



# SCHAEFF

A **YANMAR** BRAND

# MINI EXCAVATOR



## Specifications

Operating weight	2600 kg
Engine power	17.4 kW (24 HP)
Bucket capacity	38-110 l
Dig depth	2.86 / 3.06 m
Reach	4.7 / 4.9 m

## Features

- ▶ Short-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
- ▶ Increased productivity thanks to load sensing hydraulics
- ▶ Knickmatik® allows for working closely alongside walls
- ▶ Wide range of proven working tools

## TC25

# SPECIFICATIONS

# TC25

## ENGINE

Manufacturer, model	Mitsubishi, S3L2
Type	3-cylinder diesel engine, EPA/Tier 4
Combustion	4-stroke, swirl chamber injection
Displacement	1318 cm <sup>3</sup>
Rated power acc. to ISO 9249 at 2200 rpm	17.4 kW (24 hp)
Torque	78.4 Nm at 1800 rpm
Cooling system	Water

## ELECTRICAL SYSTEM

Nominal voltage	12 V
Battery	12 V / 71 Ah
Generator	12 V / 50 A
Starter	12 V / 1,7 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:

Travel speed, forward and reverse	0-2.7 / 4.4 km/h
Max.	gradeability 60 %
Drawbar pull 1st / 2nd speed range	1965 / 1250 daN

## UNDERCARRIAGE

Maintenance-free crawler-type undercarriage. Idler suspension with hydraulic crawler track tensioning.	
Width rubber crawlers / steel crawlers	250 / 300 mm
Tread width	1200 mm
Total length (sprocket - idler)	1550 mm
Total length (undercarriage)	1960 mm

## DOZER BLADE

Independent of drive train, sensitive control via separate hand lever.	
Width x height	1510 x 340 mm
Dozer cut below ground	290 mm
Dozer lift above ground	280 mm
Slope angle	40°

## 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	60° / 570 mm
Angle of articulation / lateral adjustment right	67° / 710 mm

## FLUID CAPACITIES

Fuel tank	40 l
Hydraulic system (incl. tank 34 l)	40 l



## OPERATING DATA, STANDARD EQUIPMENT

Transport weight (without bucket)	2450 kg
Operating weight acc. to ISO 6016 (incl. operator)	2600 kg
Total length (travel position)	2950 mm
Total height (travel position)	3060 mm
Total width	1510 mm
Uppercarriage tailswing	1100 mm
Uppercarriage frontswing	1470 mm
Working envelope 180° / 360°	2570 / 2940 mm
Ground Clearance	310 mm
Bucket digging force (ISO 6015)	21,800 N
Stick digging force (ISO 6015)	12,800 N
Ground pressure (rubber crawlers)	0.28 daN/cm <sup>2</sup>

## HYDRAULIC SYSTEM

Pump capacity	max. 67 l/min
Working pressure	250 bar

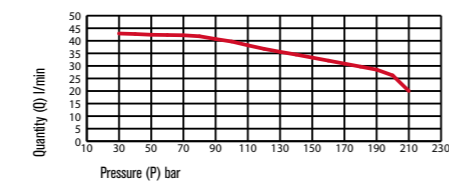
Working hydraulics: LS-axial-piston variable displacement pump, load sensing and load-independent flow division (LUDV) for all work functions und travel drive. Simultaneous independent control of all movements.

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 (except dozer blade). 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. 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. 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.

Fabric-covered operator's seat FSP010 with lap belt.

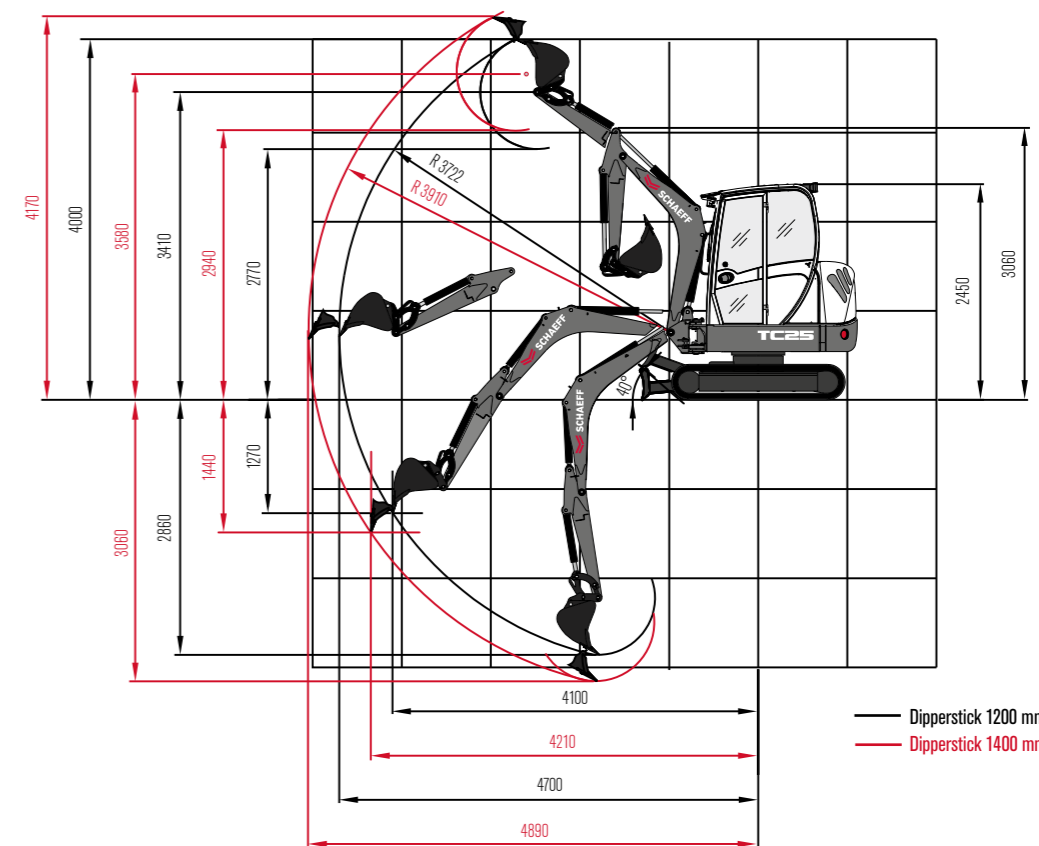
Instrument panel on the right hand side of the operator's seat with visual & acoustic warning device, hour-meter, instrument cluster with large fuel gauge.

