



# COMPACT WHEELED EXCAVATOR



**TW95**



# THE ALL-ROUNDER

## The high-performance excavator

The Schaeff wheeled excavator TW95 is comfortable, powerful, and efficient. It is a true team player, just the sort of vehicle that every operator wishes they could have on the construction site – from landscaping up to construction and civil engineering projects. The lifting capacities in material logistics make the machine of particular interest for road construction. But also where branches and tree trunks need to be seized with the grab and loaded.

Due to the latest EU Stage IV / EPA Tier 4 Final engine generation, the TW95 works economically and environmentally friendly. The integrated Schaeff Smart Control System increases efficiency, the driver determines the optimum excavator power for different applications. This minimizes losses of energy or time.

With more than 50 years of experience in wheeled excavator technology, Schaeff has extensive specialist knowledge – a prerequisite for offering machines of the highest quality for a large number of applications.

## Technical specifications

Operating weight	9100 - 9500 kg
Engine power	74.4 kW (101 hp)
Bucket capacity	87 - 348 l
Digging depth	4.1 m
Reach	7.6 - 8.1 m





# SECURE ADVANTAGES



Schaeff Smart Control for efficient working and operation.

Ergonomic ROPS cab (FOPS optional) with excellent view and superior comfort.

High-performance, economic and environmentally-friendly EU Stage IV / EPA Tier 4 Final engine.

Rear view camera standard.

Hydraulic, temperature-controlled reversible fan for efficient cooling.

Stable under heavy loads. Short tail – ideal in confined working conditions.

Precise cycle times thanks to Schaeff Fingertip Control.

4 independent additional control circuits for operating of the standard work attachments.

Travel speeds up to 36 kph for a rapid change of location.

Smooth automatic drive, additional accelerator pedal for delicate machine movements.

14° axle swing for stability even on rough ground.



# EFFICIENT WORKING

## The engine

The Schaeff TW95 wheeled excavator is driven by a EU Stage IV / EPA Tier 4 Final engine. Exhaust gas after-treatment reduces pollutants by up to 90%, including nitrogen oxides (NOx), hydrocarbons (HC) and fine dust. This is achieved through an improved combustion and injection system and a diesel oxidation catalyst (DOC). The engine does not need a particulate filter.



### THE REVERSIBLE FAN

The hydraulically-driven reversible fan is temperature controlled. The cooling capacity automatically adjusts to the cooling requirement. The fan only runs when necessary. This saves fuel and conserves the material. The driver can switch the fan manually if required. The cleaning by reversal takes place either automatically or manually.

### THE AUTOMATIC IDLING

The auto idling function (optional) saves fuel. If there is no activity, the engine switches to the idling position – hence reducing the fuel consumption.

### AUTOMATIC ENGINE SHUTDOWN

The switch-off time can be freely selected by the driver (optional).







## The cab

The ergonomically-designed cab provides the operator with an exceptionally comfortable environment that enables a high degree of productivity. From the neatly arranged, clearly structured displays through the generously dimensioned stowage compartments to the Soft-Touch interior or the optional Klimatronik – one thing is clear: The workplace in the Schaeff wheeled excavator is designed for the driver.

## DISPLAY AND INSTRUMENTS

For a clearer overview and greater convenience – work functions and machine information can be examined at a central position at a glance. The data display appears in a tiled look like a smart phone.

The anti-reflective screen with a diagonal of 7" is very clearly arranged and is also used as a monitor for the standard reversing camera.

## THE KEYPAD

Extra-wide pressure surfaces make safe operation easy, even when wearing gloves. The optional immobilizer can be operated.



EXPERIENCE  
COMFORT



# PRECISE CONTROL



## Schaeff Smart Control

Schaeff Smart Control provides the driver with maximum control over the excavator. Many excavator functions can be adapted precisely to the driver and the construction site. This makes use of the excavator more efficient and more productive.



