

MINI EXCAVATOR



The machine shown may include optional equipment.

Specifications

Operating weight	3570 kg
Engine power	22.8 kW (31.0 HP)
Bucket capacity	54 – 191 l
Digging depth	3.33 / 3.53 m
Reach	5.39 / 5.57 m

Features

- ▶ Extra-wide blade for dozer applications
- ▶ Top-mounted boom cylinders for perfect protection of cylinders and larger range of application
- ▶ Comfort cab with excellent visibility (canopy as option)
- ▶ Increased productivity thanks to load sensing hydraulics
- ▶ Knickmatik® allows for working closely along walls
- ▶ Wide range of proven working tools

WORKS FOR YOU.™

SPECIFICATIONS

ENGINE

Manufacturer, model	Kubota, D1803 M-DI, EU Stage IIIA
Type	3-cylinder diesel engine
Combustion	4-stroke cycle with direct fuel injection (DI)
Bore x stroke	87 x 102 mm
Displacement	1826 cm ³
Power rating acc. to ISO 14396 @ 2200 rpm	22.8 kW (31.0 HP)
Torque max. @ 1400 rpm	114 Nm
Air filter with safety cartridge and maintenance switch	
Cold-starting aid	Glow plugs

ELECTRICAL SYSTEM

Nominal voltage	12 V
Battery	12 V / 71 Ah
Generator	12 V / 40 A
Starter	2.0 kW
Lighting system:	1 work light front left on the cab / canopy (auxiliary headlamps optional)

TRANSMISSION

Two-stage hydrostatic travel drive with axial piston variable displacement motor and reduction gear, fully enclosed. Automatic change-over between speed range I and II. "Straight-Travel" function. Brake valve for downhill drive. Manual switching via button on dozer lever

Travel speed, forward and reverse	0 - 2.4/4.2 kph
-----------------------------------	-----------------

UNDERCARRIAGE

Torsion-proof welded design. Crawler unit carriers in sloped design for dirt outlet. Maintenance-free crawler-type undercarriage. Idler suspension with hydraulic crawler-chain tensioning. Support roller at the top

Width rubber tracks	300 mm
Total length (undercarriage)	2090 mm
Number of rollers per side	4 at the bottom, 1 on top
Track width	1200 mm
Gradeability	max. 60%
Drawbar pull 1 st / 2 nd speed range	3560 / 2110 daN

STEERING

Independent individual control of crawler chains, also counterwise. Sensitive actuation via manual levers, combined with pedals, foot rest on pedal console

DOZER BLADE

Independent of drive train, sensitive control via separate hand lever

Width x height	1500 x 360 mm
Dozer cut below ground	300 mm
Dozer lift above ground	430 mm
Slope angle	35°

SWING SYSTEM

Internally geared ring gear

Swing speed	0 - 9 rpm
-------------	-----------

SWING BRAKE

Hydrostatic drive, also acts as wear-resistant brake. Additional spring-loaded multi-disc brake. Considered as transport security



FLUID CAPACITIES

Fuel tank	68 l
Hydraulic system (incl. tank 28 l)	45 l

KNICKMATIK®

Lateral parallel adjustment of boom arrangement at full dig depth

Angle of articulation / lateral adjustment left	57° / 400 mm
Angle of articulation / lateral adjustment right	60° / 570 mm

