

# THE URBAN CO-WORKER



**makes your way**



# THEREFORE WILLE!

**Wille is the most popular machine** on the market for the environmental management and maintenance of urban areas. It is designed to operate through all four seasons, especially winter, when maintenance operations are the most demanding and expensive. The articulated steering and location of the cabin in the front frame provide the operator with excellent working conditions.

**Wille is exceptionally strong** considering its size. The line-up comprises five models ranging from 2.0 to 6.6 tonnes. Compared with wheeled loaders in the same weight category, Wille's engine delivers about 60 % higher output. This power is mostly required to drive the hydraulic work attachments, and when carrying heavy loads on the road. Depending on the model, the travel speed is 36-40 kph.

**Wille is agile.** Wille is at its best when working in a confined, urban environment with high traffic density where the work must proceed quickly. Wille is equipped with a versatile hydraulic system and three connecting points for the work attachments: one in the front, one in the rear and the third one on top of the engine. Fewer driving passes means less disturbance of the surrounding environment!

One of **Wille's strengths** is its wide range of available work attachments. These are easy to procure and effortless to change. Their compatibility with the base unit is ideal, which means that the machine can be operated efficiently and safely all year round.

**Wille's sales and after-sales** operations are in reliable hands. Wille is a long-term investment with an exceptionally high second-hand value. Wille's high quality, capacity and productivity have helped it stay number one on the Nordic market for many years.





### HYDRAULICS

The machine's versatile and powerful operating hydraulics enable to use a wide range of optional work attachments.



### ARTICULATED STEERING

Thanks to the articulated steering, the front and rear frames follow the trajectory of the work attachment. Working is more efficient and safer even in a confined, urban environment.



### MAINTENANCE

The engine bonnet is easy to dismount and the serviceable parts are easy to access.



### LOW REAR FRAME

Thanks to the low rear frame, visibility to the rear is excellent. Work attachments may be hitched on top of the engine compartment.



### CABIN

The cabin is spacious, user-friendly, and ergonomically well laid out. The noise level is agreeably low. In winter, the cabin is warm, and its windows remain clear.



### VISIBILITY

The driver enjoys an unobstructed view of the work attachment in the front. Keeping an eye on the surroundings through the side and rear windows is also easy.



### MULTI-PURPOSE LEVER

Using the multi-purpose lever, the operator can control the movements of both the Wille and the work attachments. For example, it is possible to manoeuvre both wings of the articulated plough simultaneously.



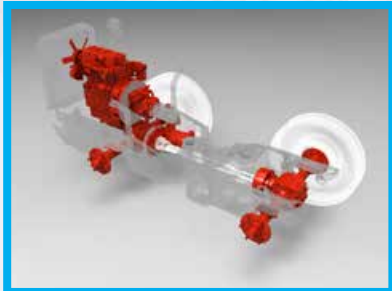
### WORK ATTACHMENTS

Wille benefits from an extensive range of proprietary work attachments. These work attachments are designed for efficient and safe year-round use.

# LITTLE GIANT

The Wille 265 can cope with even the toughest snow-clearing operations. The resistance of snow does not steer the machine off course, and its wheels effortlessly advance in even deep snow. The efficient motor hydraulics with a flow of 90 lpm power the various work attachments.

The lifting height of the front lift up to 700 mm, and the maximum lifting force of 12 kN are important properties when piling snow with, for example, a plough or a high-tipping bucket.



## RELIABLE TRANSMISSION WITH EXCELLENT PROPERTIES

The output of the diesel engine is transmitted by means of a hydraulic pump and motor to the rear axle, and by means of a cardan shaft, further to the front axle. The advantage of this type of transmission is that the maximum tractive force can always be achieved irrespective of the weight distribution, and the number of tractive tyres, and no high-pressure hoses are routed past the articulated joint. The automatic differential lock on the front axle ensures that the machine advances smoothly on slippery surface, for example, during ploughing or when mowing a lawn with a soft surface.



## VERSATILE OPERATING HYDRAULICS AS STANDARD

The hydraulically operated work attachments are easy to connect, and run safely, causing the minimum of noise. The work attachments in the front, in the rear, and on top of the engine bonnet, can be operated simultaneously. The float position of the front lift, which is a standard feature, makes, for example, ploughing and mowing of the lawn easier. Cushioning of the front lift improves driving comfort and safety while on the road.



As an option, the machine may be equipped with a rear tilt that enables, for example, a sand spreader to be tilted down and filled by reversing.

Wille comes with two operating hydraulics pumps. The flow of the pumps is 36 lpm and 54 lpm respectively, which can be used individually or combined for a flow of 90 lpm. The cylinder hydraulics are double-acting: 3 circuits to the front and 1 circuit to the rear.

## SPACIOUS CABIN WITH EXCELLENT ERGONOMICS

The cabin is spacious and easy to access. Thanks to the unobstructed view, the adjustable steering wheel and the multi-purpose lever with pilot control, the user ergonomics are excellent. The distinct multi-function display gives the operator precise information about the machine's different functions in the desired language.



