

# KOMATSU®

## **D155CX-8**

*Tier 4 Final Engine*

*K170 Pipelayer*

**PIPELAYER**

D155CX



Photos may include optional equipment.

**NET HORSEPOWER**

354 HP @ 1900 rpm  
264 kW @ 1900 rpm

**OPERATING WEIGHT**

120,970 lb  
54870 kg

**LIFT CAPACITY**

170,000 lb  
77272 kg

\*Maximum lift at tipping point (ISO 8813 1992)

# WALK AROUND



## Outstanding Lift Capacity and Balance With a Conventional Undercarriage Design

Standard 24 ft 7.3m boom or optional 28 ft 8.5m boom with 170,000 lb 77,110 kg lift capacity

Long and wide oval track undercarriage places the final drives and other heavy components lower to the ground for improved center of gravity and balance

### Komatsu SAA6D140E-7 variable geometry turbocharged and after cooled 15.24 liter diesel engine is EPA Tier 4 Final emissions certified.

- Heavy duty Selective Catalytic Reduction (SCR) system
- Diesel Exhaust Fluid (DEF) system
- Komatsu Diesel Particulate Filter (KDPF) system
- Heavy duty cooled Exhaust Gas Recirculation (EGR) system
- Electronic control system - seamless to the operator
- Komatsu Variable Geometry Turbocharger (KVG) system
- Heavy duty High Pressure Common Rail (HPCR) fuel injection system

**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.

### Komatsu Variable Geometry Turbocharger (KVG)

uses a hydraulic actuator to provide optimum air flow under all speed and load conditions.

**Komatsu Auto Idle Shutdown** helps reduce excessive idle time.



**Front bumper with integrated towing pin.**

**High flow rear hydraulics for winch (standard).**

**Rear view monitoring system (standard).**

**Front view monitoring system (standard).**

**Right view monitoring system (standard).**

**Advanced diagnostic system** continuously monitors machine operation and vital systems to identify machine issues, assists with troubleshooting, and minimizes down time.

### Integrated ROPS cab features:

- Large, quiet, and pressurized cab
- Excellent visibility with integrated ROPS structure
- High capacity heated air suspension seat
- Roof mounted A/C condenser
- Auto climate control provides heating and cooling for year round operator comfort
- Skylight for viewing the boom

**Hydrostatic Steering System (HSS)** with 14% higher capacity steering motor provides smooth, quick, and improved steering control in various ground. (Counter-rotation is available when in neutral.)

### Complete operator control

- Palm Command Control System (PCCS)
- Boom/hook/counterweight functions on one joystick lever
- 3-speed manual shift transmission
- Forward/reverse shift pattern preset function
- Electro-hydraulic controlled winches
- Winch drums easily viewed for spooling cable
- Power and Economy modes

### Cold weather operation

- Large capacity batteries
- Engine air intake heater grid
- Provision for engine oil and coolant heaters, 120V
- Radiator cooling fan with full time reverse mode



### Large color monitor:

- Easy-to-read large 7" high-resolution multi-color monitor
- Easy-to-use multiple choice pull-down menus
- Easy-to-use onboard diagnostics without requiring a laptop
- Ecology guidance

### LED (Light Emitting Diode) work lights:

- 10 lamps
- Illuminate large area to front, side, rear

### Serviceability:

- Machine access from 4 corners of machine
- Battery disconnect switch with lockout
- Tie-offs for technician restraint harness



Komtrax remote monitoring with Iridium GPS satellite system is standard and there is no fee. Send information to a secure website including machine location, SMR, error codes, cautions, maintenance items, fuel usage, fuel levels, DEF levels, ambient conditions, and much more.



