

# The Classic Ones

Wacker Neuson Compact Excavators  
2503 • 3503



**WACKER  
NEUSON**

## The strengths of the classic models:

Stable and well balanced.

Powerful, compact and tough.





### **Wacker Neuson Facts:**

- Powerful engines with high torque and smooth operation.
- High performance hydraulics.
- Ideal transport dimensions.
- High stability.
- Simple operation.

### **The ideal situation for a compact excavator: powerful, agile and easy to operate.**

The balance between the power characteristics and the hydraulics allows for effortless movements. The compact excavators 2503/3503 are a credit to their class and for this reason have quickly become the reliable choice for contractors. They are and remain the Wacker Neuson classics with a fan club that is growing steadily.

# Diesel engines and high performance hydraulics: The drive system success duo.



## Power control.

The power control ensures optimal performance of the diesel engine. If the pressure in the hydraulic system increases due to greater loads, the power control ensures that the diesel engine does not become overloaded, by reducing the discharge volume of the variable displacement pump.

Because of this the engine speed remains constant, ensuring greater efficiency. Several work operations can be carried out simultaneously without a drop in performance of the individual movement. The power control therefore ensures high work efficiency and extends the diesel engine's life.

## 1 Large volume engines.

Thanks to the large cylinder capacities the 2503/3503 develop their full power even at low engine speeds. The benefit of this is a smooth running quiet engine with exceptional fuel economy.

## 2 Optimal service accessibility to engine and hydraulic components.

The sides of the rear weights can be pulled out giving full access to the engine.

## 3 Easy, fast and safe servicing:

Intelligent one lock system for easy opening of the engine cover and valve cover from the driving cab.

**DESIGN WHICH QUICKLY SHOWS.** AN ADVANTAGE WHICH PROVES ITSELF DAILY: THE PERFECT INTERACTION BETWEEN ENGINE PERFORMANCE AND HYDRAULICS IS A QUALITY FACTOR OF THE FIRST DEGREE AND TYPICAL OF THE UNIQUENESS OF WACKER NEUSON COMPACT



### Wacker Neuson Facts:

- Low fuel consumption and quiet operation.
- Damped and hydraulically balanced driving pedals.
- Additional hydraulics to the bucket arm is standard.
- Conforms to TIER III.
- Easy and fast servicing.

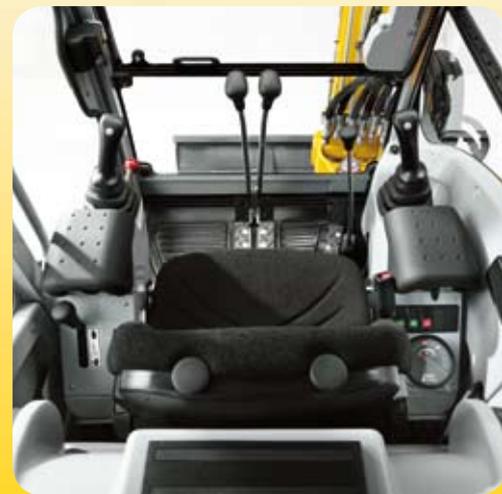


# The best places for sure performance: Cab and chassis.

## Wacker Neuson Facts:

- Cabs and canopies tested to ROPS/FOPS/TOPS.
- Multi adjustable comfortable seat.
- Hydraulically balanced driving pedals, leaving the hands free for operations when driving.
- The cab can be easily removed.

When operating without the cab all controls and machine functions remain operable.



# 2503 3503

1 Good access and spacious cab, which can be easily removed. When operating without the cab all controls and machine functions remain operable.

2 Self cleaning chassis and particularly smooth running due to the asymmetric design of chassis and track profile.

+ Auto2Speed (3503). Automatic speed adjustment depending on tractive force. Automatic changing down from higher gear into first gear if necessary due to the load at the time (for example, when levelling). If the load reduces, the machine automatically changes up into the higher gear.

