

PIPELAYER

D355C-3

FLYWHEEL HORSEPOWER: 360 HP (269kW)/2000 RPM
MAX. LIFTING CAPACITY: 92000 kg (202,820 lb/902kN)
OPERATING WEIGHT: 57850 kg (127,540 lb)



Model shown may include optional equipment.

- **Large lifting capacity:** The 92 ton (902 kN) maximum lifting capacity facilitates heavy-duty pipe laying works.
- **Controls-Easy, safe, efficient:** A minimum number of controls means safe, fatigue-free operation. Features include automatic boom stop for positive winch release, fully hydraulic winch and closed type winch brake to prevent slipping.
- **Greater stability:** Wide track gauge and long track length plus easy-to-adjust counterweights make for a safe, stable machine.
- **Rugged engine:** The Komatsu SA6D140-2 diesel engine delivers a huge 360 FHP (269 kW) for dynamic lifting performance. Direct injection fuel system saves on fuel costs and increases efficiency.
- **Komatsu TORQFLOW transmission:** TORQFLOW readily assures smooth and responsive power shifting, as well as instant changes in direction.
- **Tough, job-proven undercarriage:** The same undercarriage used in Komatsu bulldozer is used in Komatsu pipelayers . . . because it is proven tough, economical, and easy to maintain.

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D355C SPECIFICATIONS



ENGINE

Komatsu SA6D140-2 4-cycle, water-cooled, turbocharged, aftercooled diesel engine of 6 cylinders with 140 mm (5.51") bore x 165 mm (6.50") stroke and 15.24 ltr (930 cu.in) piston displacement.

Flywheel horsepower 360 HP (269 kW) at 2000 RPM
 Max. torque 160 kg-m (1157 lb-ft/1569 N-m) at 1400 RPM

* 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.

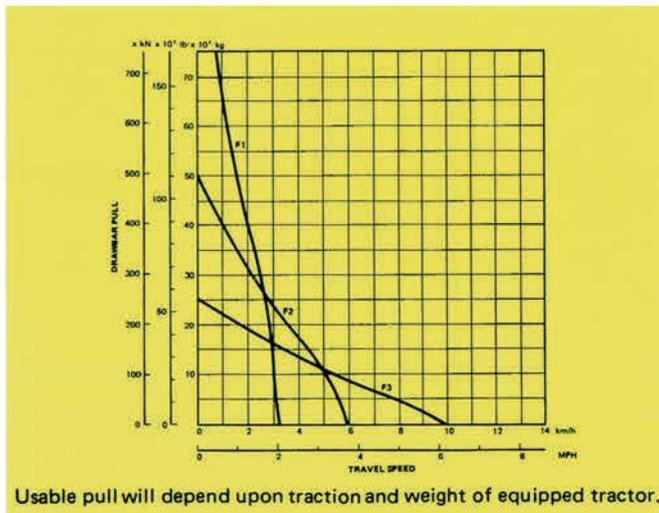
Direct-injection fuel system. All-speed mechanical governor. Forced lubrication driven by gear pump. Full-flow filter for lube oil purification. Dual element, dry-type air filters with automatic dust ejector and dust indicator. 24 V/11 kW electrical starting motor. 24 V/35A alternator. 2 x 12 V/170 Ah batteries.



TORQFLOW TRANSMISSION

Komatsu's unique TORQFLOW transmission consisting of water-cooled, 3-element, single-stage, single-phase torque converter and planetary-gear, multiple-disc clutch transmission. Hydraulically actuated and forced-lubricated for optimum heat dissipation. Offers single-lever control of speed (3 forward and 3 reverse) and directional changes. Optimum machine speed obtainable at all times to match job. Gearshift lock lever and neutral safety switch to prevent the machine from accidental starts.

Travel speeds	Forward	Reverse
1st	0-3.3 km/h (2.1 MPH)	0- 3.9 km/h (2.4 MPH)
2nd	0-5.9 km/h (3.7 MPH)	0- 7.0 km/h (4.3 MPH)
3rd	0-9.8 km/h (6.1 MPH)	0-11.0 km/h (6.8 MPH)



STEERING

Lever-controlled, wet multiple-disc steering clutches that are hydraulically actuated and require no adjustment.

Wet, contracting-band, foot-operated steering brakes with hydraulic booster for light-touch control and long service life.

Steering clutches and brakes interconnected for easy steering.
 Min. turning radius 4.67 m (15'4")



FINAL DRIVE

Double-reduction final drive of spur and planetary gears to minimize transmission of shocks to power-train components. Segmented sprocket rims are bolt-on type for easy on-field replacement.



UNDERCARRIAGE

Suspension Non-oscillating type
Track roller frame Box-section, high-tensile-strength steel construction.

Rollers and idlers: Lifetime-lubricated track, carrier rollers and idlers are sealed with floating seals.

