



ES-TRIN CERTIFIED

# WATERKING 150 NG-A

AMPHIBIOUS EXCAVATOR

**REACH** 10,00 - 12,50 m

**GROUND PRESSURE** 0,126 kg/cm<sup>2</sup>

**CLASS** 15,00 ton

# ABOUT THE WK 150 NG-A

## OUR STORY

What others saw as impossible, we saw as an opportunity. An amphibious excavator with more freedom of movement and greater work capability. Through its development, Waterking's excavator has set the standard for the next generation of amphibious machines. Our undercarriage, which can be combined with any upper, it is no problem at all to pass through difficult surfaces. From swamps to waters, anything is possible with the Waterking.

## MATERIALS

Our amphibious machines are constructed using Cor-Ten steel and Hardox. This means they are eight times better protected against corrosion than other amphibious machines. Choice of upper structure, including Doosan, Caterpillar, Komatsu, Hitachi, Volvo, Takeuchi, Yanmar, JCB etc. It is possible to mount used upper structures as well as your own machines on our undercarriages.

## PRESSURE AND CORROSION

Our undercarriages have up to 50% less ground pressure than those of our competitors. Our pontoons are wider, which helps to create greater stability and buoyancy. Amphibious excavators are equipped with a tensioning cylinder, which means tracks can be tightened faster and more efficiently. The tensioning cylinder is protected, which means there is less chance of damage and corrosion.

## MOTORS, STEERING AND ATTACHMENTS

Heavy-duty travel motors, which are the most powerful travel motors in their class. This helps to offer greater tractive force. Third generation tracks with rounded edges, to ensure easy steering and reduction of damage to the surface. Larger additional pontoons, which make it easier to use accessories like large buckets, dredging pumps or powerpacks without affecting stability.

## ES-TRIN

Since 2021, amphibious excavators now officially belong to inland waterway vessels and are therefore required to carry a stability certificate. Thus, CESNI created the ES-TRIN (European Standard laying down Technical Requirements for Inland Navigation vessels). More information and further explanations can be found on the ES-TRIN pages of this brochure.

## PACKAGES

### NAME

Basic machine

ES-TRIN uncertified

ES-TRIN certified

Dredge/driven by a powerpack implementation

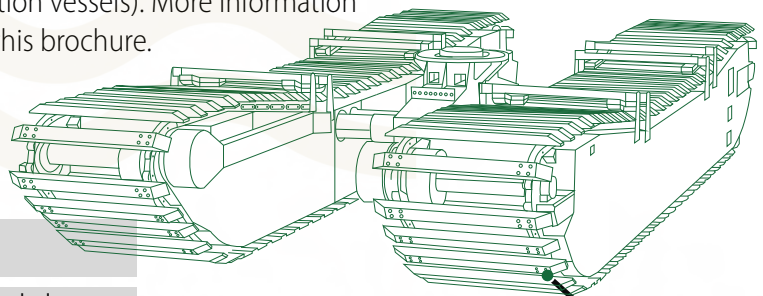
### CONTAINS

Uppercarriage + undercarriage

Basic machine + sidepontoons + spudpoles

Basic machine + sidepontoons + spudpoles + middle pontoon + safety fences

Basic machine + powerpack + DOP pump/mulcher etc. + pipelines



*Less ground pressure, strong, more stability and great buoyancy*

# WK 150 NG-A



# ES-TRIN

ES-TRIN is a regulation that vessels and floating equipment must comply with if they are to sail/operate on European inland waterways.

If your floating equipment does not comply with the current 2021 ES-TRIN regulations, then it is not allowed to perform work on European inland waters. .

Accidents happen in every field. However, everyone wants to prevent them as much as possible, which is why in 2015 the CESNI was founded by the CCNR (Central Commission for Navigation of the Rhine). The CESNI aims to centralize technical standards in different fields. This in view of the European inland navigation regulations.

The difference between an ES-TRIN certified excavator and an uncertified one is stability. A certified one is equipped with wider side pontoons, a middle pontoon and safety gates which reduces the chance of capsizing and ensures the safety of the machine.

At Waterking, we have each machine tested for number of degrees of inclination (maximum 5 degrees per side), thickness of steel and corrosion.

Would you like to know more information about ES-TRIN? You will find a comprehensive fact sheet on our website.