The efficient cabin heater and heated seat help make the ambience more comfortable during the cold season. The adjustable fan keeps the windows clear.

The opening side windows increase the operating comfort especially in summer. As required, the windows are easy to dismount. Air-conditioning is available as an option.

# "MAXIMAL TRACTIVE FORCE IRRESPECTIVE OF WEIGHT DISTRIBUTION AND THE NUMBER OF TYRES WITH GROUND CONTACT"



## SERVICE-FRIENDLY STRUCTURE

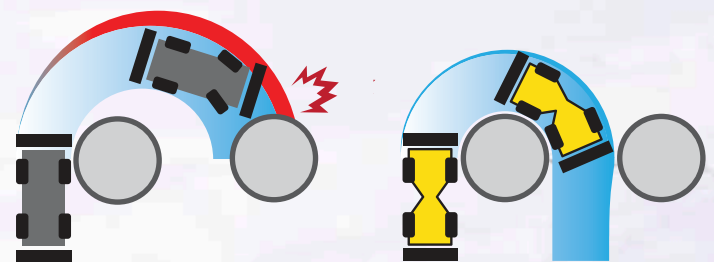
Thanks to the dismountable engine bonnet, the serviceable parts are easy to access even with a work attachment placed on top of the engine compartment.

The hydraulic oil filter can be easily changed from above.

The extract fan helps reduce the cooler element's tendency to get clogged, for example, when mowing a lawn.

## AGILE ARTICULATED STEERING

A machine with articulated steering is much more agile than, for example, a mini-tractor with front wheel steering.



A front-wheel-steered machine

Wille



# WILLE 265



Wille 265 is agile and robust. Its minimum width is 1,200 mm and minimum height 1,990 mm. It weighs only two tonnes, and has operating hydraulics with a flow of 90 lpm. Wille's extensive range of work attachments and tyres makes it a perfect partner.

Despite its small size, Wille can readily deal with even tough snow clearing operations. In addition to ploughing and blowing, loading and piling of snow is easy with the high-tipping bucket.

In summer too, there's plenty for Wille to do. In green areas, the wide lawn mower, and the leaf collector are in active use. In towns, the suction sweeper and the high-pressure washer help keep the stone and asphalt paved areas clean.

## ENGINE

- CAT C2.2 EU Off Road Stage 3A
- 4-cylinder diesel engine
- Displacement 2,216 cm<sup>3</sup>
- Output 36 kW (48 hp)/2,600 rpm
- Max. torque 143 Nm/1,800 rpm
- Fuel tank 50 l

## ELECTRIC SYSTEM

- Voltage 12 V
- Electric main switch
- Battery 88 Ah
- Start motor 2.0 kW
- Alternator 65 A

## TRANSMISSION

- Hydrostatic transmission
  - Variable displacement pump
  - Variable displacement motor with 2 speeds
  - Charge automation of the engine
  - Driving direction to the front and rear is changed electrically
  - Power-shift of speed range
  - 1-speed reduction gear
  - Driving speed/tractive force
- 0-15 kph/1,050 daN  
0-36 kph/550 daN

## NOISE LEVEL

- Inside cabin under LpA 77 dBA

## WEIGHT

- Own weight 2,050 kg
- Front axle weight 670 kg
- Rear axle weight 1,380 kg

## STEERING SYSTEM

- Hydrostatic articulated steering
- Turning angle +/- 39°
- Angle of oscillation +/- 7°

## AXLES

- Automatic differential locks in the front
- Hydraulically assisted drum brake in the front
- Mechanic control of the parking brake

## OPERATING HYDRAULICS

- Gear pump, 54 lpm, 190 bar
- Gear pump, 36 lpm, 190 bar
- Volume of the hydraulic system about 60 l
- Hydraulic oil cooler

## FRONT HITCH

- Optional hitching patterns: 3-point hitch KAT 1, Vila
- Lifting force at the end of the arms: in lower position 13 kN, in upper position 12 kN
- Lifting height 700 mm
- Hydraulic suspension
- Float position
- Mechanic quick-coupler for work attachment
- Hydraulic pilot control

## TYRES

- 31x10.5-15 (width of the machine 1,300 mm)
- 270/75R15, studded tyres (width of the machine 1,300 mm)
- 235/75 R15 (width of the machine 1,200 mm)
- Lawn tyres 31x13.5-15 (width of the machine 1,460 mm)