3 High stability thanks to optimal weight distribution and VDS option (Vertical Digging System).



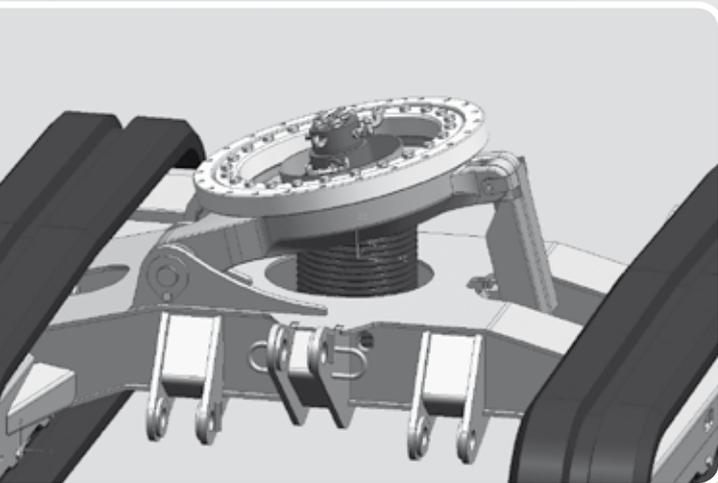
### Wacker Neuson Facts:

- Self cleaning chassis.
- High strength steel construction.
- Replaceable bushings on generously dimensioned bearings.
- Vertical Digging Systems (VDS) – optional.\*
- Auto2Speed. (3503)

\* More information on pages 8/9 of this brochure and in the VDS special brochure. Please ask for it.



Site and contract are predetermined.  
Your field of play is the excavator.  
**You are always in your best (working)  
position with Wacker Neuson vertical  
digging system (VDS).**



#### **Wacker Neuson Facts:**

- Simple and robust construction.
- As easy to operate as adjusting a seat.
- 20 Years experience.
- 10 Year guarantee on stabilizing brackets and bearings.\*\*

\*\* On proof of proper  
and regular maintenance.

**Preparation work is expensive. Full swivelling force is needed. Safety is essential. No time for difficult maneuvers.**

**You save up to 25% costs: With the infinitely variable tilting of the upper carriage-work, up to 15° inclines and declines of up to 27% can be cleared. In this way a steep challenge can become a profit making performance advantage:**

- Greater productivity, higher efficiency: Shorter excavation times due to exact vertical excavation.
- up to 25% savings in time and material when excavating.
- up to 25% savings in time and material when backfilling.
- up to 20% greater stability with 15° slopes and full loadings.
- Full swivelling force for the full 360°.
- Familiar seating position, working without fatigue.
- Simple and robust construction.



# 3503

\* Options for the 3503.

More information on the applications, the advantages and the use of this well tried system can be found in the VDS special brochures. Just ask for them.