# SPECIFICATIONS



## ENGINE

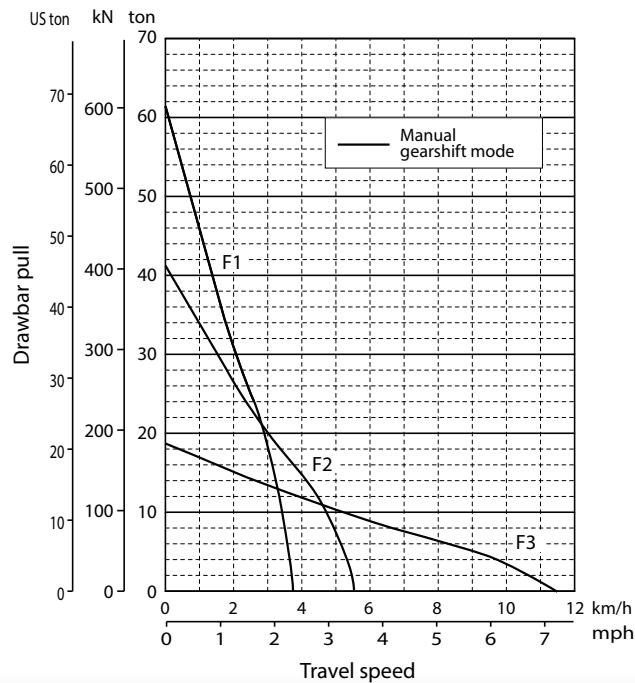
Model.....Komatsu SAA6D140E-7\*\*  
 Type..... 4-cycle, water-cooled, direct injection  
 Aspiration.....Komatsu Variable Geometry  
 Turbocharged, air-to-air aftercooled, cooled EGR  
 Number of cylinders..... 6  
 Bore x stroke..... 140 mm x 165 mm **5.51" x 6.50"**  
 Piston displacement..... 15.24 ltr **930 in³**  
 Governor.....Mid-range, electronic  
 Horsepower  
 SAE J1995..... Gross 268 kW **360 HP**  
 ISO 9249 / SAE J1349\*..... Net 264 kW **354 HP**  
 Rated rpm..... 1900 rpm  
 Fan drive type .....Hydraulic  
 Lubrication system  
 Method..... Gear pump, force lubrication  
 Filter..... Full-flow  
 \*Net horsepower at the maximum speed of radiator cooling fan ..... 239 kW **320 HP**  
 \*\*EPA Tier 4 Final emissions certified



## TORQFLOW TRANSMISSION

Komatsu's 3-speed TORQFLOW transmission consists of a water-cooled, 3-element, 1-stage, 1-phase, torque converter, and a planetary gear, multiple-disc clutch transmission which is hydraulically actuated and force-lubricated for optimum heat dissipation. Equipped with gearshift lock lever and neutral safety switch.

Travel speed	Forward	Reverse
<b>1st</b>	3.8 km/h <b>2.4 mph</b>	4.6 km/h <b>2.9 mph</b>
<b>2nd</b>	5.6 km/h <b>3.5 mph</b>	6.8 km/h <b>4.2 mph</b>
<b>3rd</b>	11.6 km/h <b>7.2 mph</b>	14.0 km/h <b>8.7 mph</b>



## FINAL DRIVES

Double-reduction, spur and planetary final drives increase tractive effort. Segmented sprockets are bolt-on for easy in-the-field replacement.



## STEERING 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 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 an independent hydraulic pump and motor. Counter-rotation turns are also available. Wet, multiple-disc, pedal-controlled service brakes are spring-actuated and hydraulically released. Gearshift lock lever also applies parking brakes.



## UNDERCARRIAGE

Suspension..... Non-suspended, Non-oscillating type  
 Track pitch ..... 228 mm 9.0"  
 Track type ..... Sealed and lubricated  
 Track shoes ..... Moderate svc, clipped 810 mm 32"  
 Number of shoes ..... 48 (each side)  
 Track gauge ..... 2400 mm 94.5"  
 Track on ground..... 3925 mm 154"  
 Ground contact area..... 6.4 m<sup>2</sup> 9,920 in<sup>2</sup>  
 Ground pressure (ISO 16754) ..... 0.83 kgf/cm<sup>2</sup> 11.8 psi  
 Track bottom rollers (each side)..... 9  
 Track carrier rollers (each side)..... 2



## 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.

Variable piston pump with capacity (discharge flow) of 325 L/min 85.9 U.S. gal for steering and 320 L/min 84.6 U.S. gal for implement at rated engine rpm.

