TEREX®

TW85

WHEELED EXCAVATOR

Specifications

Operating weight	18,519 -22,046 lbs (8,400 - 10000 kg)
Engine power	100 HP (74.4 kW)
Bucket capacity	3.1 - 12.3 ft³ (87 - 348 l)
Dig depth	13' 5" - 14' 1" (4.1 - 4,3 m)
Reach	24' 10" - 25' 7" (7.6 - 7.8 m)

Features

- Short-tail machine
- Extra-wide blade for dozer applications
- Boom systems: monobloc, TPA or circular boom
- 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

WORKS FOR YOU.™

SPECIFICATIONS

OPERATING DATA, STANDARD EQUIPMENT

Operating weight (monobloc / TPA / circular boom) acc. to ISO 6016	18,519 / 18,960 / 19,400 lbs (8,400 / 8,600 / 8,800 kg)
Total length, travel position (monobloc / TPA / circular boom)	17' 8" / 18' 1" / 17' 7" (5,380 / 5,520 / 5,370 mm)
Total height (travel position)	13' (3,950 mm)
Transport dimensions: Monobloc / TPA / circular boom (L x H)	21'5" x 9'7" / 20'1" x 9'7" / 21'11" x 9'7" (6,520 x 2,930 / 6,120 x 2,930 / 6,680 x 2,930 mm)
Total width (twin tires)	8' (2,450 mm)
Total height (top of cab)	9' 7" (2,930 mm)
Tread width	6' 4" (1,942 mm)
Wheelbase	7' 4" (2,240 mm)
Ground clearance below cardan shaft	16" (400 mm)
Turning radius	21' 12" (6,700 mm)
Uppercarriage tailswing	4' 11" (1,500 mm)
Uppercarriage frontswing	9' (2,750 mm)
Working envelope 180°	14' 8" (4,460 mm)
Working envelope 360° (MB / TPA / CB)	19' 12" / 19' 5" / 10' 11" (6,090 / 5,920 / 3,330 mm)
Bucket digging force acc. to ISO 6015	11,960 lbf (53,200 N)
Stick digging force acc. to ISO 6015 (TPA)	9,577 lbf (42,600 N)
Stick digging force acc. to ISO 6015 (circular boom)	9,442 lbf (42,000 N)

ENGINE

Manufacturer, model	Deutz, TCD3.6 L4
Type	4-cylinder turbo diesel engine with intercooler, EU Stage III B / Tier4i
Combustion	4-stroke cycle, Common Rail injection
Displacement	220 in^3 (3,600 cm^3)
Net power rating at 2000 rpm (SAE J 1349)	100 HP (74.4 kW)
Torque	302 lbf ft(410 Nm) at 1,600 rpm
Cooling system	Water

ELECTRICAL SYSTEM

Nominal voltage	12 V
Battery	12 V / 110 Ah / 850 A
Generator	14 V / 95 Ah
Starter	12 V / 4.2 hp (3,1 kW)

TRANSMISSION

Hydrostatic travel drive with automatic adjustment of drawbar pull and speed. 4-wheel drive from reduction gear on front axle via cardan shaft to rear axle. Infinitely variable speed control forward and reverse.

2 speed ranges:

"Low"	3.7 mph (0-6 kph)
"High"	12.4 mph (0-20 kph)

AXLES

Front: oscillating planetary drive axle, oscillating angle 11.5°.

Rear: rigid planetary drive axle.

TIRES

Standard	8.25-20, 12 PR twin tires

BRAKES

Service brake: Hydraulic pump accumulator two-circuit brake, acting on oil-immersed multi-disc brakes of front and rear axle.

Excavator brake: Acting on front and rear axle due to lockable service brake.

Auxiliary brake: Hydrostatic travel drive in closed circuit acting as non-wearing auxiliary brake.

Parking brake: Hydraulic spring-loaded brake, electrically actuated.

STEERING

Fully hydraulically controlled front axle with integrated steering cylinder.

Max. steering angle	32°

SWING SYSTEM

Hydrostatic drive with 2-stage planetary gear and axial piston fixed displacement motor, also acts as wear-resistant brake. In addition, automatically controlled spring-loaded multi-disc brake acting as parking brake.

Swing speed	0-10 rpm

KNICKMATIK®

Lateral parallel adjustment of boom arrangement at full dig depth.

Angle of articulation / lateral adjustment left	53° / 2' 10" (870 mm)
Angle of articulation / lateral adjustment right	67° / 3' 3" (990 mm)

FLUID CAPACITIES

Fuel tank	50 gal (190 l)
Hydraulic system (incl. tank)	50 gal (190 l)

HYDRAULIC SYSTEM

Travel hydraulics: Closed circuit, independent from working hydraulics.