**25%**  
Savings advantage  
25% less excavation,  
carting away, filling  
and time.

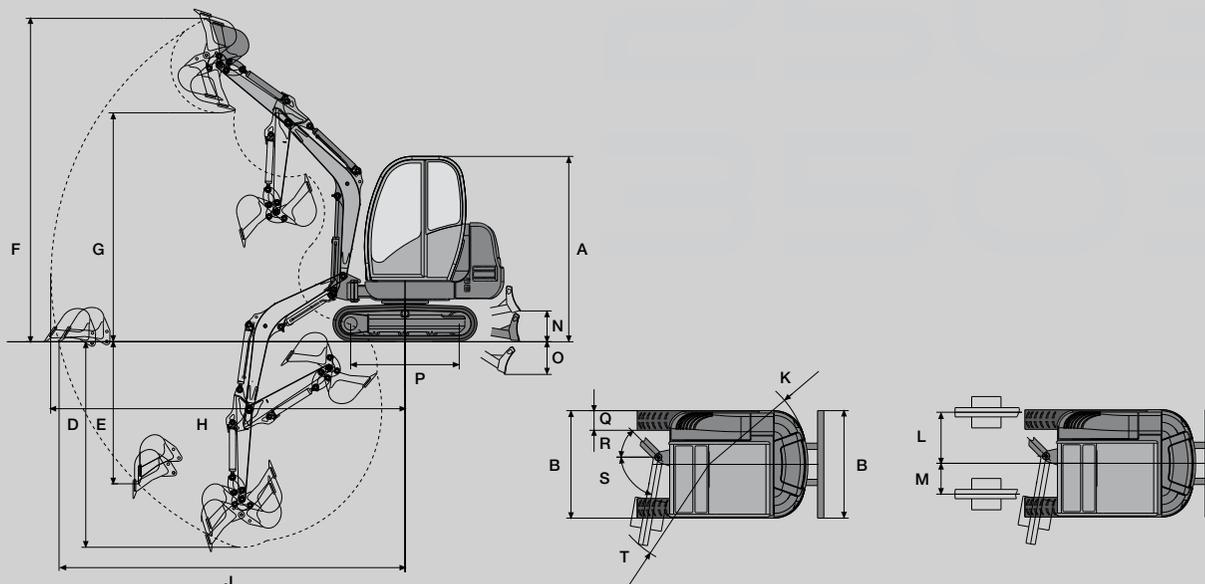


15° **vds**



**Technical Data:**  
Concrete figures are  
the best help in  
decision making.





#### DIMENSIONS

	2503	3503
<b>A</b> height	2370 mm	2405 mm
<b>B</b> width	1370 mm	1620 mm
transport length (arm lowered)	4410 mm	5170 mm
BUCKET ARM SHORT/ LONG		
<b>D</b> Max. excavation depth	2620 / 2825 mm	3230 / 3530 mm
<b>E</b> Max. vertical insertion depth	1810 / 2000 mm	2220 / 2500 mm
<b>F</b> Max. insertion height	4125 / 4250 mm	4910 / 5100 mm
<b>G</b> Max. cutting height	2925 / 3080 mm	3620 / 3810 mm
<b>H</b> Max. excavating radius	4515 / 4693 mm	5270 / 5546 mm
<b>J</b> Max. reach on the ground	4410 / 4602 mm	5175 / 5456 mm
<b>K</b> Rear swivel radius	1240 mm	1400 mm
<b>L</b> Max. arm displacement to middle of bucket right side	653 mm	685 mm
<b>M</b> Max. arm displacement to middle of bucket left side	393 mm	415 mm
<b>N</b> Max. lifting height levelling blade above ground level	390 mm	410 mm
<b>O</b> Max. scraping depth of levelling blade below ground level	415 mm	490 mm
<b>P</b> Length of travelling gear	1840 mm	2075 mm
<b>Q</b> Width of track	250 mm	300 mm
<b>R</b> Max. angle of swive arm system to the right	45 °	45 °
<b>S</b> Max. angle of swive arm system to the left	80 °	80 °
<b>T</b> Outrigger swivel radius	1360 mm	1470 mm
Max. shearing force	13 kN / 11 kN	20,6 kN / 16,8 kN
Max. breakaway torque	20 kN	30,3 kN
Vertical Digging System (VDS)	-	VDS
Length of bucket arm	1150 mm	1335 mm



	LIFTING POWER 2503						LIFTING POWER 3503										
	2 m		2,5 m		3 m		max.	1,5 m		2,5 m		3,5 m		max.			
<b>A</b>	0° 90°		0° 90°		0° 90°		0° 90°	<b>A</b>	0° 90°		0° 90°		0° 90°				
<b>B</b> 3,0 m	-	-	-	-	400*	400*	415*	415*	<b>B</b> 3,0 m	-	-	-	-	745*	685*	800*	545
1,0 m	1000*	815	670*	595	540*	460	425*	310	1,0 m	-	-	1795*	1000	1100*	620	890*	415
0,0 m	1210*	770	835*	560	635*	440	450*	315	0,0 m	-	-	2130*	930	1300*	595	955*	420
-1,0 m	1030*	775	790*	560	580*	435	475*	380	-1,0 m	4200*	2295	2100*	950	1310*	590	1045*	475

	<b>2503</b>	<b>3503</b>
 <b>OPERATING DATA</b>		
<b>Transport weight with cab</b>	2620 kg	3500 kg
<b>Transport weight with canopy</b>	2525 kg	3405 kg
 <b>ENGINE</b>		
<b>Manufacturer / type</b>	Yanmar 3TNV88	Yanmar 4TNV88
<b>Type</b>	water cooled 3 cylinder diesel engine (97/68/EC)	water cooled 4 cylinder diesel engine (97/68/EC)
<b>Max. engine performance</b>	27,1 kW (36,8 PS)	35,4 kW (48,1 PS)
<b>flywheel performance as ISO</b>	19,2 kW (26,1 PS)	23,7 kW (32,2 PS)
<b>capacity</b>	1642 cm <sup>3</sup>	2189 cm <sup>3</sup>
<b>nominal rotation speed</b>	2200 min <sup>-1</sup>	2000 min <sup>-1</sup>
<b>Battery</b>	12 V / 71 Ah	12 V / 71 Ah
<b>Volume of diesel tank</b>	41 l	52 l
 <b>HYDRAULIC SYSTEM</b>		
<b>Pump</b>	Double variable displacement gear pump	
<b>Capacity</b>	28,5 + 28,5 + 19 l/min	44,5 + 44,5 + 25,1 l/min
<b>Operating pressure</b> for work and drive hydraulics	240 bar	240 bar
<b>Operating pressure</b> of turntable	200 bar	200 bar
<b>Hydraulic oil cooler</b>	Standard	Standard
<b>Hydraulic tank capacity</b>	27 l	50 l
 <b>DRIVING GEAR AND SLEWING GEAR</b>		
<b>2 driving speeds</b>	2,3 km/h, 4,4 km/h	2,8 km/h, 5,5 km/h
<b>Gradeability</b>	30° (58 %)	30° (58 %)
<b>Width of track</b>	250 mm	300 mm
<b>Number of runners each side</b>	3	4
<b>Ground clearance</b>	270 mm	280 mm
<b>Ground pressure</b>	0,33 kg/cm <sup>2</sup>	0,33 kg/cm <sup>2</sup>
<b>Revolving superstructure revolutions</b>	9 min <sup>-1</sup>	9,2 min <sup>-1</sup>
 <b>NOISE EMISSION</b>		
<b>Sound power level (L<sub>w</sub>)</b> as 2000/14/EG	94 dB(A)	95 dB(A)
<b>Sound pressure level (L<sub>p</sub>)</b> as ISO 6394	74 dB(A)	74 dB(A)