Relief valve setting

- ..... for implement 27.5 MPa 280 kg/cm<sup>2</sup> 3,980 psi
- ..... for steering 38.2 MPa 390 kg/cm<sup>2</sup> 5,550 psi



## SERVICE REFILL CAPACITIES

Fuel tank..... 625 ltr **165 U.S. gal**  
 Coolant ..... 104 ltr **27.5 U.S. gal**  
 Engine oil ..... 37 ltr **9.8 U.S. gal**  
 Damper..... 1.5 ltr **0.4 U.S. gal**  
 Transmission, bevel gear, steering system ..... 90 ltr **23.8 U.S. gal**  
 Final drive (each side)..... 31 ltr **8.2 U.S. gal**  
 DEF tank ..... 39 ltr **10.3 U.S. gal**  
 Hydraulic oil capacity ..... 95 ltr **25.1 U.S. gal**  
 Boom Winch Case ..... 23.8 ltr **6.3 U.S. gal**  
 Hook Winch Case ..... 15.5 ltr **4.1 U.S. gal**  
 Hydraulic oil system ..... 133 ltr **35 U.S. gal**



## COMPONENT WEIGHTS (APPROXIMATE)

Counterweights.....Segmented, 11 sections  
 Weight.....Total weight: 6070 kg **13,380 lb**  
 11 sections @ 552 kg **1,217 lb**  
 Boom ..... 24' Standard: 1715 kg **3,781 lb**  
 28' Optional: 1927 kg **4,249 lb**  
 Counterweight frame ..... 2000 kg **4,400 lb**  
 Counterweight yoke..... 636 kg **1,400 lb**

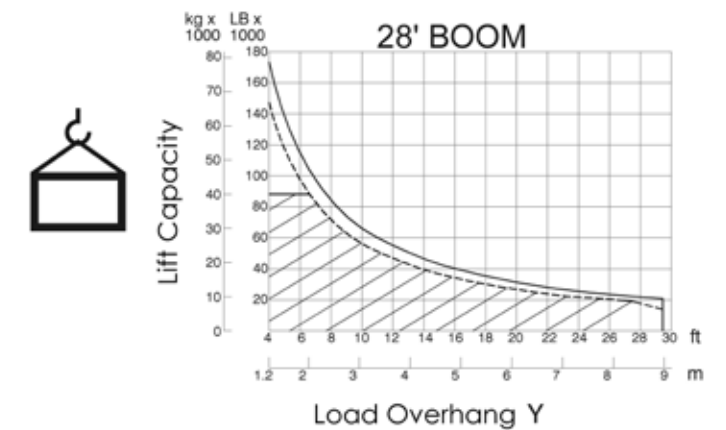
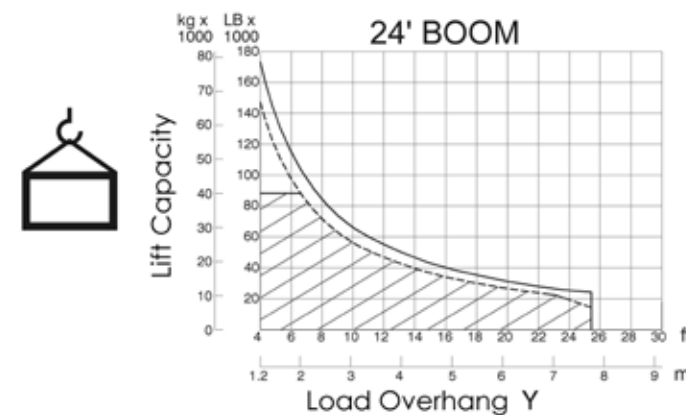


