

Mini Excavator

OPERATING WEIGHT	5.0 t
NET ENGINE POWER	29 kW (39.4 hp)
BUCKET CAPACITIES	75 - 245 l
MAX. DIG DEPTH	3.7 m
MAX. REACH	6.2 m



MINI EXCAVATOR TC50

Operating Data, Standard Equipment

Transport weight (incl. QAS, without bucket)	4820 kg
Operating weight acc. to ISO 6016 (incl. operator)	5020 kg
Total length (travel position)	3570 mm
Total height (travel position)	3895 mm
Total width (Undercarriage)	1990 mm
Total width (Uppercarriage)	1850 mm
Uppercarriage tailswing	995 mm
Uppercarriage frontswing	2020 mm
Working envelope 180° / 360°	3020 / 4040 mm
Ground clearance	360 mm
Digging depth	3715 mm
Bucket hinge pin height (lowest point)	2855 mm
Bucket hinge pin height (top position)	4475 mm
Dump height	3615 mm
Max. working height	5250 mm
Max. reach	6220 mm
Bucket digging force (ISO 6015)	31,200 N
Stick digging force (ISO 6015)	27,000 N
Ground pressure (rubber crawlers)	0,27 daN/cm ²
Ground pressure (rubber crawlers)	0,28 daN/cm ²

Specifications

Engine

Manufacturer, model	Yanmar 4TNV88
Type	4-cylinder diesel engine, COM II/EPA II
Combustion	4-stroke, direct fuel injection
Displacement	2190 cm ³
Net power rating at 2200 rpm (ISO 9249)	29 kW (39.4 hp)
Max. torque	144 Nm at 1500 rpm
Cooling system	Water

Electrical system

Nominal voltage	12 V
Battery	12 V / 74 Ah
Starter	12 V / 2.0 kW
Generator	12 V / 50 A

Power Transmission

Two-stage hydrostatic travel drive with axial piston variable displacement motor and reduction gear, fully enclosed. "Straight-Travel"-function standard. Brake valve for downhill drive.	
Travel speed, forward and reverse	0-2.8 / 5.0 km/h
Automatic shift-over between speed range 1 and 2.	
Max. gradeability	60 %
Drawbar pull 1st / 2nd speed range	4280 / 2400 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 tensioning.	
Width rubber crawlers / steel crawlers	400 mm
Tread width	1590 mm
Total length (sprocket - idler)	1920 mm
Total length (undercarriage)	2430 mm

Dozer blade

Independent of drive train, sensitive control via hand lever.	
Width x height	1990 x 400 mm
Dozer cut below ground / Dozer lift above ground	220 / 500 mm
Slope angle	38°

Steering

Independent, individual control of crawlers, also counterwise via 2-circuit hydraulic system. 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

Fluid Capacities

Fuel tank	65 l
Hydraulic system (incl. tank 60 l)	90 l



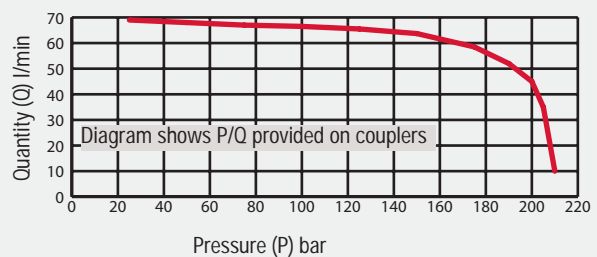
Hydraulic system

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

Max. variable pump capacity	140 l/min
Max. working pressure	250 bar

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.

Control circuit for work attachments (standard):



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.

Knickmatik®

Lateral parallel adjustment of boom arrangement at full digging depth.	
Angle of articulation / lateral adjustment right	64° / 770 mm
Angle of articulation / lateral adjustment left	67° / 860 mm

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 box. Radio pre-installation. Left-hand outside rear-view mirror.

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

Fabric-covered, hydraulically cushioned driver's seat, height, tilt and weight adjustments. Safety belt. Armrests on both sides.

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.