**A** Projection from the middle of the turntable

**B** Load sling height above ground level

\* Lifting force is restricted hydraulically. All values in the table are given in kg, at horizontal standing on hard ground and without bucket. If a bucket or other work tool is attached, the lifting power or tipping load is reduced by their weight.

Basis of calculations: as ISO 10567. The lifting power of the compact excavator is limited by the adjustment of the pressure control valve and by the tipping security. Neither 75% of the static tipping load nor 87% of the hydraulic lifting power is exceeded.

0°		With levelling blade support in direction of travel
90°		Without levelling blade support 90° to direction of travel

**STANDARD EQUIPMENT****2503 • 3503****OPTIONS****2503 • 3503****GENERALLY****levelling blade****Work floodlight on lifting arm****Tool set incl. grease press and maintenance manual****ENGINE****Water cooled YANMAR diesel engine****CAB****Canopy**

Adjustable and sprung seat with artificial leather covering and safety belt. Canopy meets the FOPS, TOPS and ROPS regulations

**HYDRAULICS****Total power control****Hydraulic oil cooler****Hydraulic pre-control**  
with joystick operation**Valve control**

as ISO, DIN, SAE, PCSA and EURO

**Parking brake****2503** for swivel gear**3503** for drive and swivel gear**2 driving speeds****hydraulically balanced driving pedals and lever****CAB****Standard cab**

Glazed safety cab

cab heating

upper windscreen can be lowered inwards

lower windscreen can be removed

windscreen wiper washer system,

1 door

fully lined internally

Canopy meets the FOPS, TOPS and ROPS regulations

**Canopy**

with rear window

**Radio**

Radio set with aerial and loudspeaker

**Rain roof****HYDRAULICS****Bio oil Panolin****BP-Biohyd SE46****Flat sealing coupling****Proportional control**

for additional hydraulics

**Control circuit for grab****Pressure relief valve additional hydraulics****Overload warning device D**

safety valve for lifting arm

**Overload warning device F**

safety valve for lifting arm and bucket arm

**Additional piping grab tool****PAINTING****Special paint 1 RAL**

(paint only for yellow parts)

**Special paint 1 non RAL**

(paint only for yellow parts)

**Special paint cab RAL**

(only RAL colours possible)

**PACKET****Mirror packet**

(mirror right and left)

**OTHER****work floodlight at front****anti-theft device****swivel light****Long bucket arm****2503** + 200 mm**3503** + 300 mm**Security 24 (1500 h)**

(extension of guarantee 24 months or 1500 operating hours)

**Security 24 (2000 h)**

(extension of guarantee to 24 months or 2000 operating hours)

**Steel track****2503** 250 mm**3503** 300 mm

Wacker Neuson compact equipment offers power and manoeuvrability on the spot.

## Any time, any place.

We consider it a constant duty to ensure that our promise regarding our products and services is fulfilled: Reliability, Trust, Quality, Reactivity, Flexibility and Innovation.

Compact construction equipment of the Wacker Neuson brand also does the business where others can only stand and watch. Our products prove their worth through quality, power, intelligent hydraulics, compact dimensions, innovative technology, high productivity and reliability.

**This gives a specification that only Wacker Neuson – the specialist in compact equipment– is capable of.**

You too can take advantage of this bespoke capability. The Wacker Neuson compact class is in a class of its own. With success stamped right through it.



**WACKER  
NEUSON**