## STANDARD EQUIPMENT

- Motor hydraulics (max. flow at 2,600 rpm)
- single-acting to the front 54 lpm
- single-acting to the front 36 lpm
- single-acting to the front 90 lpm
- single-acting to the rear 54 lpm
- Toplink hydraulics
- Hydraulic circuit for 3rd cylinder
- Hydraulic circuit for 4th cylinder
- Double-acting cylinder hydraulics to the rear
- Electric Inching and accelerator pedal
- Flow control valve for motor hydraulics with electric control
- Socket outlet of 12 V in the front and rear
- Beacon light with foldable shaft
- TFT display
- Radio/mp3 Bluetooth/AUX-in/USB/SD-Card
- Windscreen and rear window wiper and washer
- Rear mirrors with heating
- Work lights in the front and rear
- Adjustment of steering wheel tilt
- Seat with heating
- 2-point safety belt
- Safety cabin ROPS (ISO 3471)
- Safety cabin FOPS (ISO 3449 1365 J)
- Engine heater
- Bottom armours in the front and rear
- Refill pump for hydraulic oil
- Towing hitch
- Reverse alarm
- Brackets for work attachments above the engine space

## OPTIONAL EQUIPMENT

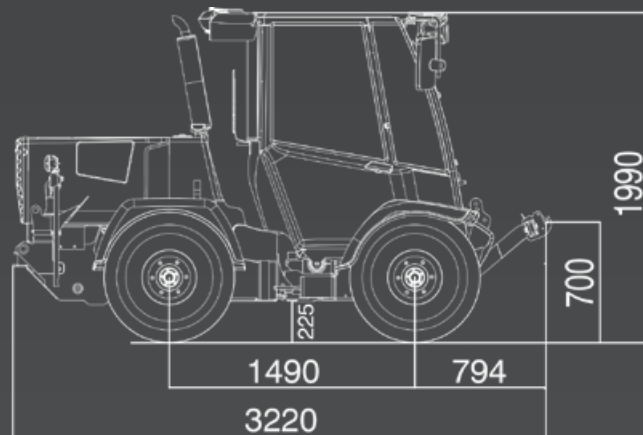
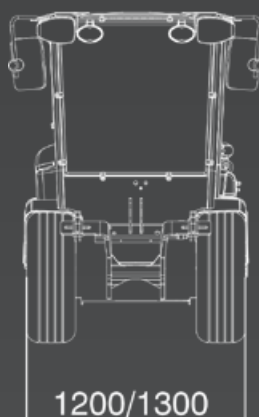
- Rear tilt (Trima)
- Float-position for rear tilt
- 3-point lift in the rear
- Hydraulic oil heater
- Central pressure lubrication
- Air-conditioning
- Air-cushioned seat
- Readiness for cabin heater
- Rear view camera

## Wille work attachments:

- Rotary brush 140
- Bucket brush 550
- Zoom plough 250
- Ice-plough
- High-tipping bucket 550 l
- Mechanical rear blade 180 l
- Rear sand spreader 180 l (250 l for salt)
- Disc gritter 450 l
- Leaf collector 900 l
- High-pressure washer 550 l
- Sprinkling tank 550 l
- Fixed platform 230 l



Inner turn radius 1,700 mm  
Outer turn radius 3,000 mm





# WILLE 365



Wille 365 is a powerful, agile and fast machine. In contrast to, for example, mini-tractors, various loading, piling and transport operations during the renovation of streets and green areas can be performed, thanks to the loader with extensive outreach, with one single machine.

The cabin with excellent ergonomics is spacious and user-friendly. The distinct multi-function display gives the operator precise information about the machine's different functions in the desired language.





### ENGINE

- CAT C2.2 EU Off Road Stage 3A 4-cylinder diesel engine
- Displacement 2,216 cm<sup>3</sup>
- Output 36 kW (48 hp)/2,600 rpm
- Max. torque 143 Nm/1,800 rpm
- Fuel tank 50 l

### ELECTRIC SYSTEM

- Voltage 12 V
- Electric main switch
- Battery 88 Ah
- Start motor 2.0 kW
- Alternator 65 A

### TRANSMISSION

- Hydrostatic transmission
- Variable displacement pump
- Variable displacement motor
- Charge automation of the engine
- Driving direction to the front and rear is changed electrically
- 1-speed reduction gear
- Driving speed/tractive force 0-36 kph/1,500 daN

### NOISE LEVEL

- External under LwA 101 dBA
- Inside cabin under LpA 77 dBA

### WEIGHT

- Own weight 2,700 kg
- Front axle weight 1,190 kg
- Rear axle weight 1,510 kg
- With standard bucket 2,850 kg

### STEERING SYSTEM

- Hydrostatic articulated steering
- Turning angle +/- 39°
- Angle of oscillation +/- 7°

### AXLES

- Automatic differential locks in the front
- Hydraulically assisted multi-disc brakes in oil-bath in the front
- Electro-hydraulic control of the parking brake

### OPERATING HYDRAULICS

- Gear pump 54 lpm., 190 bar
- Gear pump 36 lpm., 190 bar
- Volume of hydraulic system about 60 l
- Hydraulic oil cooler

### LOADER

- Optional quick-coupler types: Kunta 500, Trima and Vila
- Hydraulic quick-coupler for work attachment
- Hydraulic self-level feature of the loader
- Hydraulic suspension
- Hydraulic pilot control
- Service support for loader-arms
- Loader-arm support for levelling work

### TYRES

- 31x11.5-15 (width of the machine 1,420 mm)
- With lawn tyres 31x13.5-15 (width of the machine 1,520 mm)