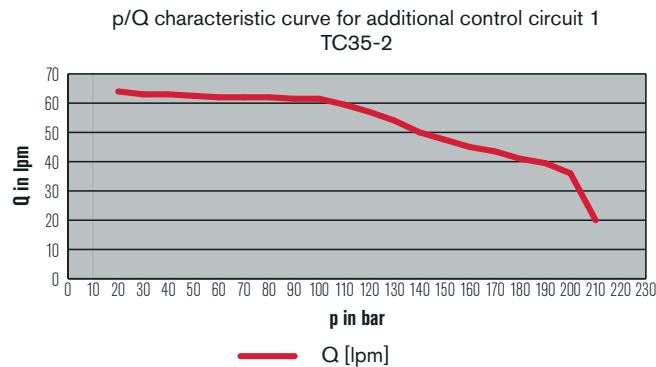
OPERATING DATA, STANDARD EQUIPMENT

Operating weight according to ISO 6016: Cab with 400 mm bucket, quick-attach system, rubber tracks, including driver, full fuel tank	3570 kg
Operating weight according to ISO 6016: Canopy with 400 mm bucket, quick-attach system, rubber tracks, including driver, full fuel tank	3490 kg
Transport weight: Cab, tank half full, with quick-attach system, w/out bucket	3360 kg
Transport weight: Canopy, tank half full, with quick-attach system, w/out bucket	3280 kg
Total length (travel position)	3150 mm
Total length (trailer transport position)	5004 mm
Total height (top of canopy/cab)	2482 / 2500 mm
Total height (travel position)	3570 mm
Total width (undercarriage)	1500 mm
Total width of uppercarriage	1500 mm
Uppercarriage tail swing	1295 mm
Uppercarriage front swing	1595 mm
Working envelope, bucket heaped (also with 600 mm bucket):	
180°	2890 mm
360°	3190 mm
Swing clearance	550 mm
Reach max.**	5395 / 5575* mm
Digging depth max.**	3335 / 3535* mm
Loading height approx.**	3200 / 3300* mm
Highest reachable height**	4675 / 4775* mm
Bucket rotation angle	187°
Bucket digging force acc. to ISO 6015	25,700 N
Stick digging force acc. to ISO 6015	15,700 N
Specific ground pressure:	
Excavator cpl. with rubber crawlers	0.29 daN/cm ²
* with dipperstick 1800 mm (optional)	

** Dimensions apply to machine standing on level ground, but can be increased by tilting the machine using the blade.

HYDRAULIC SYSTEM

Pump capacity, max.	103 l/min
Working pressure	250 bar
Single-stage, load-sensing controlled variable displacement axial piston pump	
LS-control and load independent flow distribution (LIFD) for all working movements and travel drive	
Simultaneous independent control of all functions	
All excavator movements servo-controlled, ISO	
All functions are proportionally controllable	
Powerful hydraulic oil cooler	
Full flow filtration through return filter	
Cylinders for boom, dipper arm and articulation with end position damping at both ends	
Bucket retract function with end-position damping	
Safety shutdown activated by exit barrier	
Additional control circuit as standard: Terex 'Fingertip' control (electro proportional) for additional control circuit for work attachments on right joystick, including holding function for continuous operation, actuation via rollers	
Additional control circuit with bypass for pressure-reduced return quantity	
Hydraulic power to the couplings (additional control circuit 1):	
Pump capacity (pressure-controlled)	
up to approx. 100 bar	62 lpm
@ 210 bar	20 lpm
Max. working pressure	210 bar
Diagram shows P/Q provided on couplers:	



CAB (STANDARD)

Spacious, sound-insulated full-vision steel cab, FOPS*** (acc. to ISO 3449), ROPS and TOPS (acc. to ISO 12117) certified
Very good all-round visibility, lean vertical support members
Safety glass
Front window supported by pneumatic springs, slidable under cab roof
Fixed window part without frame which obstructs the forward view
Door with large access on left hand side
Foldable console on left hand side for large entry access
Sliding window on right-hand side
Matching locks of hood and ignition
Central connector for electrical cable
Wiper washer with wiper for windscreen
Sun visor, interior light, coat hook
Operator's seat (standard version), imitation leather: Longitudinal and back tilt adjustment
Continuous weight adjustment as per operators weight
Safety belt
Armrests height adjustable without tools
Preparation for antenna, loudspeakers and radio
Large storage compartment under the operator's seat
Heating (water) with 2-speed fan and 4 adjustable exhaust nozzles
Temperature controller in cab
Storage pocket behind the operator's seat
Storage compartment for mobile phone (near 12V outlet)
1 left-hand outside rear-view mirror, foldable in front of windshield
1 working floodlight front left as standard
Display, fuel gauge, hour meter and warning lights
Fuse box easily accessible from outside of the cab
Very good ergonomics
Ergonomically arranged dozer blade lever
Fast / slow switch on dozer blade lever
Yellow beacon, radio, immobilizer (anti-theft device), working floodlights prepared for optional installation
*** FOPS-approved only with skylight guard (optional)