Number of track rollers (each side) 8
 Number of carrier rollers (each side) 2

Track shoes: Assembled single-grouser shoes. Unique X-shaped dust seals for preventing entry of dust into pin-to-bushing clearances for extended service. Track tension easily adjusted with grease gun.

Number of shoes (each side) 42
 Grouser height 88 mm (3.5")
 Shoe width (standard) 860 mm (2'10")
 Ground contact area 64500 cm² (9,998 sq.in)
 Ground pressure 0.90 kg/cm² (12.8 PSI/88.3 kPa)



PIPELAYING EQUIPMENT

Lifting capacity: With a large 92000 kg (202,820 lb/902 kN) capacity, the D355C is ideal for operation in large-scale pipe-laying sites which require laying of pipe more than 48 inches in diameter. The working radius is 1.3 to 7.3 m (4'3" to 23'11").

Hook speeds (bare drum):

	Raise	Lower
1st	5.5 m/min (18.0 FPM)	4.5 m/min (14.8 FPM)
2nd	12.7 m/min (41.7 FPM)	10.2 m/min (33.5 FPM)

Boom: The box-sectioned boom is made of hightensile steel to take the punishment of heavy-duty loads. The wire-controlled boom has an automatic maximum stopper device which prevents excessive boom raising.

	Standard boom	Optional boom
Boom length	7300 mm (23'11")	8560 mm (28'1")
Boom weight	2420 kg (5,340 lb)	2520 kg (5,560 lb)

Winch: Hydraulically controlled, double drum, reversible type winch allows simultaneous hook/boom operation. HYDROSHIFT type transmission and wet, multiple-disc type brake.

Winch dimensions:

Hook drum (dia. x width) 290 mm (11.4") x 340 mm (13.4")
 Boom drum (dia. x width) 290 mm (11.4") x 166 mm (6.5")

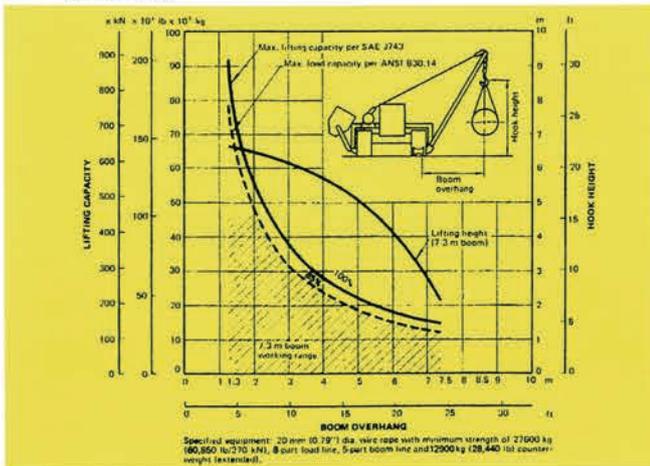
Cable capacity (dia. x length):

Hook (attached) 20 mm (0.79") x 95 m (311'8")
 Boom (attached) 20 mm (0.79") x 65 m (213'3")
 Hook (max.) 20 mm (0.79") x 190 m (623'5")
 Boom (max.) 20 mm (0.79") x 80 m (262'6")

Counterweights: Segmented plate type of 1530 kg (3,370 lb). Total six plates. Hydraulically controlled.

Total weight (including six plates, frame and hydraulic cylinders) 12900 kg (28,440 lb)

Lifting capacity



COOLANT & LUBRICANT CAPACITY

Coolant	145 ltr (38.3 U.S. Gal)
Fuel tank	640 ltr (169.1 U.S. Gal)
Engine	42 ltr (11.1 U.S. Gal)
Torque converter, transmission, bevel gear, steering system	230 ltr (60.8 U.S. Gal)
Final drive (each side)	68 ltr (18.0 U.S. Gal)
Winch	125 ltr (33.0 U.S. Gal)
Counterweight	47 ltr (12.4 U.S. Gal)



OPERATING WEIGHT (approximate)

Operating weight, including hook, boom, winch, counterweights, rated capacity of lubricant, coolant and fuel 57850 kg (127,540 lb)

STANDARD EQUIPMENT

- TORQFLOW transmission • 860 mm (2'10") single-grouser shoes • Hydraulic track adjusters • 24 V, 35 A alternator • 24 V, 11 kW electric starting motor • Decelerator pedal • Segmented sprockets • Front pull hook • Oil-suspension seat • Dry-type air cleaner with automatic dust evacuator and dust indicator • 24 V (12 V x 2), 170 Ah batteries • 8-roller track frames • Lighting system (including one rear and two front lights) • Wet-type steering clutches and brakes • Final-drive-case wear guard • In-line radiator • Lower guard (4 pieces) • Center track roller guards • Front bumper • Fixed type drawbar • 7.3 m (23'11") boom • Automatic boom maximum stopper • Double-drum, reversible type winch • Hydraulically-controlled counterweights (6 plates) • Hook with 4-grooved pulley