## PIPELAYING EQUIPMENT

Boom length ..... Standard: 7300 mm **24'**  
 Optional: 8569 mm **28'**  
 Boom line partings..... 5  
 Hook line partings..... 6  
 Hook speeds Raise - low speed: 5.7 - 10.5 m/min **18.7 - 34.5 ft/min**  
 Raise - high speed: 10.6 - 19.5 m/min **34.7 - 64 ft/min**  
 Hook free fall..... Yes  
 Boom drum..... Diameter: 254 mm **10"**  
 Width: xxx mm **11"**  
 Cable capacity: 98.5 m **323 ft**  
 Rope diameter: 19 mm **.75"**  
 Hook drum..... Diameter: 254 mm **10"**  
 Width: xxx mm **xx'**  
 Cable capacity: 151.8 m **498 ft**  
 Rope diameter: 19 mm **.75"**



## LIFTING CAPACITY



	Lift Capacity (ISO 8813:1992)	24' Boom	28' Boom
A	Lift capacity maximum at tipping point @ 4' overhang	77272 kg <b>170,000 lb</b>	77272 kg <b>170,000 lb</b>
B	Rated load maximum @ 4' overhang (85% of tipping)	65682 kg <b>144,500 lb</b>	65682 kg <b>144,500 lb</b>
C	Working load maximum @ 4' overhang (25% of rope strength)	38636 kg <b>85,000 lb</b>	38636 kg <b>85,000 lb</b>



## SHIPPING

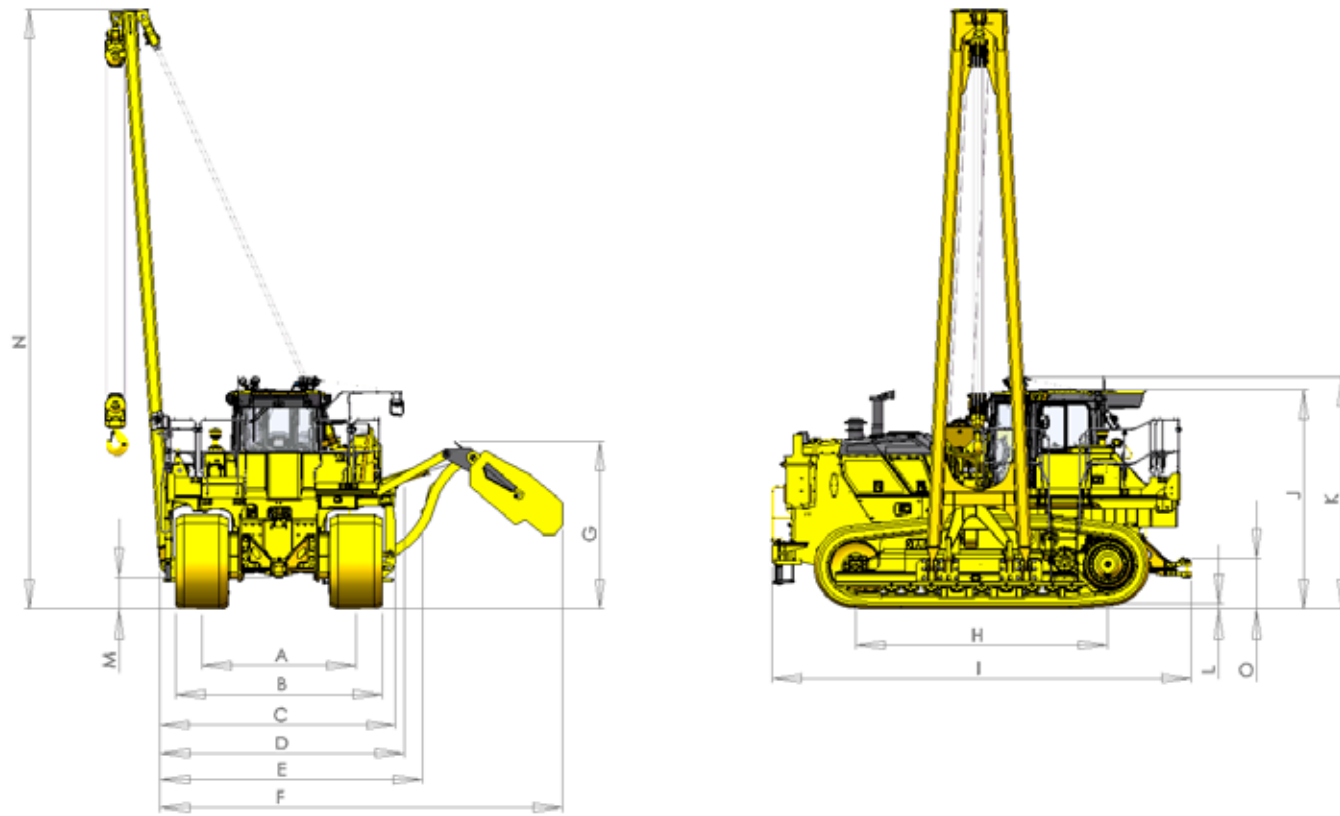
	Machine Width	Machine Weight
Fully assembled, boom vertical**	4115 mm <b>13'6"</b>	54870 kg <b>120,970 lbs</b>
C/W sections & boom removed	3810 mm <b>12'6"</b>	47090 kg <b>103,810 lbs</b>
C/W sections, frame, yoke, boom removed	3657 mm <b>12'</b>	44460 kg <b>98,010 lbs</b>
C/W sections, frame, yoke, boom, LH/RH roller frame, bosses removed	3210 mm <b>10'6"</b>	41730 kg <b>92,000 lbs</b>