## EXEMPLARY MACHINE CONTROL

- ▶ **Hydraulic control circuits** allow fast operation. The flow rate of the control circuits is also adjusted proportionally during continuous operation via a bar chart according to use and attachment tool.
- ▶ **Eco-mode** is switched on with just the touch of a button.
- ▶ **Air conditioning control** Heating and defrosting can be adjusted exactly to the required conditions, automatic air conditioning is optional.

## FURTHER ADVANTAGES:

- ▶ Pilot control for all control elements; jerk-free, convenient cycle times.



## Schaeff Fingertip Control

The sensitive inputs on the joystick enable high precision and ease of use. The dual-circuit hydraulic system with load independent flow sharing (LUDV) allows simultaneous, independent work movements. Economic load sensing technology ensures accurate volume control, hence saving fuel.





# ACHIEVING TARGETS

## COMPACT WHEELED EXCAVATOR TW95

### The undercarriage

The undercarriage combines high terrain mobility with drive power. It can be configured as exactly as required due to a wide range of equipment variants.

#### ► UNDERCARRIAGE OPTIONS

- Stabilizers
- Support plate
- Front dozer blade

#### ► HYDROSTATIC TRAVEL DRIVE

- independent from working hydraulics
- also functions as an additional brake system

#### ► TIRE OPTIONS

Low-pressure tires and twin tires or wide tires are available.

#### ► STEERING

Can be equipped with two-wheel or all-wheel steering.

#### ► SPEED

A quick change of construction site or location is possible with speeds of up to 36 kph. Non-productive transport times are reduced to a minimum.

#### ► AUTOMATIC DRIVE

Additional accelerator pedal for delicate machine movements.

#### ► PENDULUM AXLE

Due to the pendulum axle with a pendulum angle of 14°, the wheeled excavator is absolutely stable even on uneven terrain.

#### ► LEVELING

The optional float function of the dozer blade makes leveling of the ground, the filling processes or clearing of the construction site easier.



# SPEEDING UP RESULTS

## Boom and hydraulic system

Schaeff provides the right boom system for different applications. The excavation work is carried out in an optimum manner, quickly achieving the required result.

### ► STANDARD ARTICULATED BOOM

The standard TPA booms are suitable for high-performance digging work, transport and precise positioning of heavy loads – the action radius is designed for the greatest possible working range.

### ► LONG DIPPERSTICK

The TW95 wheeled excavator achieves a greater reach on the articulated boom due to an extended dipperstick with 2350 mm.

## Knickmatik®:

### ► ARTICULATED JOINT

with wide angle of articulation allows for working closely along walls.

## WEIGHT DISTRIBUTION AND LOAD CAPACITY

The laterally installed engine stabilizes the machine, especially with a fully extended, offset boom.

## HYDRAULIC SYSTEM WITH FOUR INDEPENDENT CONTROL CIRCUITS

Due to the four independent control circuits, the TW95 wheeled excavator increases its capacity with attachment tools. The driver operates a tilt rotator including hydraulic quick-attach system plus a hydraulically-driven tool, such as a sorting grab, asphalt cutter or cutting unit, for example. The control circuits can be operated at the same time, they do not influence each other.

## The attachment tools

Excellent versatility thanks to numerous options and attachment tools. Tested and proven in use:

- Light-material bucket
- Standard bucket
- Ditch-cleaning bucket
- Swing bucket
- Hydraulic cutting units
- Ripper tooth
- Adapter for rock breaker
- Load hook
- Screw-on load hook
- Mechanical quick-attach system
- Hydraulic quick-attach system
- Pallet forks





# MINIMIZING DOWNTIME

## The service

Daily service work can be carried out from the ground, saving time.

A service bar with the central electrics is integrated in the service ladder: Hence, all relays and fuses are easy to access from the ground. The flap can be opened without tools.

For easier ascent, the ladder in the service flap is extended towards the ground. The flap is provided with rubber buffers, it lies gently on the extended ladder, the material is conserved.