### STANDARD EQUIPMENT

- Motor hydraulics (max. flow 2,600 rpm)
- double-acting to the front 54 lpm
- single-acting to the front 36 lpm
- single-acting to the front 90 lpm
- single-acting to the rear 36/54/90 lpm
- Hydraulic circuit for 3rd cylinder, electric control
- Hydraulic circuit for 4th cylinder, electric control
- Double-acting cylinder hydraulics to the rear
- Electric Inching and accelerator pedal
- Flow control valve for motor hydraulics with electric control
- Socket outlet of 12 V in the front and rear
- Beacon light with foldable shaft
- TFT display
- Radio/mp3 Bluetooth/AUX-in/USB/SD-Card
- Windscreen and rear window wiper and washer
- Rear mirrors with heating
- Work lights in the front and rear
- Adjustment of steering wheel tilt
- Seat with heating
- 2-point safety belt
- Roof window
- Safety cabin ROPS (ISO 3471)
- Safety cabin FOPS (ISO 3449 1365 J)
- Engine heater
- Bottom armours in the front and rear
- Refill pump for hydraulic oil
- Towing hitch
- Reverse alarm
- Immobiliser is active when the parking brake is engaged
- Brackets for work attachments on top of the engine compartment

### OPTIONAL EQUIPMENT

- Rear tilt (Kunta 500)
- Float position for rear tilt
- Hydraulic oil heater
- Central pressure lubrication
- Air-conditioning
- Air-cushioned seat
- Readiness for cabin heater
- Brake valve for trailer
- Float position for loader
- Counter-weight 250 kg
- Rear view camera

### Wille work attachments:

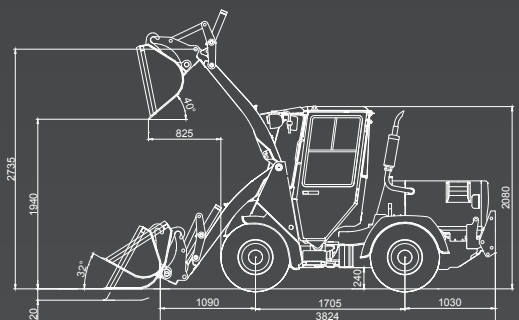
- Rotary brush 170
- Collecting sweeper 205
- Zoom plough 250
- Ice-plough
- Soil bucket 400 l
- Snow bucket 800 l
- High-tipping bucket 550 l
- Multi-function bucket 750 l
- Mechanical rear blade 1801
- Rear sand spreader 250 l (370 l for salt)
- Disc gritter 450 l
- Leaf collector 900 l
- High-pressure washer 550 l
- Sprinkling tank 550 l
- Fixed platform 230 l
- Access platform Wille-9
- Forklift forks



|  | FRONT FACE OF THE QUICK-COUPLER | BUCKET 400 L    | DISTANCE TO CENTRE OF GRAVITY 500 mm |
|--|---------------------------------|-----------------|--------------------------------------|
| Lifting force lower position, kN               | 17.7                            | 16.2            | 14.8                                 |
| Lifting force upper position, kN               | 7.4                             | 5.8             | 5.1                                  |
| Rated transport capacity, kg                   |                                 | 445*            | 570* (even surface)                  |
| Tipping load, with straight/turned machine, kg | 1,260/1,110 R 20*               | 1,040/890 R 20* | 840/720*                             |
| Break-out force of the bucket, kN              |                                 | 10.0            |                                      |

\* with rear-tilt, without counter-weight. According to the ISO 8313 and EN 474-3 standards

Dimensions with 400 l bucket:  
Width 1,420 mm  
Inner turn radius 1,870 mm  
Outer turn radius 3,290 mm





# WILLE 465



The new Wille 465 model picks up from where its predecessor, the best-in-class, reliable Finnish player in real estate services, the Wille 455B, left off – even better than before. The new Stage 3B/ Tier 4 Final engine meets the latest emission requirements. The load sensing hydraulic system with variable displacement pump and proportional control makes the working even more comfortable. The electric inching and accelerator pedal make operating the work attachments significantly easier and more efficient. The extended wheelbase improves the machine's stability and tipping load, and the strong loader enables handling of larger masses than before.



## ENGINE

- Kohler KDI 2504 TCR, EU Off Road Stage 3B/Tier 4 final
- 4-cylinder turbo-charged Common rail diesel engine with intercooler
- DOC-catalyst
- Displacement 2482 cm<sup>3</sup>
- Output 55,4 kW (74,3 hp) 2300 rpm
- Max. torque 300 Nm/ 1500 rpm
- Fuel tank 55 l

## ELECTRIC SYSTEM

- Voltage 12 V
- Electric main switch
- Battery 105 Ah
- Start motor 2.0 kW
- Alternator 100 A

## TRANSMISSION

- Hydrostatic transmission
- Variable displacement pump
- Variable displacement motor
- Driving direction to the front and rear is changed electrically
- 1-speed reduction gear
- Driving speed/tractive force 0-40 kph/1,600 daN