Working flood lights Halogen	
Noise emission ambience L <sub>WA</sub>	93 dB (A)
Noise emission cab L <sub>PA</sub>	75 dB (A)

Measured in dynamic measuring cycle acc. to EEC-directive 2000/14.

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

## WORKING RANGES & DIMENSIONS: MONOBLOC BOOM



— Dipperstick 1200 mm  
— Dipperstick 1400 mm

## LIFTING CAPACITIES

Bucket hinge height	Dipperstick 1200 mm	Load radius from center of ring gear									
		2.0 m		2.5 m		3.0 m		3.5 m		4.0 m	
		End	Side	End	Side	End	Side	End	Side	End	Side
2.0 m	S	-	-	-	-	0.48	0.45	0.47	0.35	-	-
	T	-	-	-	-	0.47	0.44	0.46	0.33	-	-
1.0 m	S	1.34	0.84	0.89	0.59	0.66	0.45	0.54	0.34	0.44	0.28
	T	0.98	0.79	0.70	0.56	0.52	0.42	0.40	0.33	0.32	0.26
0 m	S	1.22	0.74	0.90	0.59	0.67	0.42	0.50	0.33	0.39	0.27
	T	0.86	0.72	0.63	0.54	0.48	0.39	0.38	0.31	0.31	0.26
-1.0 m	S	0.99	0.71	0.72	0.54	0.52	0.42	0.40	0.34	-	-
	T	0.85	0.70	0.74	0.53	0.54	0.41	0.37	0.31	-	-

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.

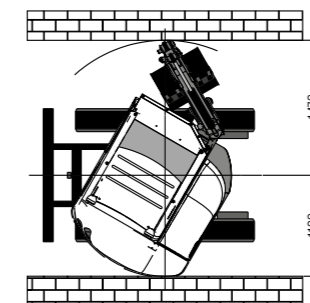
Working equipment: Rubber crawlers.

Abbreviations: S = Supported by blade, T = Traveling

## DIMENSIONS

Work equipment:

Monobloc boom with dipperstick 1200 mm



## WORK ATTACHMENTS

### BUCKETS

Bucket, QAS	250 mm wide, capacity 33 l
Bucket, QAS	300 mm wide, capacity 41 l
Bucket, QAS	400 mm wide, capacity 60 l
Bucket, QAS	500 mm wide, capacity 80 l
Bucket, QAS	600 mm wide, capacity 98 l
Ditch-cleaning bucket, QAS	1000 mm wide, capacity 91 l
Ditch-cleaning bucket, QAS	1200 mm wide, capacity 110 l
Swing bucket, QAS	1000 mm wide, capacity 91 l

## OPTIONAL EQUIPMENT

### BOOM OPTIONS

Monobloc boom, with extended dipperstick 1,400 mm

### CRAWLER CHAIN OPTIONS

Rubber crawler chain, 300 mm wide

### HYDRAULIC SYSTEM

Schaeff 'Fingertip' control (electro proportional) for additional control circuit for work attachments on right joystick, actuation via rollers

Hose-rupture / load-retaining valve for boom with load warning device

Hose-rupture / load-retaining valve for dipperstick

Schaeff 'Fingertip' control (electro proportional) incl. second additional control circuit on left joystick, actuation via rollers

Second additional control circuit (e.g. for sorting grab), foot pedal

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

Float position - front dozer blade

### OPERATOR'S STAND

Fabric-covered operator's seat MSG 20 (standard version), lap belt, adjustable driver's weight

Operator's seat MSG 85 (premium version), hydraulic damping, extra-high backrest, tilt-adjustable armrests longitudinal-horizontal suspension, mechanical lumbar support

### 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
Ejector	

### OTHER WORK ATTACHMENTS

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

### CAB

Rain guard	FOPS - skylight guard
Cab-mounted working floodlight, front right	Cab-mounted working floodlight, rear right
Electronic immobilizer, keypad operation	Radio set installation kit (speakers)
Anti-theft device, coded key (immobilizer)	Motion alarm incl. horn (to be deactivated on demand)

Yellow beacon

### OTHER OPTIONAL EQUIPMENT

Mechanical quick-attach system (QAS)	Track shoes with "Felasto" tiles
Quick-attach system, mechanical (genuine Lehnhoff system), type MS03	Canopy with working floodlight (weight reduction: 80 kg)
Crane loading wire-rope harness	Front dozer blade - extra-long version
Special coating / adhesive films	Boom-mounted working floodlight
Further optional equipment available on request	



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