGMADOZER®		D85PXi-18 Straight Tilt Dozer with Long Drawbar	
A	5810 mm	19'1"	6025 mm	19'10"
B	2000 mm	6'7"	2250 mm	7'5"
C	3498 mm	11'6"	3498 mm	11'6"
D	3300 mm	10'10"	3300 mm	10'10"
E	3030 mm	10'0"	3460 mm	11'5"
F	1515 mm	5'0"	-	-
G	660 mm	2'2"	910 mm	3'0"
H	72 mm	2.8"	72 mm	2.8"

Ground clearance ..... 450 mm 1'6"



Dimension with D85EXi-18 SIGMADOZER 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.

D85EXi-18 ..... 24270 kg **53,506 lb**

D85PXi-18..... 26210 kg **57,849 lb**

Operating weight:

Including SIGMADOZER® and fixed multi-shank ripper (EXi) or straight tilt dozer and long drawbar (PXi) ROPS cab, operator, standard equipment, rated capacity of lubricant, hydraulic control unit, coolant, and full fuel tank.

D85EXi-18 SIGMADOZER® ..... 30590 kg **67,439 lb**

D85PXi-18 straight tilt dozer ..... 29520 kg **65,080 lb**