## NOISE LEVEL

- External under LwA 101 dBA
- Inside cabin under LpA 76 dBA

## WEIGHT

- Own weight 3,420 kg
- Front axle weight 1,510 kg
- Rear axle weight 1,910 kg
- With standard bucket 3,955 kg

## STEERING SYSTEM

- Hydrostatic articulated steering
- Turning angle +/- 40°
- Angle of oscillation +/- 9°

## AXLES

- Automatic differential locks in the front
- Hydraulically assisted multi-disc brakes in oil-bath in the front
- Electro-hydraulic control of the parking brake with immobilizer

## OPERATING HYDRAULICS

- Load sensing hydraulic system with variable displacement, 80 lpm, 200 bar
- Gear pump 52 lpm., 200 bar
- Maximum flow 132 lpm, 200 bar
- Volume of hydraulic system about 70 l
- Hydraulic oil cooler

## LOADER

- Optional quick-coupler types: Kunta 500, Trima and Vila
- Hydraulic quick-coupler for work attachment
- Hydraulic self-level feature of the loader
- Automatic suspension for the loader, 5-10 kph
- Hydraulic pilot control
- Service support for loader-arms
- Loader-arm support for levelling work

## TYRES

- 33x12,5-15 (width of the machine 1655 mm)
- Lawn tyres 380/60-R15 (width of the machine 1,830 mm)

## STANDARD EQUIPMENT

- Motor hydraulics (max. flow 2,300 rpm)
- double-acting to the front 0 - 80 lpm
- single-acting to the front 52 lpm
- single-acting to the front 52-132 lpm
- single-acting to the rear 52 / 0 - 80 / 52 - 132 lpm
- Hydraulic circuit for 3rd cylinder, proportional control 0 - 52 lpm
- Hydraulic circuit for 4th cylinder, proportional control 0 - 52 lpm
- Double-acting hydraulics to the rear
- Electric inching and accelerator pedal
- Socket outlet of 12 V in the front and rear
- Beacon light with foldable shaft
- Radio/mp3 Bluetooth/AUX-in/USB/SD-Card
- Windscreen and rear window wiper and washer
- Rear mirrors with heating
- Low beam automation
- LED work lights in the front 2000/1800lm and rear 800/1400 lm, EMC –and E- certified
- Adjustment of steering wheel tilt
- Seat with heating
- 2-point safety belt
- Roof window
- Safety cabin ROPS (ISO 3471)
- Safety cabin FOPS (ISO 3449 1365 J)
- Engine heater
- Bottom armours in the front and rear
- Refill pump for hydraulic oil
- Towing hitch
- Reverse alarm , on/off selectable
- Brackets for work attachments on top of the engine compartment

## OPTIONAL EQUIPMENT

- Rear tilt (Kunta 500)
- Float position for rear tilt
- Hydraulic oil heater
- Electrically operated inching valve
- Central pressure lubrication
- Automatic air-conditioning
- Air-cushioned seat
- Readiness for cabin heater
- Brake valve for trailer
- Float position for loader
- Counter-weight 300 kg
- FOPS-roof (ISO 3449 11,600 J)
- Rear view camera

## Wille work attachments:

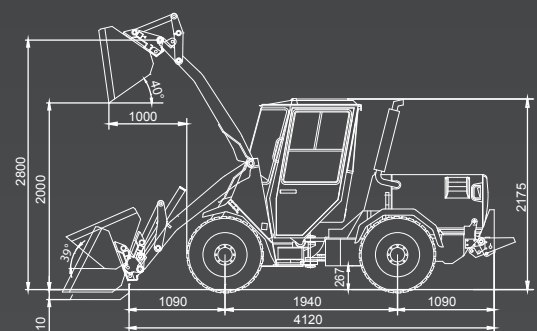
- Rotary brush 200
- Collecting sweeper 305
- Zoom plough 290
- Ice-plough
- Soil bucket 600 l
- Snow bucket 1,200 l
- High-tipping bucket 800 l
- Multi-function bucket 1,000 l
- Mechanical rear blade 180 l
- Rear sand spreader 370 l
- Disc gritter 700 l
- Leaf bucket 1,200 l
- Leaf collector 1,000 l
- High-pressure washer 1,000 l
- Fixed platform 300 l
- Platform with hydraulic tipping 300 l
- Access platform Wille-9
- Forklift forks



|  | FRONT FACE OF THE QUICK-COUPLER | BUCKET 600 L | FORKLIFT FORK with 500 mm DISTANCE TO CENTRE OF GRAVITY |
|--|---------------------------------|--------------|---|
| Lifting force lower position, kN               | 24.7                            | 23.0         | 19.5  |
| Lifting force upper position, kN               | 11.6                            | 10.3         | 9.5   |
| Rated transport capacity, kg                   |                                 | 795*         | 980* (even surface)                                     |
| Tipping load, with straight/turned machine, kg | 2,160/1810*                     | 1940/1590*   | 1450/1230*  |
| Break-out force of the bucket, kN              |                                 | 16.4         |   |