There are no main hydraulic components mounted under the cab. Tilting of the cab is not required – but possible if necessary.

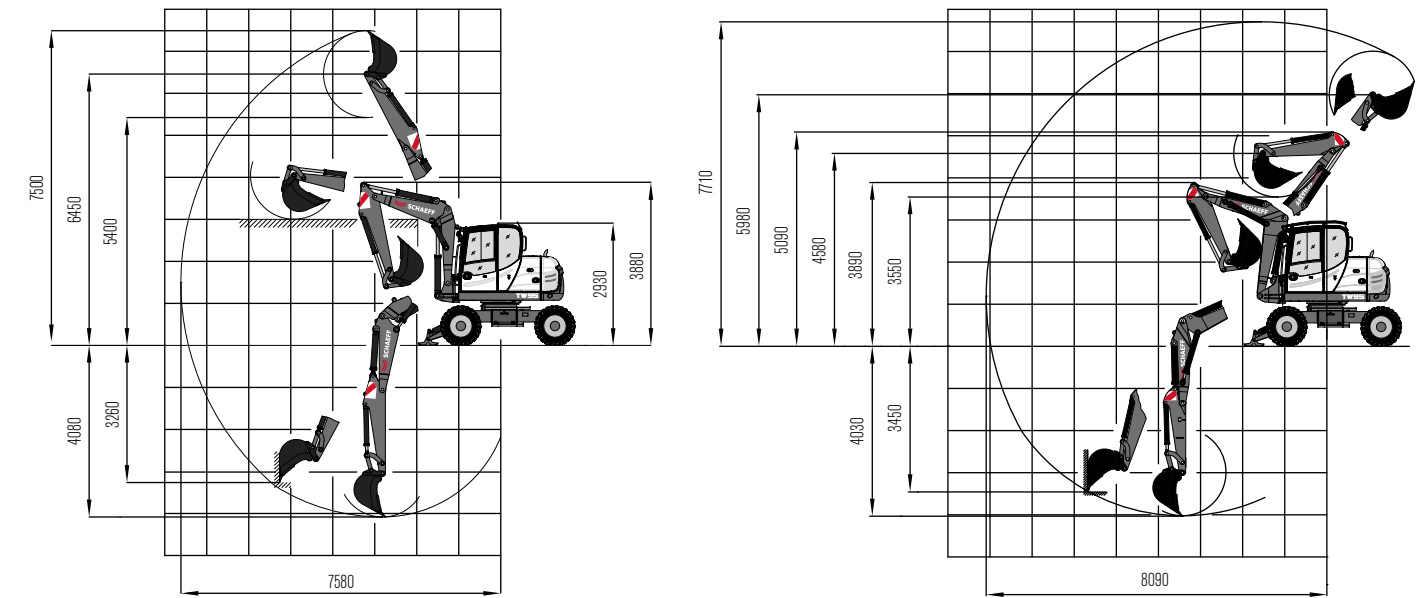


## DIAGNOSTICS PLUG

The diagnostics plug for engine and machine data speeds up maintenance and service through better communication between man and machine. CAN bus data is shown on the display.



WORKING RANGES & DIMENSIONS: TPA BOOM / CIRCULAR BOOM



LIFTING CAPACITIES

Bucket hinge height		Load radius from center of ring gear									
TPA boom		3.0 m		4.0 m		5.0 m		6.0 m		7.0 m	
		longt.	transv.	longt.	transv.	longt.	transv.	longt.	transv.	longt.	transv.
3.0 m	S	-	-	2.6	2.3	1.7	1.6	1.5	1.0	-	-
	T	-	-	2.2	2.2	1.6	1.6	1.0	1.0	-	-
1.5 m	S	4.1	3.5	2.6	2.3	2.1	1.6	1.5	1.0	-	-
	T	3.4	3.3	2.2	2.2	1.3	1.5	0.9	1.0	-	-
0 m	S	4.5	2.7	2.7	1.8	2.0	1.3	1.5	0.9	-	-
	T	2.6	2.6	1.7	1.7	1.2	1.2	0.9	0.9	-	-
-1.0 m	S	4.7	2.7	2.9	1.7	2.0	1.2	-	-	-	-
	T	2.6	2.6	1.6	1.7	1.2	1.2	-	-	-	-

