



TEREX®

TC50

MINI EXCAVATOR



Specifications

Operating weight	11,070 lbs (5,020 kg)
Engine power	36 HP (26.5 kW)
Bucket capacity	2.4-8.2 ft ³ (68-232 l)
Dig depth	12' 2" (3.7 m)
Reach	20' 4" (6.2 m)

Features

- ▶ Zero-tail machine
- ▶ Extra-wide blade for dozer applications
- ▶ Top-mounted boom cylinders for perfect protection of cylinders and larger range of application
- ▶ Comfort cab with perfect all-round visibility
- ▶ Knickmatik® allows for working closely alongside walls
- ▶ Wide range of proven working tools

WORKS FOR YOU.™

SPECIFICATIONS

OPERATING DATA, STANDARD EQUIPMENT

Transport weight (incl. bucket)	10,625 lbs (4,820 kg)
Operating weight acc. to ISO 6016 (incl. operator)	11,070 lbs (5,020 kg)
Total length (travel position)	11' 6" (3,570 mm)
Total length (trailer transport position)	12' 9" (3,895 mm)
Total height (travel position)	6' 6" (1,990 mm)
Total width	6' 1" (1,850 mm)
Uppercarriage tailswing	3' 3" (995 mm)
Uppercarriage frontswing	6' 8" (2,020 mm)
Working envelope 180° / 360°	9' 11" / 13' 3" (3,015 / 4,040 mm)
Ground clearance	14.1" (360 mm)
Bucket digging force (ISO 6015)	7,014 lbf (31,200 N)
Stick digging force (ISO 6015)	6,070 / (5,350* lbf) / 27,000 (23,800* N)
Ground pressure (rubber crawlers)	3.91 psi (0.27 daN/cm ²)
Ground pressure (steel crawlers)	4.0 psi (0.28 daN/cm ²)

ENGINE

Manufacturer, model	Yanmar 4TNV88
Type	4-cylinder diesel engine, EPA/Tier 4 Interim (2008)
Combustion	4-stroke, direct fuel injection
Displacement	134 in ³ (2,190 cm ³)
Net power rating at 2,200 rpm (SAE J 1349)	36 hp (26.5 kW)
Max. torque	101.8 lbf ft (138 Nm) @ 1,320 rpm
Cooling system	Water

ELECTRICAL SYSTEM

Nominal voltage	12 V
Battery	12 V / 74 Ah
Generator	12 V / 50 A
Starter	12 V / (2.7 hp) 2.0 kW

TRANSMISSION

Two-stage hydrostatic travel drive with axial piston variable displacement motor and reduction gear, fully enclosed. "Straight-Travel" function. Brake valve for downhill drive. 2 speed ranges:

2 speed ranges:

Travel speed, forward and reverse	1.7 / 3.1 mph (0-2.8 / 5.0 kph)
Automatic shift-over between speed range 1 and 2.	
Gradeability	max. 60 %
Drawbar pull 1st / 2nd speed range	10,835/ 5,395 lbf (4,820 / 2,400 daN)

UNDERCARRIAGE

Torsion-proof welded design. Crawler unit carriers in sloped design for dirt outlet. Maintenance-free crawler-type undercarriage. Idler suspension with hydraulic crawler track tensioning.

Width rubber crawlers / steel crawlers	16" (400 mm)
Tread width	5' 3" (1,590 mm)
Total length (sprocket - idler)	6' 4" (1,920 mm)
Total length (undercarriage)	7' 11.7" (2,430 mm)

DOZER BLADE

Independent of drive train, sensitive control via separate hand lever.

Width x height	6' 6" x 16" (1,990 x 400) mm
Dozer cut below ground	8.7" / 16.1" (220 mm)
Dozer lift above ground	20" (500 mm)
Slope angle	38°

STEERING

Independent, individual control of crawler chains, also counterwise. Sensitive control via hand levers combined with foot pedals. Pedal console serving as foot rest.

SWING SYSTEM

Hydrostatic drive, also acts as wear-resistant brake. Additional spring-loaded multi-disc brake. Internally toothed ring gear.

Swing speed	0-10 rpm
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KNICKMATIK®

Lateral parallel adjustment of boom arrangement at full digging depth.

Angle of articulation / lateral adjustment left	67° / 34" (860 mm)
Angle of articulation / lateral adjustment right	64° / 30" (770 mm)

FLUID CAPACITIES

Fuel tank	17 gal (65 l)
Hydraulic system (incl. tank)	24 gal (90 l)

HYDRAULIC SYSTEM

Variable pump capacity	max. 37 gpm (140 l/min)
Working pressure	3,625 psi (250 bar)

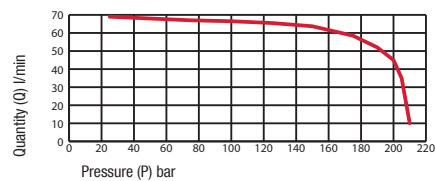
Working hydraulics: LS-axial-piston variable displacement pump, load sensing and load-independent flow distribution (LUDV) for all work functions and travel drive. Simultaneous independent control of all movements.