CANOPY

Robust steel pipe construction. 4 support members for the best all-round visibility	
1 working floodlight front left	
FOPS (acc. to ISO 3449), ROPS and TOPS (acc. to ISO 12117) certified	
Operator's seat (standard version), imitation leather:	
Safety belt	
Large storage compartment under the operator's seat	
Storage pocket behind the operator's seat	
Display, fuel gauge, hour meter and warning lights	
Easy and quick change of cab to canopy and vice-versa	
Yellow beacon, immobilizer (anti-theft device), working floodlights prepared for optional installation	
Reduction weight canopy	80 kg

CRANE TRANSPORT

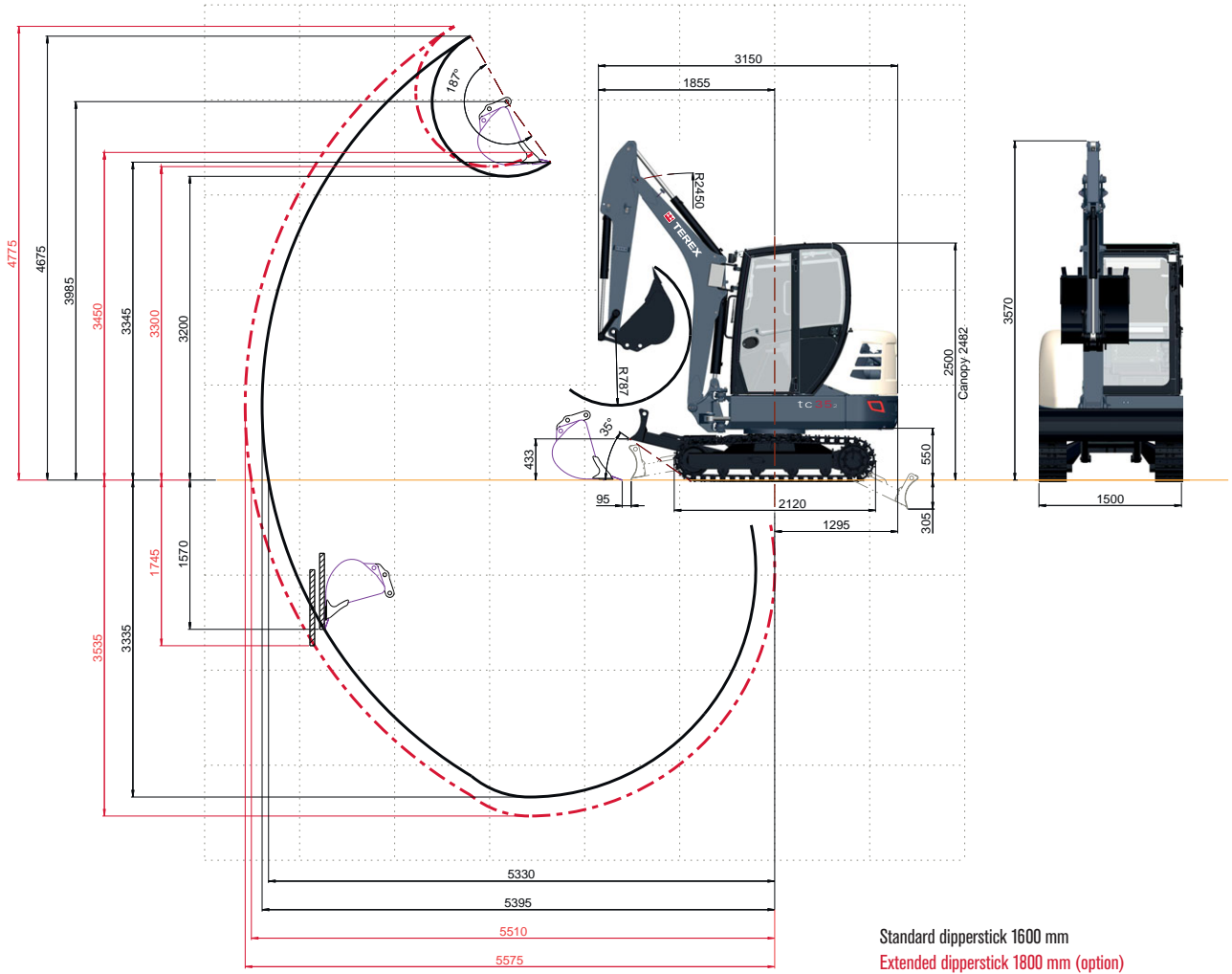
Crane lifting beam for cab and canopy

SOUND LEVEL VALUES

Noise emission ambience L_{WA} cab / canopy	95 / 95 dB (A)
Noise emission cab L_{PA} cab / canopy	78 / 79 dB (A)
Sound level values measured in compliance with Directive 2000/14/EC and EN474.	

VIBRATION VALUES

Effective values of acceleration for whole body	less than 0.5 m/s ²
Effective values of acceleration for hand-arm	less than 2.5 m/s ²
Vibration values in compliance with Directive 2006/42/EC and EN474	



DIMENSIONS

Fig. 1, 2:
 Excavation within the entire width of the machine