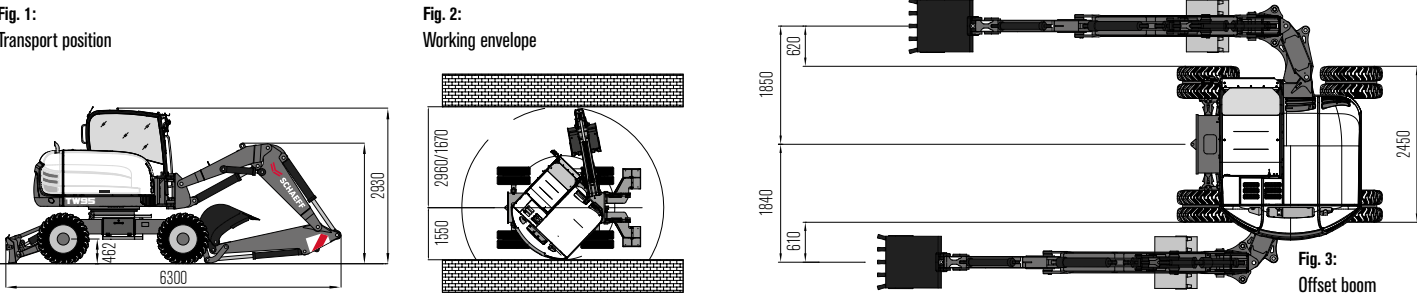
Bucket hinge height		Load radius from center of ring gear									
Circular boom		3.0 m		4.0 m		5.0 m		6.0 m		7.0 m	
		longt.	transv.	longt.	transv.	longt.	transv.	longt.	transv.	longt.	transv.
3.0 m	S	4.4	3.8	2.5	2.5	1.7	1.7	1.7	1.0	1.3	0.8
	T	3.3	3.6	2.2	2.3	1.3	1.6	0.9	1.1	0.7	0.7
1.5 m	S	4.8	3.1	2.8	2.0	2.1	1.4	1.6	1.0	0.8	0.8
	T	2.7	2.9	1.8	1.9	1.2	1.3	0.9	0.9	0.6	0.7
0 m	S	5.3	2.7	3.3	1.8	2.2	1.3	1.5	1.0	0.5	0.6
	T	2.3	2.4	1.5	1.7	1.1	1.2	0.8	0.9	0.5	0.6
-1.0 m	S	4.4	2.6	2.9	1.8	1.6	1.3	1.1	1.1	0.3	0.4
	T	2.3	2.4	1.5	1.6	1.1	1.2	0.9	0.9	0.3	0.4

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 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 2000 mm / circular boom, dipperstick 1650 mm; twin tires.

Abbreviations: S = Supported by blade, T = Traveling

DIMENSIONS



TECHNICAL DESCRIPTION

ENGINE

Manufacturer, model	Deutz, TCD3.6 L4
Type	4-cylinder turbo diesel engine with intercooler, EU Stage IV / Tier 4 Final
Combustion	4-stroke cycle, Common Rail injection
Displacement	3600 cm³
Power rating acc. to ISO 9249 @ 2000 rpm	74.4 kW (101 hp)
Torque	410 Nm at 1600 rpm
Cooling system	Water

ELECTRICAL SYSTEM

Nominal voltage	12 V
Battery	12 V / 135 Ah
Generator	14 V / 95 Ah
Starter	12 V / 4.0 kW