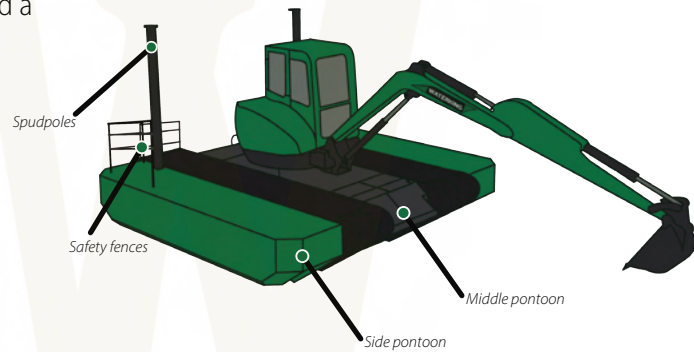
- ES-TRIN MANDATORY
- ES-TRIN VALID, NOT MANDATORY
- Ⓜ THE RHINE

## ✘ CONSEQUENCES WORKING WITHOUT ES-TRIN

- Unsafe work environment
- Accident risk
  - Personal injury
  - Environmental damage
  - Equipment damage
- Project shutdown
- Financial risk

## ✔ WHY ES-TRIN CERTIFIED

- Complies with laws and regulations
- Deployable anywhere
- Safety guaranteed
- Gives working comfort