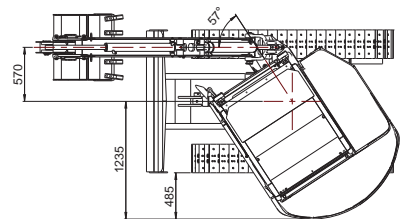
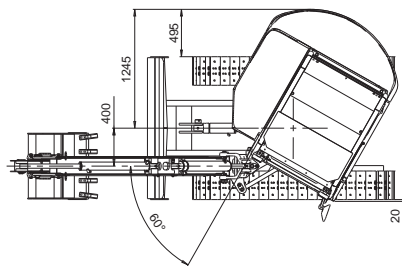
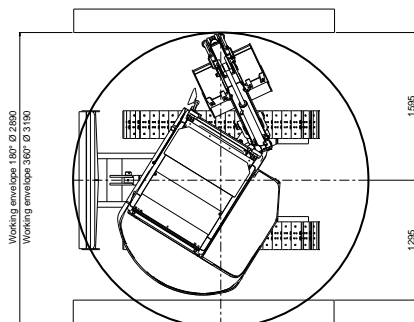






































Fig. 3:
 Working envelope



LIFTING CAPACITIES

Bucket hinge height		Load radius from center of ring gear											
Dipperstick 1600 mm		2.0 m		2.5 m		3.0 m		3.5 m		4.0 m		4.5 m	
													
2.0 m		-	-	-	-	1.03	0.98	0.96	0.66	0.89	0.55	-	-
		-	-	-	-	0.96	0.97	0.90	0.64	0.80	0.53	-	-
1.0 m		-	1.40	1.77	1.01	1.33	0.79	1.09	0.63	0.91	0.51	0.76	0.43
		-	1.35	1.64	0.98	1.22	0.77	0.97	0.61	0.77	0.50	0.64	0.42
0.0 m		-	1.30	1.81	0.93	1.39	0.74	1.11	0.60	0.89	0.49	0.72	0.41
		-	1.23	1.57	0.90	1.18	0.71	0.94	0.58	0.75	0.48	0.64	0.39

Bucket hinge height		Load radius from center of ring gear											
Dipperstick 1800 mm		2.0 m		2.5 m		3.0 m		3.5 m		4.0 m		4.5 m	
													
2.0 m		-	-	-	-	0.93	0.88	0.91	0.67	0.89	0.55	0.83	0.45
		-	-	-	-	0.86	0.87	0.85	0.66	0.80	0.53	0.67	0.44
1.0 m		-	1.37	1.77	1.01	1.34	0.77	1.11	0.62	0.94	0.50	0.82	0.41
		-	1.35	1.67	0.99	1.24	0.75	0.94	0.59	0.79	0.49	0.66	0.40
0.0 m		-	1.20	1.97	0.91	1.52	0.72	1.21	0.58	0.99	0.47	0.82	0.40
		-	1.16	1.60	0.89	1.26	0.69	0.97	0.56	0.80	0.47	0.67	0.42