Pump capacity, max.	30 gpm (112 l/min)
Working pressure, max.	6,090 psi (420 bar)

Working hydraulics: Axial-piston variable displacement pump with load sensing, coupled with a load-independent flow distribution (LUDV). Simultaneous, independent control of all movements. Sensitive maneuvers irrespective of loads.

Pump capacity, max.	38 gpm (142 l/min)
Working pressure, max.	4,060 psi (280 bar)

The thermostatically controlled oil circuit ensures that the oil temperature is promptly reached and avoids overheating. Return filter installed in oil tank allows for eco-friendly replacement of filter elements.

Dual gear pump for all positioning and swing movements. Pressure cut-off valve for sensitive and energy-saving swing movements.

Pump capacity, max.	11 + 7 gpm (40 + 26 l/min)
Working pressure, max.	3,335 psi (230 bar)

Control circuit for work attachments (proportionally operated):

Pump capacity, adjustable	5-26 gpm (20-100 l/min)
Working pressure, max.	4,060 psi (280 bar)

Two servo-assisted joystick controls (ISO) for excavator operations.

CAB

Spacious, sound-insulated full-vision steel cab. 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. Windshield washer system. Storage compartment. Preparation for radio installation. Left-hand outside rear-view mirror.

Cab heating with front window defroster by engine coolant heat exchanger with 10-stage fan. Fresh air filter.

Operator's seat MSG 85 (standard version), hydraulic damping, extra-high backrest, adjustable armrests, weight, longitudinal and tilt adjustments. Lap belt.

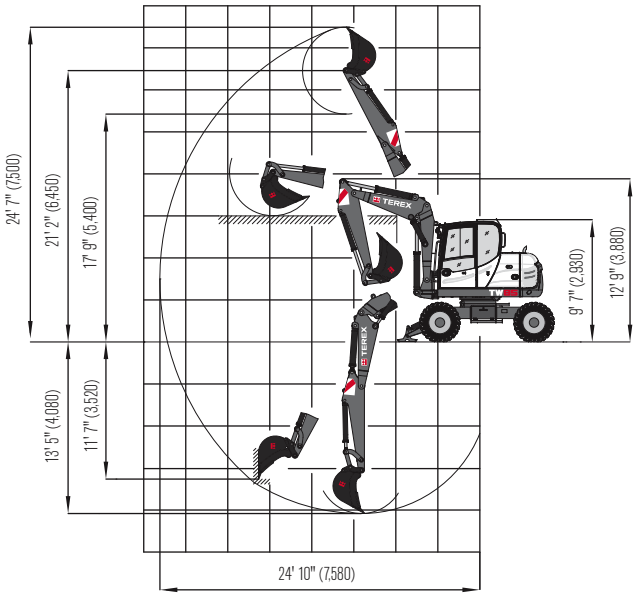
Instrument panel on the right-hand side of the operator's seat with visual & acoustic warning device, hour-meter and safety module.

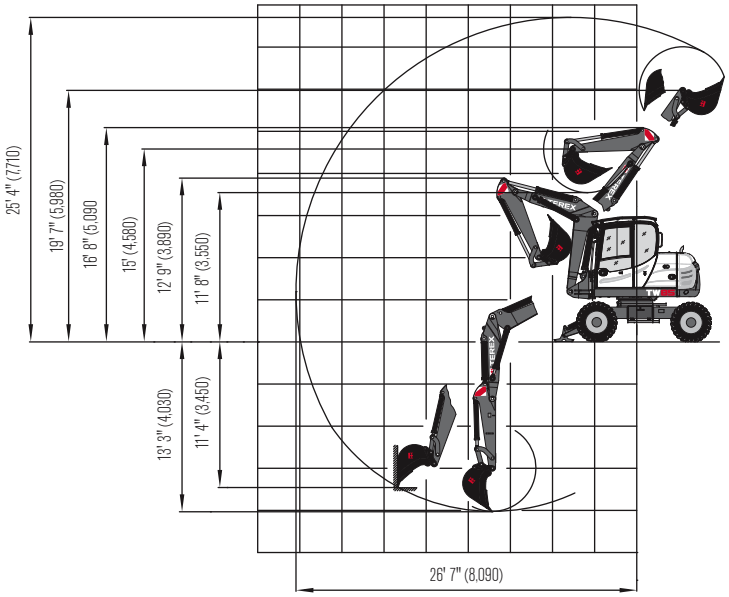
Working floodlights Halogen H-3.

Sound level values in compliance with EC-directives.