\*\* 24' boom, long drawbar, 32" track shoes, full fuel tank

# SPECIFICATIONS

# OPERATOR ENVIRONMENT

D155CX-8



## DIMENSIONS

<b>A</b>	Track Gauge	2400 mm	<b>7' 10"</b>
<b>B</b>	Width of Tractor (32" Shoes)	3210 mm	<b>10' 6"</b>
<b>C</b>	Width of Tractor (counterweight/boom/counterweight frame removed)	3653 mm	<b>12'</b>
<b>D</b>	Width of Tractor (counterweight/boom removed)	3796 mm	<b>12' 5"</b>
<b>E</b>	Width of Tractor (counterweight retracted)	4079 mm	<b>13' 4"</b>
<b>F</b>	Width of Tractor (counterweight extended)	6255 mm	<b>20' 6"</b>
<b>G</b>	Machine Height (top of counterweight)	2604 mm	<b>8' 6"</b>
<b>H</b>	Length of Track on Ground	3925 mm	<b>12' 10"</b>
<b>I</b>	Operating Length	6516 mm	<b>21' 4"</b>
<b>J</b>	Height of Machine (Cab & ROPS)	3400 mm	<b>11' 1"</b>
<b>K</b>	Height of Machine (Cab, ROPS & Lights)	3604 mm	<b>11' 9"</b>
<b>L</b>	Grouser Height	80 mm	<b>3.1"</b>
<b>M</b>	Ground Clearance	572 mm	<b>1' 10"</b>
<b>N</b>	Boom Height (at SAE 1.22 m [4 ft] overhang) 7.31 m (24 ft) boom	8096 mm	<b>26' 6"</b>
	Boom Height (at SAE 1.22 m [4 ft] overhang) 8.53 m (28 ft) boom	9310 mm	<b>30' 6"</b>
<b>O</b>	Drawbar Height	782 mm	<b>2' 6"</b>



Comfortable air-conditioned and heated ROPS cab has large glass area for good visibility



Ten bright LED lights illuminate work area (standard)