\* with rear-tilt, without counter-weight. According to the ISO 8313 and EN 474-3 standards

Dimensions with 600 l bucket:  
Width 1655 mm  
Inner turn radius 2355 mm  
Outer turn radius 3750 mm





# WILLE 665



The Wille 665 is unrivalled in its weight category. The great load-bearing capacity of the axles means that the Wille Optim work attachments can be connected not only to the front, but also to the back and on top of the engine compartment. The most powerful operating hydraulic system on the market with two hydraulic circuits and a load-sensing variable displacement pump is a standard feature. The combined flow of the motor hydraulics is 200 lpm, which is particularly needed, when driving a snow blower under tough conditions. Wille is low, agile and able to work smoothly even in narrow places.

Wille machines are equipped with the new Caterpillar engine of 83 kW, which meets the stage 3B emission requirements, and is equipped with a maintenance-free particle filter. The machines never lack power even during tough transport driving or when ploughing heavy snow. Its transfer speed is max. 50 kph which can be limited if necessary.



### ENGINE

- CAT C3.4 EU Off Road Stage 3B
- 4-cylinder turbo-charged Diesel-engine with intercooler
- DPF particle filter
- Common Rail fuel system
- Displacement 3385 cm<sup>3</sup>
- Output 83 kW (111 hp)/2,200 rpm
- Max. torque 450 Nm/1,400 rpm
- Fuel tank 100 l

### ELECTRIC SYSTEM

- Voltage 12 V
- Electric main switch
- Battery 145 Ah
- Start motor 4.2 kW
- Alternator 120 A

### TRANSMISSION

- Hydrostatic transmission
- Variable displacement pump
- Variable displacement motor
- Driving direction to the front and rear is changed electrically
- 2-speed electro-hydraulic range gearbox
- Driving speed/tractive force 0–20 kph/4,200 daN 0–50 kph 2,100 daN

### NOISE LEVEL

- External under LwA 101 dBA
- Inside cabin below LpA 72 dBA

### WEIGHT (KG)

- Own weight 5,660/6,060\*
- Front axle weight 2,230/2,230\*
- Rear axle weight 3,430/3,830\*
- Rear tyres with liquid filling

### STEERING SYSTEM

- Hydrostatic articulated steering
- Turning angle +/- 39°
- Oscillation angle +/- 12.5°

### AXLES

- Automatic friction locks in the front and rear
- Hydraulically assisted multi-disc brakes in oil-bath in the front and rear
- Electro-hydraulic control of the parking brake with immobilizer

### OPERATING HYDRAULICS

- Load-sensing variable displacement pump 145 lpm, 220 bar
- Gear pump 55 lpm, 220 bar
- Maximum flow of motor hydraulics 200 lpm, 220 bar
- Volume of the hydraulic system about 150 l
- Hydraulic oil cooler

### LOADER

- Optional quick-coupler types: Kunta 500, Vila, Volvo BM and Trima
- Hydraulic quick-coupler for work attachment
- Hydraulic self-level feature of the loader
- Automatic suspension for the loader, 5-10 kph
- Hydraulic pilot control
- Service support for loader-arms
- Loader-arm support for levelling work

### TYRES

- 420/65 R 24 (width of the machine 1920 mm)
- 360/80 R 20 (width of the machine 1750 mm)

### STANDARD EQUIPMENT

- Motor hydraulics (max. flow 2,200 rpm)
  - double-acting to the front 0–145 lpm
  - single-acting to the front 55 lpm
  - single-acting to the front 55–200 lpm
  - single-acting to the rear 55/0–145 lpm
- Hydraulic circuit for 3rd cylinder, proportional control 0-90 lpm
- Hydraulic circuit for 4th cylinder, proportional control 0-90 lpm
- Double-acting cylinder hydraulics to the rear
- Electric inching and accelerator pedal
- Socket outlet of 12 V in the front and rear
- From the cabin foldable Beacon light shaft
- TFT display
- Radio/mp3 Bluetooth/AUX-in/USB/SD-Card
- Windscreen and rear window wiper and washer
- Rear mirrors with heating
- Low beam automation
- LED work lights in the front 2000/1800lm and rear 800/1400 lm, EMC- and E-certified
- Adjustment of steering wheel tilt
- Seat with heating
- 2-point safety belt
- Roof window
- Safety cabin ROPS (ISO 3471)
- Safety cabin FOPS (ISO 3449 1365J)
- Engine heater
- Bottom armours in the front and rear
- Refill pump for hydraulic oil
- Towing hitch
- Reverse alarm, on/off selectable
- Brackets for work attachments on top of the engine compartment