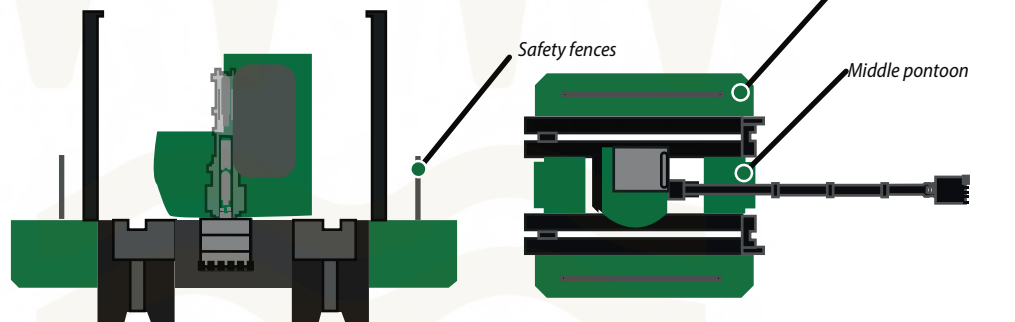
ES-TRIN certified amphibious excavator

## CERTIFIED AND UNCERTIFIED

### A certified machine has:

- Wider side pontoons
- A middle pontoon
- Safety fences
- Stronger drive motors

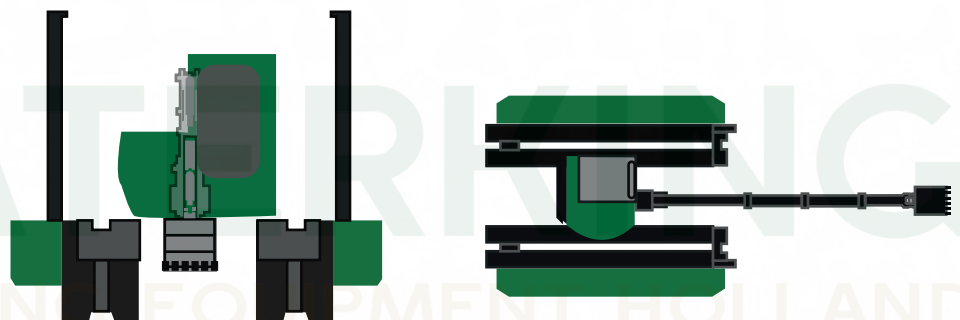
Certified



### An uncertified machine has:

- Smaller side pontoons
- No middle pontoon
- No safety fences

Not certified

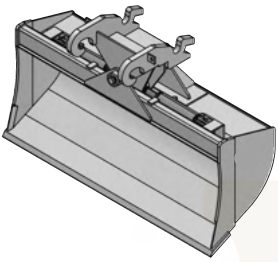


## WK 150 NG-A in Sellinger, the Netherlands



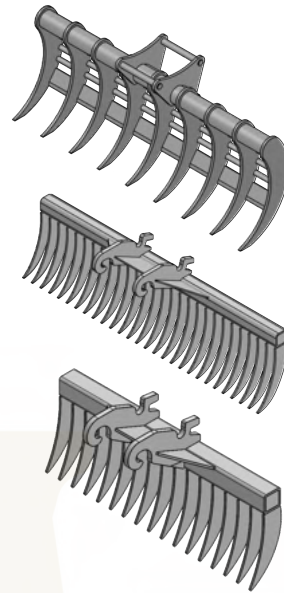
# OPTIONS AND ATTACHMENTS

## UNPERFORATED BUCKETS



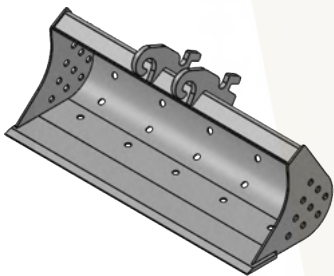
**Unperforated** digging buckets are used to dig sand. They are made of hard steel and can also come with teeth (teethbucket) to get through hard surfaces.  
450-1200 liters

## RAKES

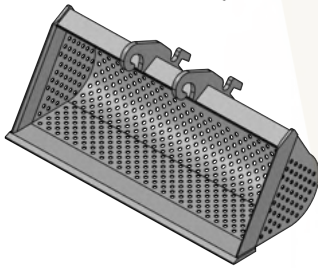


**Rakes** are used to level substrates or remove exotics from water, for example.

## PERFORATED BUCKETS

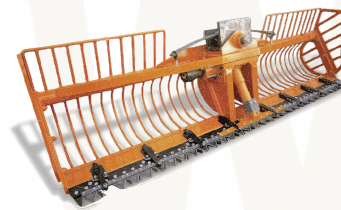


**Full- and half-perforated** digging buckets are often used for dredging. The holes allow the water to drain out and the silt remains.  
450-1200 liters



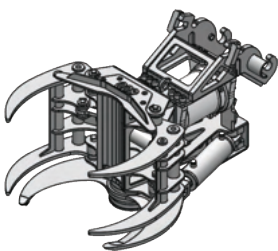
\*Illustrations by SCM modifications

## MOWING BUCKET



**A mowing bucket**, consisting of a bucket with cutting blades to remove vegetation from an embankment or water bottom.  
1- 5 meters

## MECHANICAL TREE CUTTERS



**Tree cutters** are used to prune and cut both large and small trees with ease.

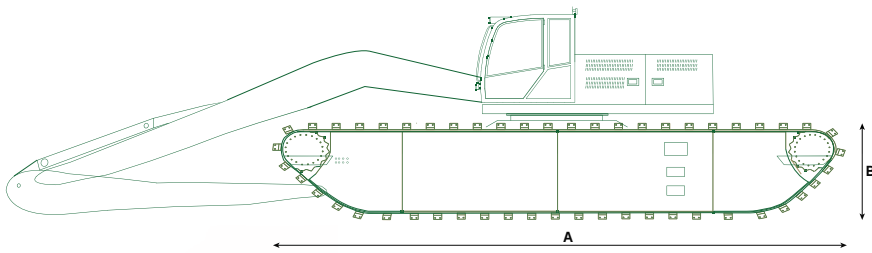
It is entirely up to the respective customer to assemble the machine himself, this of course includes attachments. Waterking supplies various types, from fully perforated dredging buckets to tree cutters. Attachments to be powered by hydraulic

## QUICK-HITCH

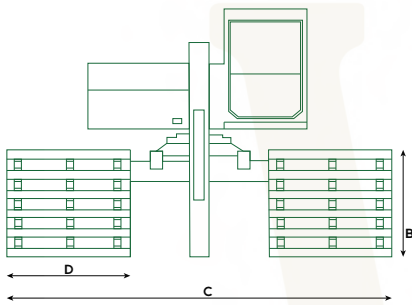


A **quick-hitch** is used to switch quickly between buckets and other attachments.