TRANSMISSION

Hydrostatic travel drive, closed circuit, with automatic adjustment of drawbar pull and speed, independent from working hydraulics. 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"	0-6 kph
"High"	0-20 kph
4 speed ranges (high-speed version optional):	
"Low"	0-5 / 0-15 kph
"High"	0-12 / 0-36 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, 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° / 870 mm
Angle of articulation / lateral adjustment right	67° / 990 mm

FLUID CAPACITIES

Fuel tank	160 l
AdBlue tank	10 l
Hydraulic system (incl. tank)	175 l

OPERATING DATA, STANDARD EQUIPMENT

Operating weight (monobloc / TPA / circular boom) acc. to ISO 6016	9100 / 9300 / 9500 kg
Total length, travel position (monobloc / TPA / circular boom)	5430 / 5570 / 5700 mm
Total height (travel position)	3950 mm
Transport dimensions:	
Monobloc / TPA / Circular boom (L x H)	6520 x 2930 / 6120 x 2930 / 6680 x 2930 mm
Total width (twin tires)	2450 mm
Total height (top of cab)	2930 mm
Tread width	1942 mm
Wheelbase	2240 mm
Ground clearance below cardan shaft	400 mm
Turning radius	6700 mm
Uppercarriage tailswing	1550 mm
Uppercarriage frontswing (monobloc / TPA / circular boom)	2960 / 1670 mm
Working envelope 180° (TPA / circular boom)	4510 / 3220 mm
Working envelope 360° (TPA / circular boom)	5920 / 3340 mm
Bucket digging force acc. to ISO 6015	53,200 N
Stick digging force acc. to ISO 6015 (TPA / circular boom)	42,600 / 42,000 N

HYDRAULIC SYSTEM

Travel hydraulics: Closed circuit, independent from working hydraulics.	
Pump capacity, max.	112 l/min
Working pressure, max.	420 bar
Working hydraulics: Axial-piston variable displacement pump with load sensing, coupled with a load independent flow sharing (LUDV). Simultaneous, independent control of all movements. Sensitive maneuvers irrespective of loads.	
Max. pump capacity	142 l/min
Working pressure, max.	280 bar
The thermostatically controlled oil circuit ensures that the oil temperature is promptly reached and avoids overheating. Hydraulically actuated reversible fan. Return filter installed in oil tank allows for eco-friendly replacement of filter elements.	
Triple gear pump for all positioning movements, pivoting of uppercarriage and for hydrostatic fan.	
Pump capacity, max.	38 + 38 + 38 l/min
Working pressure, max.	230 bar
Control circuit for work attachments, proportionally operated:	
Pump capacity, adjustable	20 – 100 l/min
Working pressure, max.	280 bar
Two servo-assisted joystick controls (ISO) for excavator operations.	

CAB

Spacious, sound-insulated full-vision steel cab (ROPS certified). Sliding window in cab door.	
Safety glass windows, thermo windows tinted in green. Skylight thermo window, bronze tinted.	
Panoramic rear window. Front window supported by pneumatic springs, slidable under cab roof.	
Ventilation position by tilting the front window. Windshield washer system. Storage compartment. Preparation for radio installation. Left-hand outside rear-view mirror.	
Cab heating with front window defroster by coolant heat exchanger with stepless fan.	
Fresh air and recirculating air filters.	
Operator's seat MSG 85 (comfort version), hydraulic damping, extra-high backrest, tilt-adjustable armrests, longitudinal-horizontal suspension, mechanical lumbar support. Lap belt.	
Rear view camera	
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 power level (L <sub>WA</sub> ) around the machine	100 dB (A)
Sound pressure level (L <sub>PA</sub> ) in cab	72 dB (A)
Sound level values measured in compliance with Directive 2000/14/EC and EN474.	
Effective values of acceleration for whole body	less than 0.5 m/s²
Effective values of acceleration for hand-arm	less than 2.5 m/s²
Vibration values in compliance with Directive 2006/42/EC and EN474.	