WORKING RANGES & DIMENSIONS: TPA BOOM / CIRCULAR BOOM

TW85





LIFTING CAPACITIES

Bucket hinge height		Load radius from center of ring gear							
TPA boom		9'10" (3.0 m)		13'1" (4.0 m)		16'5" (5.0 m)		19'8" (6.0 m)	
		End	Side	End	Side	End	Side	End	Side)
9'10" (3.0 m)	S	-	-	5.27 (2.39)	4.39 (1.99)	3.68 (1.67)	3.17 (1.44)	3.4 (1.54)	2.2 (1.00)
	T	-	-	4.03 (1.83)	4.39 (1.90)	2.89 (1.31)	2.98 (1.35)	1.92 (0.87)	2.07 (0.94)
4' 11" (1.5 m)	S	8.25 (3.74)	6.28 (2.85)	4.92 (2.23)	4.19 (1.89)	4.21(1.91)	2.98 (1.35)	4.21 (1.91)	2.14 (0.97)
	T	5.71 (2.59)	6.0 (2.72)	3.68 (1.67)	3.95 (1.79)	2.58 (1.17)	2.78 (1.26)	1.85 (0.84)	1.98 (0.90)
0 m	S	9.57 (4.34)	6.17 (2.80)	5.75 (2.61)	3.81 (1.73)	4.37 (1.98)	2.78 (1.26)	3.51 (1.59	2.09 (0.95)
	T	5.22 (2.37)	5.73 (2.60)	3.40 (1.54)	3.62 (1.64)	2.43 (1.10)	2.62 (1.19)	1.76 (0.80)	1.92 (0.87)
3' 3" (-1.0 m)	S	10.0 (4.54)	5.80 (2.63)	6.19 (2.81)	3.77 (1.71)	4.72 (2.14)	2.69 (1.22)	3.13 (1.42)	1.98 (0.90)
	T	5.07 (2.30)	5.49 (2.49)	3.24 (1.47)	3.51 (1.59)	2.34 (1.06)	2.51 (1.14)	1.72 (0.78)	1.87 (0.85)

Bucket hinge height		Load radius from center of ring gear							
Circular boom		9'10" (3.0 m)		13'1" (4.0 m)		16'5" (5.0 m)		19'8" (6.0 m)	
		End	Side	End	Side	End	Side	End	Side
9'10" (3.0 m)	S	12.13 (5.50)	7.05 (3.20)	7.05 (3.20)	4.19 (1.90)	5.07 (2.30)	3.09 (1.40)	4.19 (1.90)	1.98 (0.90)
	T	6.39 (2.90)	6.83 (3.10)	3.53 (1.60)	3.97 (1.80)	2.65 (1.20)	2.87 (1.30)	1.76 (0.80)	1.98 (0.90)
4' 11" (1.5 m)	S	11.24 (5.10)	6.93 (2.90)	8.38 (3.80)	3.97 (1.80)	5.73 (2.60)	2.65 (1.30)	4.19 (1.90)	1.98 (0.90)
	T	5.73 (2.60)	5.95 (2.70)	3.75 (1.70)	3.97 (1.80)	2.43 (1.10)	2.65 (1.20)	1.54 (0.70)	1.98 (0.90)
0 m	S	12.8 (5.80)	5.29 (2.40)	6.39 (2.90)	3.75 (1.70)	5.51 (2.50)	2.65 (1.20)	4.41 (2.00)	1.76 (0.80)
	T	4.63 (2.10)	5.07 (2.30)	3.31 (1.50)	3.53 (1.60)	1.98 (0.90)	2.43 (1.10)	1.54 (0.70)	1.76 (0.80)
3' 3" (-1.0 m)	S	12.35 (5.60)	5.07 (2.30)	6.39 (2.90)	3.31 (1.50)	4.41 (2.00)	2.43 (1.10)	3.53 (1.60)	1.76 (0.80)
	T	4.41 (2.00)	4.85 (2.20)	2.87 (1.30)	3.31 (1.50)	2.2 (1.00)	2.43 (1.10)	1.54 (0.70)	1.76 (0.80)

All values in tons lbs x 1,000 resp. metric tons 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 load hook. With bucket attached, the weight difference between bucket and load hook must be deducted from the permissible operating loads. When used for load hook applications, excavators must be equipped with hose-rupture valves and overload warning device in compliance with EN 474-5.

Working equipment: TPA boom, dipperstick 6'7" (2,000 mm) / circular boom, dipperstick 5'5" (1,650 mm); twin tires.