Good view to winch drums for spooling



View to the boom through skylight in the cab roof





## STANDARD EQUIPMENT FOR BASE K170 MACHINE\*

- Air cleaner, double element with dust indicator
- Alternator, 140 ampere/24V
- Backup alarm
- Batteries, 200 Ah/2 x 12V
- Battery disconnect switch with lockout
- Boom and C'wt limit switches
- Bumper, front with pull device
- Color monitor, LCD
- Decelerator pedal
- Draw works with 7.3m 24' boom, hook, blocks, cables, extendable counterweight
- Ecology drains
  - Engine oil
  - Coolant
  - Hydraulic oil
  - Fuel tank
- Engine hood
- Engine idle auto shutdown with adjustable timer
- Engine intake centrifugal precleaner
- Engine, gull-wing side covers
- Engine shutdown secondary switch
- Exhaust pipe with raincap
- Extended length fixed roller track frame, wide track gauge
- Fast fuel provision
- Fenders
- Front pull hook
- Fuel pre-filter and primary filter
- Fuel priming pump, electric
- Grid heater starting aid in cold weather
- Hard bar, integral non-oscillating
- High mount foot rests
- Horn, warning
- Hydraulic driven radiator cooling fan with manual reverse clean mode and cold weather reverse operating mode
- Hydraulics for draw works and counterweight
- Hydraulics for towing winch (high flow)
- KOMTRAX® Level 5, Iridium satellite
- Komatsu Diesel Particulate Filter (KDPF)
- Variable Geometry Turbocharger (VGT)
- Komatsu Selective Catalytic Reduction (SCR)
- Locks, filler caps and covers
- Oil pressure check ports and covers
- Oil pressure check ports for power train
- PM service connector
- Provision for Load Moment Indicator
- Radiator mask, double door, heavy-duty, hinged perforated
- Radiator reserve tank
- Rear cover
- Restraint harness tie-off points
- ROPS cab
  - Air conditioner/heater/defroster
  - Autoclimate control
  - Pressurized with air precleaner
  - Condenser remote mounted
  - Skylight in roof
  - Emergency exit
- Cab accessories
  - 12V power supply (2 ports)
  - Cup holder
  - Rearview mirror
  - Rear view monitoring (1 camera)
  - Forward view monitoring (1 camera)
  - Right view monitoring (1 camera)
  - AM/FM Radio w/remote AUX plug (3.5 mm)
  - Lunch box holder
- Work lights, 10 LED type
  - 2 front, hood mounted
  - 2 front, cab mounted
  - 2 side, cab mounted
  - 2 rear, fender mounted
  - 2 rear, cab mounted
- Monitor with 7" color display
  - Diagnostics capability
  - Performance records
  - Service records
- 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
- Starting motor, 11.0 kW/24V
- Starting aid, air intake heater grid
- Steering system
  - Hydrostatic Steering System (HSS)
    - High capacity steering motor
- Storage bracket for blocks during transport
- Torque converter
- Track roller guards, end and center guiding sections
- Track show assembly
  - 9" 228 mm pitch sealed and lubricated
  - Master links
  - 810 mm 32" clipped moderate service
- Transmission, 3-speed manual powershift
- Underguards, heavy duty
  - Hinged belly pans
- Walkway with steps and handrails
- Water separator, fuel
- Wide core cooling package, 6 fins per inch spacing

\*Rear mounted equipment is not included in base machine standard equipment

\*\*Cab meets:

ROPS standard ISO 3471:2008

FOPS Level 2 standard ISO 3449:2005



## OPTIONAL EQUIPMENT



- Rear Attachment
  - HD long drawbar 240 kg 528 lb
- 8.5 m 28' boom
  - Includes longer hook cable
- Load Moment Indicator
  - Load pin, boom angle indicator, anti 2-black alert



## ALLIED MANUFACTURER'S ATTACHMENTS (SHIPPED LOOSE)

- Guarding - Medford
  - Hinged cab rear screen 61 kg 135 lb
- Hydraulic winch with drawbar
  - Allied H12E 1800 kg 4,000 lb

AESS948-00

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AD08(Electronic View Only)

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# KOMATSU®

*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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