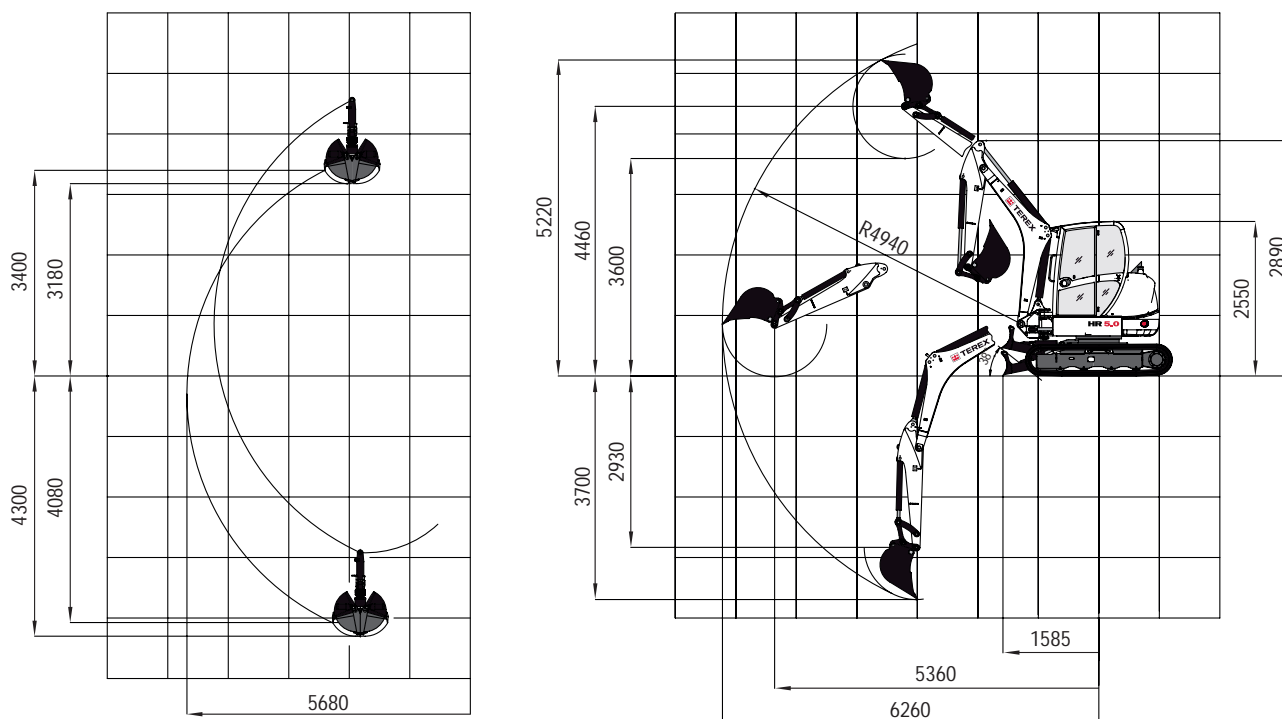
Working flood lights Halogen H-3 front left.

Sound level values in compliance with EC-directives.

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

*FOPS-approved only with skylight guard (optional)

Working ranges: Monobloc boom



Lifting capacities

Bucket hinge pin height		Load radius from center of ring gear													
		25 m		3.0 m		3.5 m		4.0 m		4.5 m		5.0 m		5.3 m	
Dipperstick 1600 mm		End	Side	End	Side	End	Side	End	Side	End	Side	End	Side	End	Side
2.0 m	S	-	-	1.68	1.27	1.55	1.00	1.39	0.77	1.24	0.65	1.15	0.54	1.08	0.51
	T	-	-	1.52	1.23	1.09	0.94	0.86	0.76	0.71	0.62	0.58	0.51	0.55	0.48
1.0 m	S	3.56	1.49	2.57	1.16	2.00	0.94	1.64	0.77	1.39	0.63	1.18	0.53	1.04	0.48
	T	1.65	1.42	1.32	1.11	1.03	0.89	0.85	0.72	0.70	0.59	0.57	0.50	0.51	0.45
0 m	S	3.03	1.36	2.44	1.07	1.91	0.85	1.57	0.69	1.28	0.59	1.06	0.50	0.97	0.47
	T	1.56	1.32	1.16	1.02	0.94	0.82	0.77	0.67	0.64	0.56	0.55	0.47	0.51	0.44