Abbreviations: S = Supported by blade, T = Traveling

DIMENSIONS

Fig. 1:
Transport position

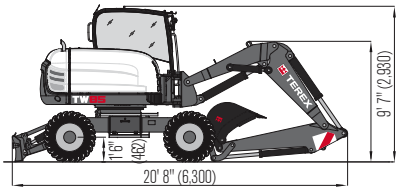
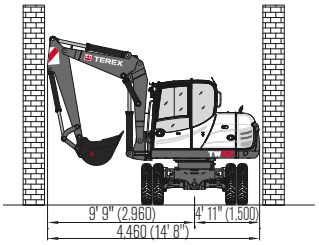


Fig. 2:
Working envelope



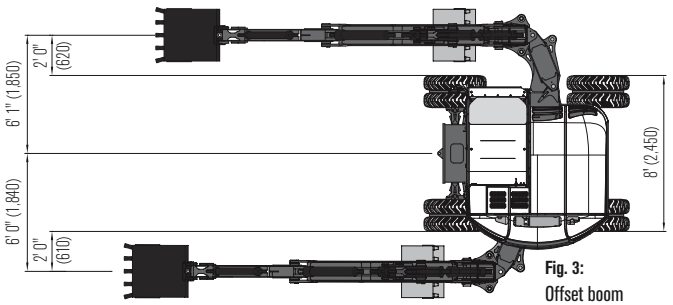


Fig. 3:
Offset boom

WORK ATTACHMENTS

BUCKETS

Bucket, QAS, light material, without teeth	12" (300 mm) wide, capacity 3.07 ft³ (87 l)
Bucket, QAS, light material, without teeth	16" (400 mm) wide, capacity 4.48 ft³ (127 l)
Bucket, QAS, light material, without teeth	24" (600 mm) wide, capacity 7.49 ft³ (212 l)
Bucket, QAS	12" (300 mm) wide, capacity 4.48 ft³ (87 l)
Bucket, QAS	16" (400 mm) wide, capacity 12.9 ft³ (127 l)
Bucket, QAS	20" (500 mm) wide, capacity 5.97 ft³ (169 l)
Bucket, QAS	24" (600 mm) wide, capacity 7.49 ft³ (212 l)
Bucket, QAS	31" (800 mm) wide, capacity 10.7 ft³ (303 l)
Bucket, QAS	35" (900 mm) wide, capacity 12.3 ft³ (348 l)
Ditch-cleaning bucket, QAS	49" (1,250 mm) wide, capacity 8.86 ft³ (251 l)
Ditch-cleaning bucket, QAS	59" (1,500 mm) wide, capacity 13.1 ft³ (371 l)
Swing bucket, QAS	59" (1,500 mm) wide, capacity 13.1 ft³ (371 l)

OTHER WORK ATTACHMENTS

Ripper tooth / QAS (1 tooth)	Cutting unit
Hydraulic hammer	Quick-change adapter for hydraulic hammer
Auger	Bolt-on load hook for bucket rod
Load hook integrated in quick-attach system	Fork carrier, 4' 1" (1,240) mm wide
Further work attachments available on request	Forks, 3' 8" (1,120 mm) long, 4" (100 mm) wide, 2" (45 mm) high

OPTIONAL EQUIPMENT

BOOM OPTIONS

Monobloc boom, with dipperstick 6' 7" (2,000 mm)
TPA boom, with dipperstick 7' 3" (2,200 mm)
Circular boom, with dipperstick 5' 5" (1,650 mm)
Monobloc boom, offset boom 2' 9" (850 mm), with dipperstick 6' 7" (2,000 mm)

TIRES

365/70 R 18 MPT E-70 Conti (single tires)
500/45-20 (single wide tires)

HYDRAULIC SYSTEM

Second control circuit (e.g. for sorting grab)	Biodegradable hydraulic oil / ester-based HLP 68 (Panolin)
Open return	Conversion kit from ISO controls to Schaeff controls
Hose-rupture / load-retaining valve for dipperstick (monobloc boom)	Hose-rupture / load-retaining valve for dipperstick and intermediate boom (TPA boom)
Hose-rupture / load-retaining valve for dipperstick and intermediate boom (circular boom)	Bucket control change-over (in case of forklift operation)
Hydraulic boom height limitation	

DRIVER'S STAND

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

ENGINE

Automatic idling system	Diesel exhaust cleaner

CAB

Lighting package: 1 double beam working floodlight - cab-mounted rear center, 1 working floodlight cab-mounted - front right	FOPS - skylight guard
Yellow beacon	Radio set installation kit

OPTIONAL SUPPORT/DOZER SYSTEMS

Rear support blade, 8' 1" (2,460 mm) wide, (with twin and wide tires)
Rear support blade, 7' 6" (2,290 mm) wide (with single tires)
Rear outrigger plates, flat, oscillating
Rear outrigger plates, rubber-coated, oscillating
Front dozer blade, 8' 1" (2,460 mm) wide

OTHER OPTIONAL EQUIPMENT

Air conditioning	High-speed version, 25 kph
Automatic idling system	Anti-theft device (immobilizer)
Quick-attach system, mechanical (genuine Lehnhoff system), type MS08	Engine-independent diesel heater with fresh air circulation and timer
Additional tool box	Travel drive shut-off in case of hand-throttle actuation
Additional rear weight	Electrical refueling pump
Special coating / adhesive films	Further optional equipment available on request

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TW110 2.5K 0213C Part No. 127551

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