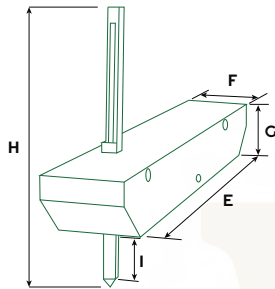
# TECHNICAL SPECIFICATIONS



Side view excavator



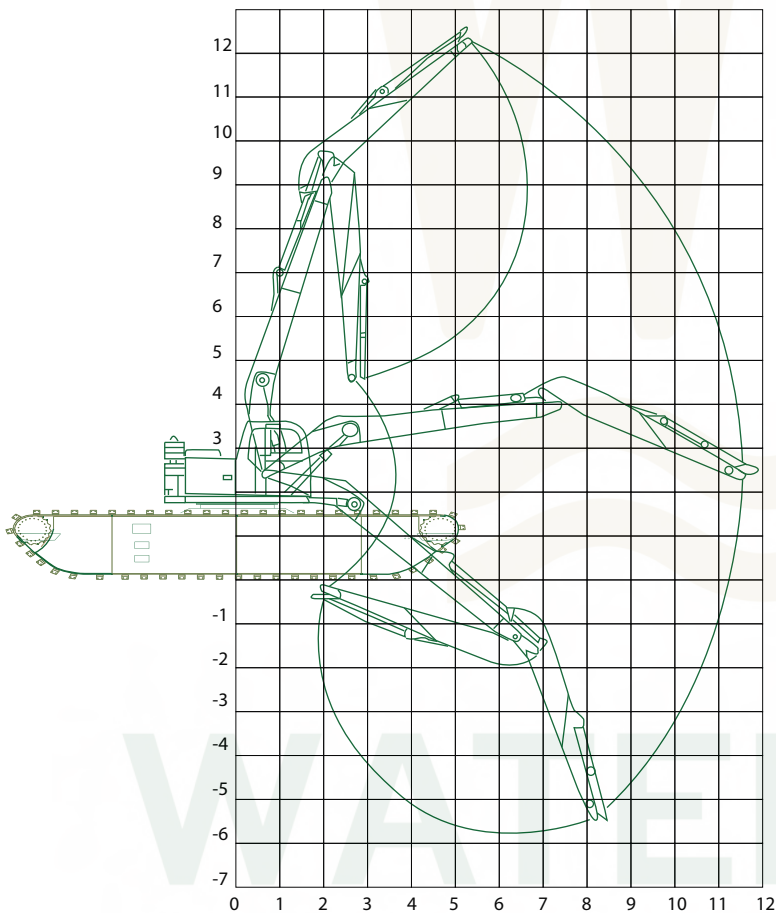
Front view excavator



Side pontoon with spudpole

Excavator class - ton	15,00
Total weight - ton	22,00
Reach - m	10,00 - 12,50
Weight pontoon set - ton	14,00
Groundpressure - kg/cm <sup>2</sup>	0,126
Engine power - kW	71 - 129
Bucket- l	300 - 700
<b>A</b> Length pontoon - m	10,00
<b>B</b> Height pontoon - m	1,55
<b>C</b> Undercarriage overall width - m	3,49 - 4,74
<b>D</b> Pontoon width - m	1,51
Tracks - m	PE
<b>E</b> Additional pontoon length - m	9,60
<b>F</b> Additional pontoon width - m	1,50
<b>G</b> Additional pontoon height - m	1,05
Additional pontoon weight (each incl. spud pole) - ton	3,66
<b>H</b> Spud pole length - m	6,00
<b>I</b> Spud pole stroke length - m	4,95

## REACH CAPACITY



# DRIVEN BY A POWERPACK

To ensure that the dredge execution can do its job properly, a powerpack is supplied with it. The suitable power pack for the WK 150 NG-A is the WK PP 150. This is a hydraulically driven 250 HP power pack that ensures that there is enough drive power to drive, for example, a DOP pump or tree cutter.

The powerpack, depending on customer demand, is equipped with a Volvo or Caterpillar engine. Engine types Tier3/stage 3A or Tier4Fstage V fit in the same sound attenuated enclosure, made of coated steel to provide protection in tropical and marine environments. The power pack is built according to EC regulations, low noise and ISO9001 quality management standards.