## WORK ATTACHMENTS

### BUCKETS

Bucket, QAS, light material, without teeth	300 mm wide, capacity 87 l
Bucket, QAS, light material, without teeth	400 mm wide, capacity 127 l
Bucket, QAS, light material, without teeth	600 mm wide, capacity 212 l
Bucket, QAS	300 mm wide, capacity 87 l
Bucket, QAS	400 mm wide, capacity 127 l
Bucket, QAS	500 mm wide, capacity 169 l
Bucket, QAS	600 mm wide, capacity 212 l
Bucket, QAS	800 mm wide, capacity 303 l
Bucket, QAS	900 mm wide, capacity 348 l
Ditch-cleaning bucket, QAS	1250 mm wide, capacity 251 l
Ditch-cleaning bucket, QAS	1500 mm wide, capacity 305 l
Swing bucket, QAS	1500 mm wide, capacity 305 l

## OPTIONAL EQUIPMENT

### BOOM OPTIONS

TPA boom, with dipperstick 2200 mm
Circular boom, with dipperstick 1650 mm
Monobloc boom, offset boom 850 mm, with dipperstick 2000 mm

### TIRES

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

### HYDRAULIC SYSTEM

Open return	Biodegradable hydraulic oil / ester-based HLP 68 (Panolin)
Schaeff 'Fingertip' control incl. second additional control circuit on left joystick	Schaeff 'Fingertip' control incl. third additional control circuit on left joystick
Hose-rupture / load-retaining valve for dipperstick (monobloc boom)	Hose-rupture / load-retaining valve for dipperstick and intermediate boom (TPA and circular boom)
Float position - dozer blade	Bucket control changeover in case of forklift operation
Conversion from ISO controls to SAE controls	Conversion kit from ISO controls to Schaeff controls
Bypass filter	

### OPERATOR'S STAND

Operator's seat MSG 95 (premium version), air damping, extra-high backrest and tilt-adjustable armrests, longitudinal-horizontal suspension, seat and backrest heating, pneumatic lumbar support.	
Klimatronic	Thermoelectric cooler

### OTHER WORK ATTACHMENTS

Ripper tooth / QAS (1 tooth)	Auger
Hydraulic hammer	Quick-change adapter for hydraulic hammer
Rototilt RT30	Bolt-on load hook for bucket rod
Fork carrier, 1240 mm wide	Forks, 1100 mm long, 100 x 45 mm
Further work attachments available on request	

### DIESEL ENGINE

Diesel particulate filter	Automatic idle
---------------------------	----------------

### CAB

Lighting package: 1 double beam working floodlight - cab-mounted rear center, 1 working floodlight cab-mounted - front right	Roof protective grating, FOPS certified
Yellow rotating beacon	Radio set installation kit
Sliding window on right-hand side.	

### OPTIONAL SUPPORT/DOZER SYSTEMS

Rear support blade, 2460 mm wide (with twin and wide tires)
Rear support blade, 2290 mm wide (with single tires)
Outrigger plates, flat, oscillating
Outrigger plates, rubber-coated, oscillating
Front dozer blade, 2460 mm wide (twin tires) or 2290 mm wide (single tires)

### OTHER OPTIONAL EQUIPMENT

Four-wheel steering switchable from four-wheel to crab steering	Working floodlight boom-mounted, left or right
Quick-attach system, mechanical (genuine Lehnhoff system), type MS08	Quick-attach system, hydraulic (genuine Lehnhoff system), type HS08
Anti-theft device (immobilizer)	Approval package for the high-speed version
Additional tool box	Engine-independent diesel heater with fresh air circulation and timer
Steering change-over in case of blade operation	Electrical refueling pump
Additional rear weight, 365 kg	Special coating / adhesive films
Working floodlights, LED version	Further optional equipment available on request



Yanmar Compact Germany GmbH  
Kraftwerkstrasse 4  
74564 Crailsheim, Germany

[www.schaeff-yanmar.com](http://www.schaeff-yanmar.com)