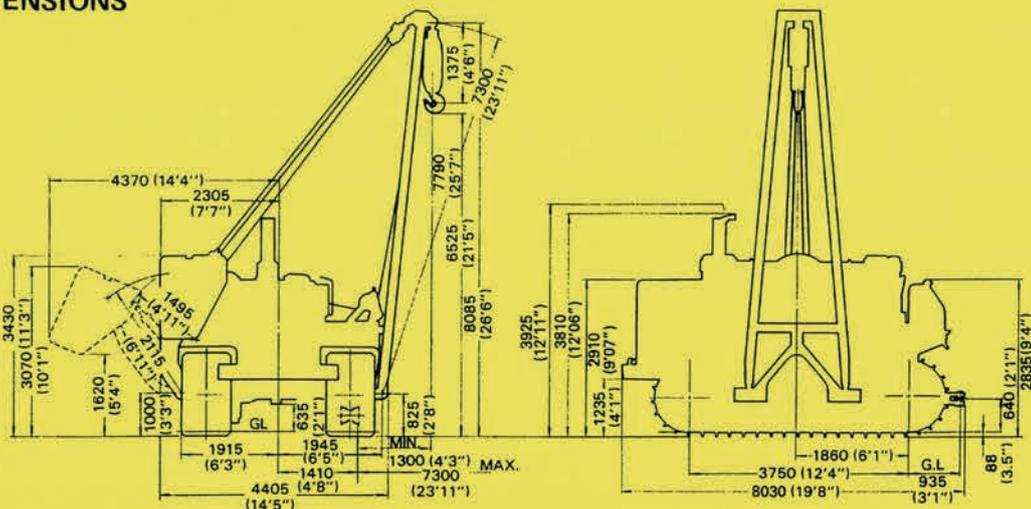


CONTROL FEATURES

Controls are human-engineered—they're easy to use and easy to get to. Inter-connected steering clutches and brakes assure responsive, trouble-free steering control. All hook, winch, boom movements are controlled simultaneously by just three levers. Counterweight position control is next to operator's seat. This oil-suspension seat means hours of productive, fatigue-free operation. Viscous damper type cab suspension softens shocks for operator comfort and extends component life.



DIMENSIONS



Ground clearance 635 mm (2'1")

Unit: mm (ft.in)

Other features



Winch power train: Wet, gear-drive type for outstanding durability. Single power train with double drums positively controls boom and hook driving independently. This means both functions can be carried out without any correlation with another function.

Easy winch control: Compact and lightweight winch has a fool-proof type control mechanism and high-low range lever with interlock mechanism, assuring precise, smooth, positive winch controls according to the pipe weight. Hook is lowered hydraulically to prevent abnormal pipe swinging or damage on pipes when it is stopped abruptly.

Only three levers are required for controls; one for the transmission, another for hook and the other for boom. All levers are hydraulically actuated for light-touch control effort. As a result, simultaneous (compound) movements are carried out easily and quickly.

The PPC valve adjusts lever handling effort in proportion to lever strokes, enabling precise control.

Tough bulldozer undercarriage: The same undercarriage used in the high performance Komatsu D355A bulldozer is used in the D355C pipelayer. As a result, the D355C takes shocks and stress-in stride, Center track-roller guards prevent rocks and other abrasive items from entering in – between track roller and links. Grooved type floating seals keep lubricant in, dirt out of track rollers and idlers.

Attachments

Momentum indicator: A safety device for warning the operator when the machine has reached its lifting limit. Tells the operator to adjust boom or counterweight positions. Wire harness is already built in the machine for easy installation of this equipment.

Overwinding warning device: Warns the operator when the hook sheave has been overwound, preventing broken wire rope from causing damage to vital components.

Load indicator: Tells the operator at a glance the ideal working range and rated lifting load according to the boom elevation angle, assuring safe pipelaying works.

Low noise cab: This optional cab minimizes interior operating noise. Air conditioner and ventilator can be installed on cabs.

Optional shoes

	Additional weight	Ground contact area	Additional ground pressure
960 mm (3'2") single-grouser shoes	650 kg (1,430 lb)	72000 cm ² (11,160 sq.in)	-0.08 kg/cm ² (1.14 PSI/7.85 kPa)
1010 mm (3'4") single-grouser shoes	950 kg (2,090 lb)	75750 cm ² (11,740 sq.in)	-0.12 kg/cm ² (1.71 PSI/11.77 kPa)

Steel cab:

•Additional weight: 670 kg (4,474 lb)

•Dimension:

Length 2070 mm (6'10")

Width 1785 mm (5'10")

Height 1460 mm (4'9")
(floor to ceiling)

•Hot water-type cab heater with defroster: 5400 kcal/h

•Floor mat, Front and Rear wiper, Rear lamp, Room lamp

Materials and specifications are subject to change without notice.

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