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 operating loads

Working equipment: Rubber tracks

WORK ATTACHMENTS

BUCKETS

Bucket, QAS	300 mm wide, capacity 54 l, 67 kg
Bucket, QAS	400 mm wide, capacity 78 l, 78 kg
Bucket, QAS	500 mm wide, capacity 103 l, 89 kg
Bucket, QAS	600 mm wide, capacity 129 l, 98 kg
Bucket, QAS	700 mm wide, capacity 155 l, 109 kg
Ditch-cleaning bucket, QAS	1000 mm wide, capacity 145 l, 135 kg
Ditch-cleaning bucket, QAS	1300 mm wide, capacity 191 l, 164 kg
Swing bucket, QAS	1000 mm wide, capacity 145 l, 194 kg
Swing bucket, QAS	1300 mm wide, capacity 191 l, 228 kg

GRABS

Clamshell grab GL 1250, grab swing brake	set of shells 250 mm wide, capacity 45 l
Clamshell grab GL 1350, grab swing brake	set of shells 350 mm wide, capacity 65 l
Clamshell grab GL 1450, grab swing brake	set of shells 450 mm wide, capacity 85 l
Clamshell grab GL 1600, grab swing brake	set of shells 600 mm wide, capacity 115 l
Ejector	

OTHER WORK ATTACHMENTS

Ripper tooth / QAS (1 tooth)	Cutting unit
Hydraulic hammer	Quick-change adapter for hydraulic hammer
Augers	Bolt-on load hook for bucket rod
Load hook integrated in quick-attach system	
Further work attachments available on request	

OPTIONAL EQUIPMENT

BOOM OPTIONS

Monobloc boom, with extended dipperstick 1800 mm

HYDRAULIC SYSTEM

Terex 'Fingertip' control (electro proportional) for 2nd additional control circuit for work attachments on left joystick, actuation via rollers (boom with standard dipperstick)

Float position - front dozer blade

Quick couplings for work attachments

Supplementary set "Clamshell grab opening / closing", for standard dipperstick

Quick couplings for supplementary set "Clamshell grab opening/closing"

Biodegradable hydraulic oil / ester-based HLP 68 (Panolin)

Hose-rupture / load-retaining valve for boom

Hose-rupture / load-retaining valve for dipperstick

OPERATOR'S STAND

Operator's seat (comfort version), hydraulic damping, extra-high backrest, longitudinal-horizontal suspension, mechanical lumbar support

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

CAB

Rain guard

FOPS - skylight guard

Lighting package: Cab-mounted working floodlight front right and rear right, boom-mounted working floodlight, yellow beacon

Air-conditioning

Fire extinguisher, ABC powder 2 kg

Radio set installation kit

Back-up alarm, signal-horn (can be switched off)

Guard for front window

OTHER OPTIONAL EQUIPMENT

Mechanical quick-attach system

Special colour options

Quick-attach system, mechanical (genuine Lehnhoff system), type MS03

Canopy with working floodlight (weight reduction: 80 kg)

Crane loading wire-rope harness

Immobilizer

Electric refueling pump

Safety package: hose-rupture / load-retaining valves for boom and dipperstick cylinders, fire extinguisher, immobilizer, motion alarm

Battery master switch

Further optional equipment available on request

www.terex.com/construction

Effective Date: April 2016. Product specifications and prices are subject to change without notice or obligation. The photographs and/or drawings in this document are for illustrative purposes only. Refer to the appropriate Operator's Manual for instructions on the proper use of this equipment. Failure to follow the appropriate Operator's Manual when using our equipment or to otherwise act irresponsibly may result in serious injury or death. The only warranty applicable to our equipment is the standard written warranty applicable to the particular product. Terex makes no other warranty, express or implied. Products and services listed may be trademarks, service marks or trade-names of Terex Corporation and/or its subsidiaries in the USA and other countries. All rights are reserved. "Terex" is a registered trademark of Terex Corporation in the USA and many other countries. Copyright © 2016 Terex Corporation (R1_010416) Ref. no.: TEREX851EN

Terex Compact Germany GmbH
Kraftwerkstrasse 4
D-74564 Crailsheim
Phone: +49 (0)7951 / 9357-0 Fax: +49 (0)7951 / 9357-671
construction@terex.com www.terex.com



TEREX®

WORKS FOR YOU.™