### OPTIONAL EQUIPMENT

- Hydraulic rear lift with towing hitch (Kunta 500)
- Lifting force to the upper position 34 kN
- Thrust force with rear blade 17.7 kN
- Float position
- Hydraulic circuit for 5th cylinder
- Hydraulic circuit for 6th cylinder
- Hydraulic oil heater
- Electrically operated inching valve
- Central pressure lubrication
- Air-conditioning, automatic
- Air-cushioned seat, 3-point seat belt
- Readiness for cabin heater
- Brake valve for trailer
- Float position of loader
- Elevated cabin 80 mm
- FOPS roof (ISO 3449 11600J)
- Counter-weight 400 kg
- Rear view camera

### Wille Optim

#### work attachments

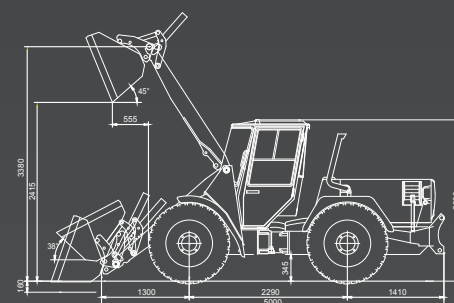
- Rotary brush 240, 270
- Collecting sweeper 650
- Soil bucket 1,000 l
- Snow bucket 1,700 l, 1,900 l
- Multi-function bucket 1,500 l
- Leave bucket 1,900 l
- Hydraulic rear blade 2,500
- Rear sand spreader 550 l
- Disc spreader 1,000 l
- High-pressure washer 1,500 l
- Platform with hydraulic tipping 800 l
- Access platform Wille-9
- Forklift forks



|  | FRONT FACE OF THE QUICK-COUPLER | BUCKET 1000 L                 | FORKLIFT FORK 500 MM LOAD CENTRE DISTANCE            |
|--|---------------------------------|-------------------------------|--|
| Hydraulic lifting force at lower position kN   | 41.0                            | 36.9                          | 34.5   |
| Hydraulic lifting force at upper position kN   | 30.2                            | 24.1                          | 22.6   |
| Rated transport capacity, kg                   | 1,575*                          | 1,785**                       | 1,960 (on even surface*)<br>2,216 (on even surface*) |
| Tipping load, with straight/turned machine, kg | 4,140/3,600*<br>4,645/4,035**   | 3,660/3,150*<br>4,160/3,570** | 2,760/2,450*<br>3,130/2,770**                        |
| Break-out force of the bucket, kN              |                                 | 37.9                          |  |

Dimensions with 1,000 l bucket:

- Width 1920 mm
- Inner turn radius 2,440 mm
- Outer turn radius 4,340 mm
- Height 420/65 R 24 2,340 mm
- Height 360/80 R 20 2,290 mm



\* with Nokia 420/65 R 24 tyres and rear-lift without counterweight. According to ISO 8313 and EN 474-3 standards

\*\* with rear-lift and rear tyres with liquid filling



# WILLE 865



The Wille 865 is really a multi-functional wheel loader, whose work attachments can also be connected to the rear lift or to the top of the engine compartment. The most powerful operating hydraulic system on the market with two hydraulic circuits, and a load-sensing variable displacement pump is a standard feature. The combined flow of the motor hydraulics is 200 lpm, which is particularly needed when driving a snow blower under tough conditions. Wille is low, agile and able to work smoothly even in narrow places.

Wille machines are equipped with the new Caterpillar engine of 98 kW, which meets the stage 3B emission requirements, and is equipped with a maintenance-free particle filter. The machines never lack power even during tough transport driving or when ploughing heavy snow. The lifting forces are equivalent to those of a wheel loader of the same size. Its transfer speed is max. 50 kph which can be limited if necessary.



## ENGINE

- CAT C4.4 EU Off Road Stage 3B
- 4-cylinder turbo-charged Diesel engine with intercooler
- DPF particle filter
- Common Rail fuel system
- Displacement 4,410 cm<sup>3</sup>
- Output 98 kW (133 hp)/2,200 rpm
- Max. torque 530 Nm/1,400 rpm
- Fuel tank 100 l

## ELECTRIC SYSTEM

- Voltage 12 V
- Electric main switch
- Battery 145 Ah
- Start motor 4.0 kW
- Alternator 150 A

## TRANSMISSION

- Hydrostatic transmission
- Variable displacement pump
- Variable displacement motor
- Driving direction to the front and rear is changed electrically
- 2-speed electro-hydraulic range gearbox
- Driving speed/traction force 0–20 kph 4,720 daN  
0–50 kph 2,330 daN

## NOISE LEVEL

- External under LwA 102 dBA
- Inside cabin under LpA 70 dBA

## WEIGHT (KG)

- Own weight 6,780/7,280\*
- Front axle weight 2,740/2,740\*
- Rear axle weight 4,040/4,540\*
- \* Rear tyres with liquid filling

## STEERING SYSTEM

- Hydrostatic articulated steering
- Turning angle +/- 39°
- Angle of oscillation +/- 12.5°

## AXLES

- Automatic friction locks in the front and rear
- Hydraulically assisted multi-disc brakes in oil-bath in the front and rear
- Electro-hydraulic control of the parking brake with immobilizer