Tank-immersed return filter with electric contamination indicator, full flow filtration. Hydraulic oil radiator provided as standard. Boom, dipperstick and articulated cylinders with end-positioning damping on both sides, bucket retract function with one-side end-position damping.

Open return provided as standard. All functions can be activated proportionally. Two servo-assisted joystick controls for excavator operations. Shut-off of all functions when operator dismounts from machine.

Control circuit for work attachments (standard):

Diagram shows P/Q provided on couplers



CAB

Spacious, sound-insulated full-vision steel cab, FOPS** (acc. to ISO 3449) and TOPS (acc. to ISO 12117) certified. Door with large entry zone on left-hand side. Sliding window on right-hand side. Safety glass windows, thermo windows tinted in green. Skylight thermo window, bronze tinted. Panoramic rear window. Front window supported by pneumatic springs, lockable for ventilation and slidable under cab roof. Fixed window part without frame which obstructs the forward view. Windshield washer system. Storage compartment. Preparation for radio installation. Left-hand outside rear-view mirror.

Cab heating with windshield defroster through coolant heat exchanger and 2-speed fan, ventilating mode in summer.

Operator's seat MSG 85 (standard version), hydraulic damping, height-adjustable, longitudinal-horizontal suspension. Lap belt.

Instrument panel on the right-hand side of the operator's seat with visual & acoustic warning device, hour-meter, instrument cluster with large fuel gauge.

Working flood lights Halogen H-3 front left.

Noise emission ambient L _{WA}	94 dB (A)
Noise emission cab L _{PA}	79 dB (A)

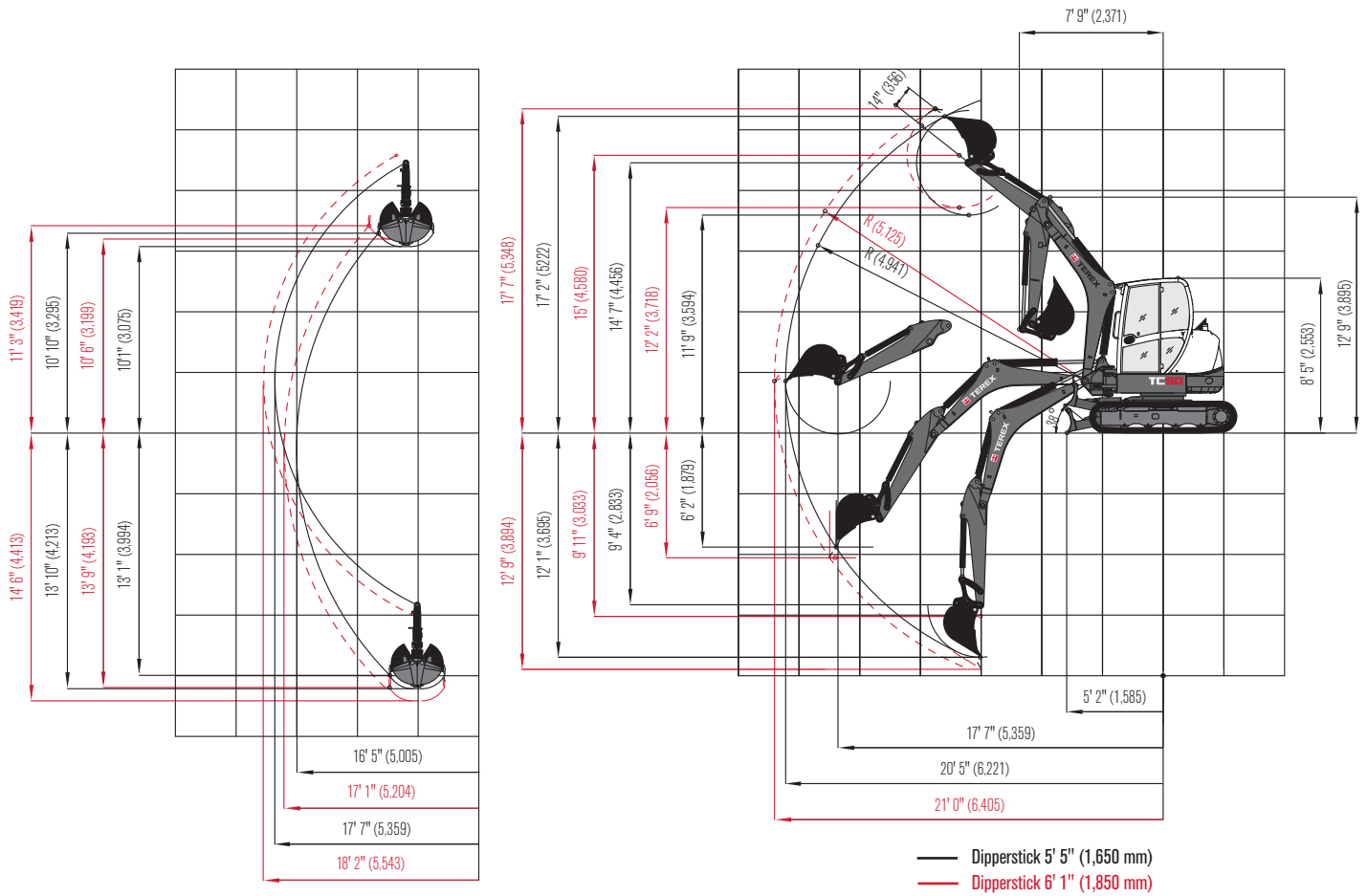
Yellow beacon, radio, immobilizer (anti-theft device), working floodlights prepared for optional installation.