## SUITABLE FOR THE WK 150 NG-A

### WK POWERPACK 150

Description	Diesel driven hydraulic powerpack
Dimensions	2770 x 1370 x 1888
Capacity	200 LPM @250 Bars
Capacity hydraulic tank	300 L
Capacity diesel tank	400 L
Electronics	PLC based, IP 67 -40 to +85C

\*PRP: main power available continuously with variable load for an unlimited time in accordance with ISO 8528-1



GPS system, powerpack dashboard and DOP pump dashboard

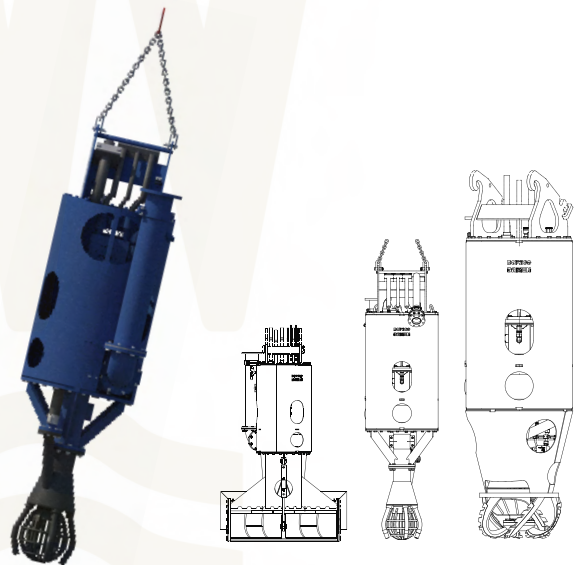
## DAMEN DOP PUMPS

## MULCHER



### FAE FOREST MULCHER

Flow rate	145-300 L/min
Pressure	220-350 bar
Working width (mm)	1587
Weight	1550 kg
Rotor diameter (mm)	450 mm
Max. shredding diameter	300 mm
No. teeth	32+4



### DAMEN DOP 150

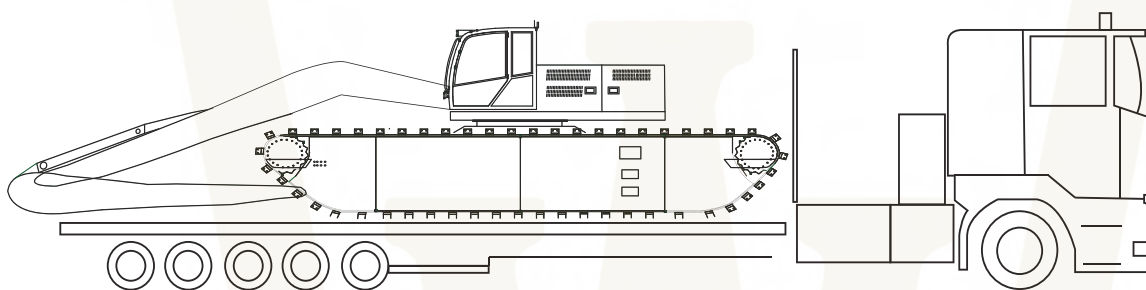
Description	DAMEN dredge pump
Nominal mixture capacity	600 m <sup>3</sup> /hr
Max. total head	5,0 bar
Max. pump speed	1.300 rpm
Max. power at shaft	80 kW
Oil flow	200 l/min
Oil pressure at motor	250 bar
Weight basic pump unit	1.100 kg

# TRANSPORT

The WK 150 NG-A an adjustable excavator which means the undercarriage can be extended. This makes it easy to transport the machine. A ES-TRIN non-certified can be transported on 1 trailer, with the ES-TRIN certified, the side pontoons, intermediate pontoon and spud poles are getting disconnected and they will fit on 2 trailers in total. Should the machine need to be transported in a container, it is possible to take it apart.

To transport, as an example, the base machine, the undercarriage is disconnected from the uppercarriage. The advantage of this is that you comply with laws for dimensions and weight for transportation at all times. It is not applicable to apply for separate permits for this, which saves a lot of time. The pontoons are taken apart, stacked on top of each other and transported on a trailer. The superstructure can be transported as a whole, with the boom removed if preferred.

*The transport of the excavator can be completely arranged by Waterking*



## TYPE

**Basic machine**  
Uppercarriage + undercarriage

**ES-TRIN uncertified**  
Uppercarriage + undercarriage + spudpoles + side pontoons

**ES-TRIN certified**  
Basic machine + sidepontoons + spudpoles + middle pontoon + safety fences

**Dredge / driven by a powerpack implementation**  
Basic machine + powerpack + DOP pump/ mulcher etc. + pipelines

## AMOUNT OF TRAILERS

1 trailer

2 trailers

2 trailers

4 trailers

## WATERKING BV

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# INGENIOUS FOR YOU

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