## OPERATING HYDRAULICS

- Load-sensing variable displacement pump 145 lpm, 220 bar
- Gear pump 55 lpm, 220 bar
- Maximum flow of motor hydraulics 200 lpm, 220 bar
- Volume of the hydraulic system about 150 l
- Hydraulic oil cooler

## LOADER

- Optional quick-coupler types: Kunta 500 and Volvo BM
- Hydraulic quick-coupler for work attachment
- Hydraulic self-level feature of the loader
- Automatic suspension for the loader, 5–10 kph
- Hydraulic pilot control
- Service support for loader-arms
- Loader-arm support for levelling work

## TYRES

- 460/65 R 24  
(width of the machine 2070 mm)
- 500/60 R 22.5  
(width of the machine 2150 mm)

## STANDARD EQUIPMENT

- Motor hydraulics max. flow at 2200 r.p.m.)
- double-acting to the front 0–145 lpm
- single-acting to the front 55–200 lpm
- single-acting to the rear 55/0–145 lpm
- Hydraulic circuit for 3rd cylinder, proportional control 0–90 lpm
- Hydraulic circuit for 4th cylinder, proportional control 0–90 lpm
- Double-acting cylinder hydraulics to the rear
- Electric inching and accelerator pedal
- Socket outlet of 12 V in the front and rear
- From the cabin foldable Beacon light shaft
- TFT display
- Radio/mp3 Bluetooth/AUX-in/USB/SD-Card
- Windscreen and rear window wiper and washer
- Rear mirrors with heating
- Low beam automation
- LED work lights in the front 2000/1800lm and rear 800/1400 lm, EMC- and E-certified
- Adjustment of steering wheel tilt
- Seat with heating
- 2-point safety belt
- Roof window
- Safety cabin ROPS (ISO 3471)
- Safety cabin FOPS (ISO 3449 1365 J)
- Engine heater
- Bottom armours in the front and rear
- Refill pump for hydraulic oil
- Towing hitch
- Reverse alarm, on/off selectable
- Brackets for work attachments on top of the engine compartment

## OPTIONAL EQUIPMENT

- Hydraulic rear lift with towing hitch (Kunta 500)
- Lifting force to the upper position 34 kN
- Thrust force with rear blade 17.7 kN
- Float position
- Hydraulic circuit for 5th cylinder
- Hydraulic circuit for 6th cylinder
- Hydraulic oil heater
- Electrically operated inching valve
- Central pressure lubrication
- Air-conditioning, automatic
- Air-cushioned seat, 3-point seat belt
- Readiness for cabin heater
- Brake valve for trailer
- Float position of loader
- Elevated cabin 160 mm
- FOPS roof (ISO 3449 11600 J)
- Counter-weight 400 kg
- Rear view camera

## Wille Optim

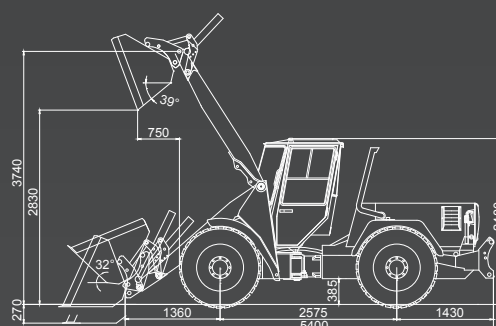
### work attachments

- Rotary brush 240, 270, 320
- Collecting sweeper 650
- Soil bucket 1,300 l
- Snow bucket 2500 l
- Multi-function bucket 2,000 l
- Leave bucket 1,900 l
- Hydraulic rear blade 2,500
- Rear sand spreader 700 l
- Disc spreader 1,000 l
- High-pressure washer 1,500 l
- Platform with hydraulic tipping 800 l
- Access platform Wille-9
- Forklift forks



|  | FRONT FACE OF THE QUICK-COUPLER | BUCKET 1300 L                 | FORKLIFT FORK 500 mm LOAD CENTRE DISTANCE             |
|--|---------------------------------|-------------------------------|---|
| Hydraulic lifting force at lower position, kN  | 65,8                            | 61,4                          | 51,6  |
| Hydraulic lifting force at upper position, kN  | 42,5                            | 39,6                          | 33,3  |
| Rated transport capacity, kg                   |                                 | 1,970*<br>2,190**             | 2,440 (on even surface*)<br>2,664 (on even surface**) |
| Tipping load, with straight/turned machine, kg | 5,000/4,330*<br>5,495/4,760**   | 4,570/3,940*<br>5,065/3,380** | 3,560/3,050*<br>3,960/3,330**                         |
| Break-out force of the bucket, kN              |                                 | 42,5                          |   |

Dimensions with 1,300 l bucket:  
Width 2,150 mm  
Inner turn radius 2,650 mm  
Outer turn radius 4,800 mm



\* with Nokia 460/65 R 24 tyres and rear-lift. According to ISO 8313 and EN 474-3 standards  
\*\* with rear-lift and rear tyres with liquid filling

# VILAKONE



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