*with dipperstick 6' 1" (1,850 mm) (optional)

**FOPS-approved only with skylight guard (optional)

WORKING RANGES & DIMENSIONS: MONOBLOC BOOM

TC50



LIFTING CAPACITIES

Bucket hinge height	Load radius from center of ring gear														
	8'2" (2.5 m)		9'10" (3.0 m)		11'6" (3.5 m)		13'1" (4.0 m)		14'9" (4.5 m)		16'5" (5.0 m)		17'5" (5.3 m)		
Dipperstick 1650 mm	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	
6'7" (2.0 m)	S	-	-	3.704 (1.68)	2.800 (1.27)	3.418 (1.55)	2.204 (1.00)	3.064 (1.39)	1.697 (0.77)	2.733 (1.24)	1.433 (0.65)	2.535 (1.15)	1.190 (0.54)	2.381 (1.08)	1.124 (0.51)
	T	-	-	3.351 (1.52)	2.712 (1.23)	2.403 (1.09)	2.072 (0.94)	1.896 (0.86)	1.675 (0.76)	1.565 (0.71)	1.367 (0.62)	1.279 (0.58)	1.124 (0.51)	1.213 (0.55)	1.058 (0.48)
3'3" (1.0 m)	S	7.848 (3.56)	3.284 (1.49)	5.666 (2.57)	2.557 (1.16)	4.409 (2.00)	2.072(0.94)	3.616 (1.64)	1.697 (0.77)	3.064 (1.39)	1.389 (0.63)	2.601 (1.18)	1.160 (0.53)	2.293 (1.04)	1.058 (0.48)
	T	3.638 (1.65)	3.131 (1.42)	2.910 (1.32)	2.447 (1.11)	2.271 (1.03)	1.962 (0.89)	1.874 (0.85)	1.587 (0.72)	1.543 (0.70)	1.301 (0.59)	1.257 (0.57)	1.102 (0.50)	1.124 (0.51)	.992 (0.45)
0 m	S	6.680 (3.03)	2.998 (1.36)	5.379 (2.44)	2.359 (1.07)	4.210 (1.91)	1.874 (0.85)	3.461 (1.57)	1521 (0.69)	2.822 (1.28)	1.301 (0.59)	2.337 (1.06)	1.102 (0.50)	2.138 (0.97)	1.036 (0.47)
	T	3.439 (1.56)	2.910 (1.32)	2.557 (1.16)	2.249 (1.02)	2.072 (0.94)	1.82 (0.82)	1.697 (0.77)	1.477 (0.67)	1.411 (0.64)	1.313 (0.56)	1.213 (0.55)	1.036 (0.47)	1.124 (0.51)	.970 (0.44)

The above loads (all values in lbs x 1,000 resp. metric tons) are in compliance with SAE J 1097. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. All values were determined with quick-attach system but without bucket. In case of mounted-on work attachments, the deadweights of the work attachments must be deducted from the permissible payloads.

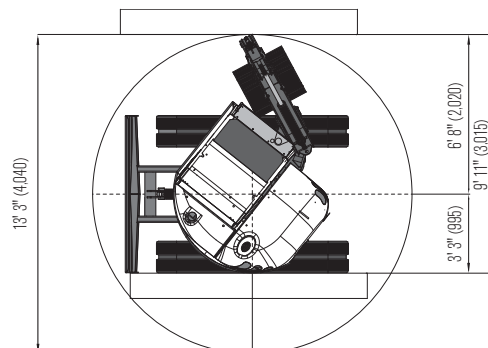
Working equipment: Rubber crawlers.