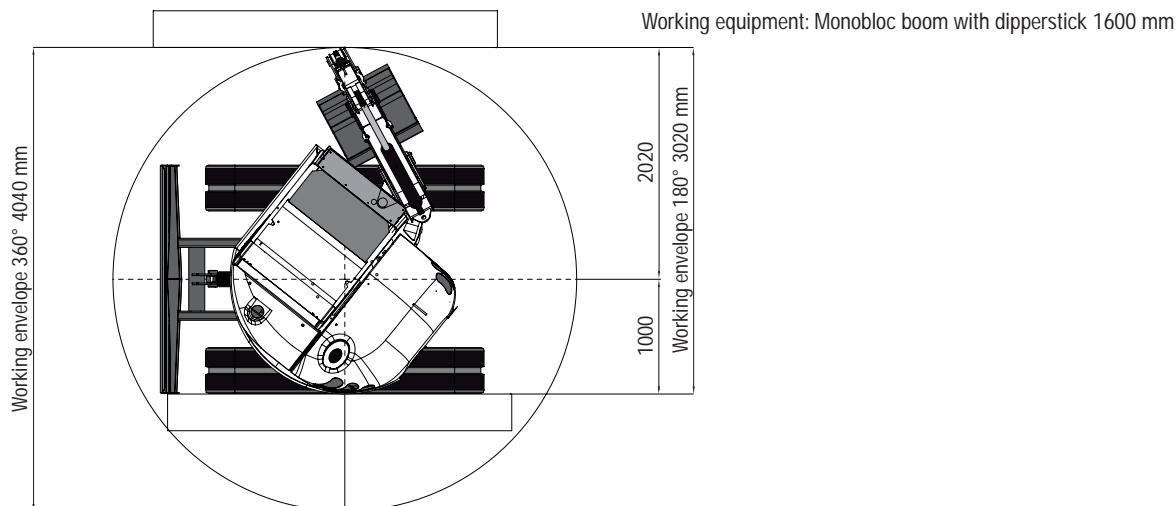
All values in tons (t) were determined acc. to ISO 10567 and include a stability factor of 1.33 or 87% of the hydraulic lifting capacity. All values were determined with quick-attach system but without bucket. In case of mounted-on work attachments, the deadweights of the work attachments must be deducted from the permissible payloads.

Working equipment: Rubber crawlers.

Abbreviations: S = Supported by blade, T = Traveling

Mini Excavator TC50

Dimensions



Options

Accessories

Mechanical quick-attach system for work tools (QAS)
Canopy with working floodlight (weight reduction: 80 kg)
Dipperstick 1850 mm
Steel crawlers, 400 mm wide
Luxury driver's seat, height-adjustable, with extra-high back rest, progressively adjustable to operator's weight, seating has tilt and lengthwise adjustment. Upward folding, tilt-adjustable comfort armrests.
FOPS-skylight guard
Cab-mounted working floodlight, front and rear
Boom-mounted working floodlight
Yellow beacon
Travel motion alarm (acoustic signal)
Crane loading wire-rope harness
Track shoes with "Felasto" tiles
Quick-change adapter for hydraulic hammer
Filling with biodegradable hydraulic oil, ester-based, VI 68
Anti-teft device (immobilizer)

Buckets

Bucket, tapered (QAS)	300 mm / 80 l
Bucket, with ejector (QAS)	300 mm / 75 l
Bucket, tapered (QAS)	400 mm / 115 l
Bucket, with ejector (QAS)	400 mm / 110 l
Bucket (QAS)	500 mm / 150 l
Bucket (QAS)	600 mm / 180 l
Bucket (QAS)	750 mm / 245 l
Ditch-cleaning bucket (QAS)	1250 mm / 170 l
Swing bucket, 2 x 45° (QAS)	1250 mm / 180 l

Clamshell grabs

Type GL 1250 (QAS), grab swing brake	250 mm / 45 l
Type GL 1350 (QAS), grab swing brake	350 mm / 65 l
Type GL 1450 (QAS), grab swing brake	450 mm / 85 l
Type GL 1600 (QAS), grab swing brake	600 mm / 115 l

Further attachments available on request

Further attachments available on request



Terex GmbH

Schaeffstrasse 8
D-74595 Langenburg
Germany

PHONE ++49 (0) 7905 / 58-0
FAX ++49 (0) 7905 / 58114
EMAIL info@terex-schaeff.com
WEB terex-schaeff.de