Abbreviations: S = Supported by blade, T = Traveling

DIMENSIONS

Work equipment:

Monobloc boom with dipperstick 5' 5" (1,650 mm)



WORK ATTACHMENTS

BUCKETS

Bucket, QAS	12" (300 mm wide, capacity 2.4 ft ³ (68 l))
Bucket, directly mounted	12" (300 mm wide, capacity 2.83 ft ³ (80 l))
Bucket, QAS	16" (400 mm wide, capacity 3.5 ft ³ (99 l))
Bucket, directly mounted	16" (400 mm wide, capacity 3.96 ft ³ (112 l))
Bucket, QAS	20" (500 mm wide, capacity 4.63 ft ³ (131 l))
Bucket, directly mounted	20" (500 mm wide, capacity 5.1 ft ³ (144 l))
Bucket, QAS	24" (600 mm wide, capacity 5.8 ft ³ (164 l))
Bucket, directly mounted	24" (600 mm wide, capacity 6.2 ft ³ (176 l))
Bucket, QAS	28" (700 mm wide, capacity 7.0 ft ³ (198 l))
Bucket, directly mounted	30" (750 mm wide, capacity 7.95 ft ³ (225 l))
Bucket, QAS	31" (800 mm wide, capacity 8.2 ft ³ (232 l))
Ditch-cleaning bucket, QAS	51" (1,300 mm wide, capacity 6.75 ft ³ (191 l))
Ditch-cleaning bucket, directly mounted	51" (1,250 mm wide, capacity 7.45 ft ³ (211 l))
Swing bucket, QAS	51" (1,300 mm wide, capacity 6.75 ft ³ (191 l))
Swing bucket, directly mounted	39" (1,000 mm wide, capacity 7.45 ft ³ (211 l))

OPTIONAL EQUIPMENT

BOOM OPTIONS

Monobloc boom, with extended dipperstick 6' 1" (1,850 mm)

CRAWLER CHAIN OPTIONS

Steel crawler chain, 16" (400 mm) wide

Rubber-coated steel crawler chain 'Roadliner', 16" (400 mm) wide.

HYDRAULIC SYSTEM

Terex 'Fingertip' control for work attachments on right joystick	Hose-rupture / load-retaining valve for boom with load warning device
Terex 'Fingertip' control for work attachments on left joystick	Hose-rupture / load-retaining valve for dipperstick
Second control circuit (e.g. for sorting grab)	Biodegradable hydraulic oil / ester-based HLP 68 (Panolin)
Conversion kit from ISO controls to Schaeff controls	A/B control pattern switch

DRIVER'S STAND

Operator's seat MSG 85 (comfort version), hydraulic damping, extra-high backrest, longitudinal-horizontal suspension

Operator's seat MSG 95 (premium version), air damping, extra-high backrest, longitudinal-horizontal suspension, seat and backrest heating

www.terex.com/construction

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GRABS

Clamshell grab GL 1250, grab swing brake	set of shells 10" (250 mm) wide, capacity 1.77 ft ³ (45 l)
Clamshell grab GL 1350, grab swing brake	set of shells 14" (350 mm) wide, capacity 2.56 ft ³ (65 l)
Clamshell grab GL 1450, grab swing brake	set of shells 18" (450 mm) wide, capacity 3.35 ft ³ (85 l)
Clamshell grab GL 1600, grab swing brake	set of shells 18" (600 mm) wide, capacity 4.53 ft ³ (115 l)
Ejector	

OTHER WORK ATTACHMENTS

Hydraulic hammer	Cutting unit
Auger	Quick-change adapter for hydraulic hammer
Load hook integrated in quick-attach system	Bolt-on load hook for bucket rod
Further work attachments available on request	

ENGINE

Diesel exhaust cleaner	Catalyst
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CAB

Air conditioning	FOPS - skylight guard
Working floodlight, front	Motion alarm incl. horn (to be deactivated on demand)
Working floodlight, rear	Radio set installation kit
Yellow beacon	

OTHER OPTIONAL EQUIPMENT

Mechanical quick-attach system (QAS)	Anti-theft device (immobilizer)
Quick-attach system, mechanical (genuine Lehnhoff system), type MS03	Canopy with working floodlight (weight reduction: 176 lbs (80 kg))
Additional boom-mounted working floodlight	Electrical refueling pump
Engine-independent diesel heater with fresh air circulation and timer	Special coating / adhesive films
Crane loading wire-rope harness	
Further optional equipment available on request	

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