





woltmanrigs.com



# Dieseko Group Foundation equipment

Dieseko Group, established in 1974, manufactures a wide range of products for the foundation industry. The range is divided into five product lines: vibratory hammers and impact hammers, piling and drilling rigs, soil improvement equipment, dredging equipment, and hydraulic power packs.

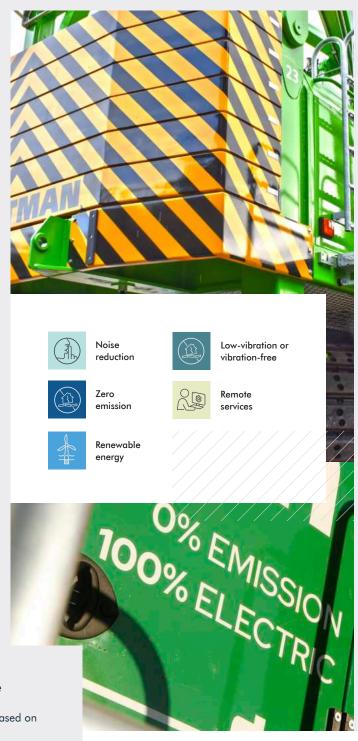
Dieseko Group is the parent company of three brands that specialize in constructing and infrastructural applications for foundations: PVE Piling & Vibro Equipment, PVE International Construction Equipment, and Woltman Piling & Drilling Rigs. Their experienced engineers have extensive knowledge of customer needs in the constructing and infrastructural markets and focus on delivering high-quality and reliable products. In addition, service engineers are available 24/7 to assist clients on-site. With over 60 dealers and branches worldwide, Dieseko Group is the perfect partner for foundation contractors seeking consultation, sales, rental, and financing services.

#### **Woltman Piling & Drilling Rigs**

Woltman Foundation Rigs Woltman specializes in manufacturing foundation machines and attachments. Since 2016, Woltman has been part of Dieseko Group.

#### **Dieseko Group: Founding the Future!**

With a sustainable future in mind and, to contribute to emission-free construction sites in 2030, Dieseko focuses on the development of sustainable foundation equipment. Our 'Founding the Future' vision and innovative solutions make us a pioneer in a market where many developments lie ahead. We have entered partnerships with several specialist parties. For example, we combine our expertise in foundation equipment with partners in the field of electrification and battery technology.



DIESEKO GROUP

#### **Founding the Future**

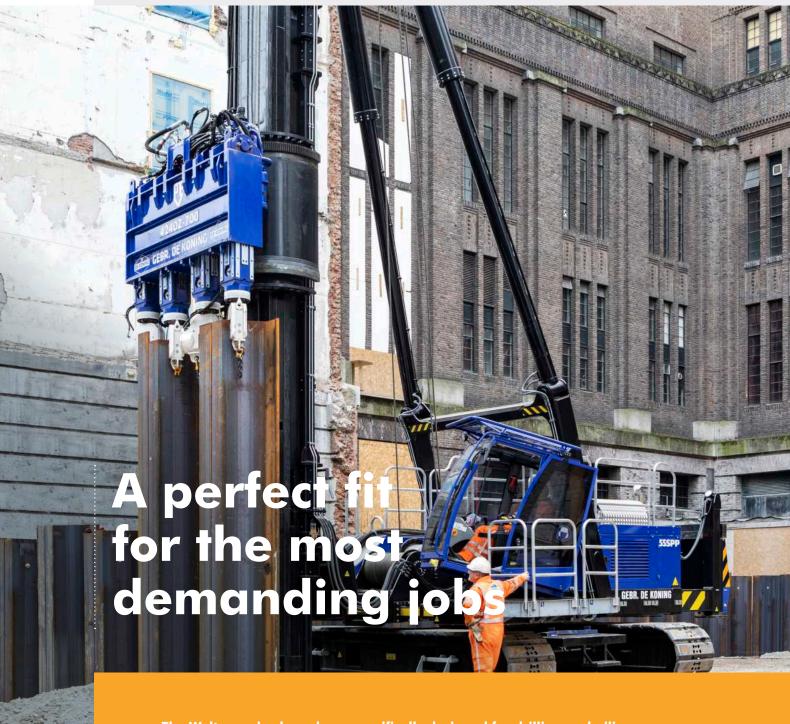
Our innovation strategy is based on 5 pillars.



#### **Woltman Piling & Drilling Rigs**

Our customers value the Woltman for its high production speed and ability to work on various construction sites due to its relatively low weight. A Woltman foundation rig is known for its favorable weight-performance ratio, intuitive operation, and intelligent yet simple design, making it a favorite of both operators and maintenance departments. These rigs can be supplied in various configurations and can even be customized to meet specific customer requirements.

Woltman specializes in manufacturing foundation machines and attachments and since 2016 Woltman has been part of Dieseko Group.



The Woltman rigs have been specifically designed for drilling and piling operations, making them stand out from other machines available in the market. The decades of experience in the foundation market have been thoroughly incorporated into the in-house development and design of these rigs, making them unique and highly efficient. The high efficiency of Woltman Piling & Drilling Rigs is achieved by its reliability and high standard materials and parts such as powerful engines and smart hydraulic systems.

# Excellent stability and high performance

Our customers value the Woltman for its stability, high production speed and ability to work on various construction sites due to its relatively low weight.

A Woltman foundation rig is known for its favorable weight-performance ratio, intuitive operation, and intelligent yet simple design, making it a favorite of both operators and maintenance departments.

#### High mobility increasing cost effectiveness

The compact size of the of the smaller range of Woltman Piling and Drilling rigs enables the machines to work in areas with limited access. Their excellent mobility enables our clients to minimize mobilization and demobilization as the compact rigs are erected and lowered in only minutes. The rigs are equipped with a self-erecting leader which reduces the time of assembly considerably.

"The rigs are designed in such a way that they can be easily operated and serviced in an efficient and safe way" The PDS-type rigs can be used onshore but also near-shore on a barge or pontoon. Woltman offers different models of which the smaller PDS-types are still easy to transport by a low-boy trailer. The largest PDS is designed more specifically to work permanently from a barge or ship for near-shore and harbor works. Excellent stability ensures suitability for every jobsite The Woltman rigs are designed with a wide undercarriage and low center of gravity which provides high stability and makes the piling rigs suitable for every jobsite.

#### High efficiency by reliability

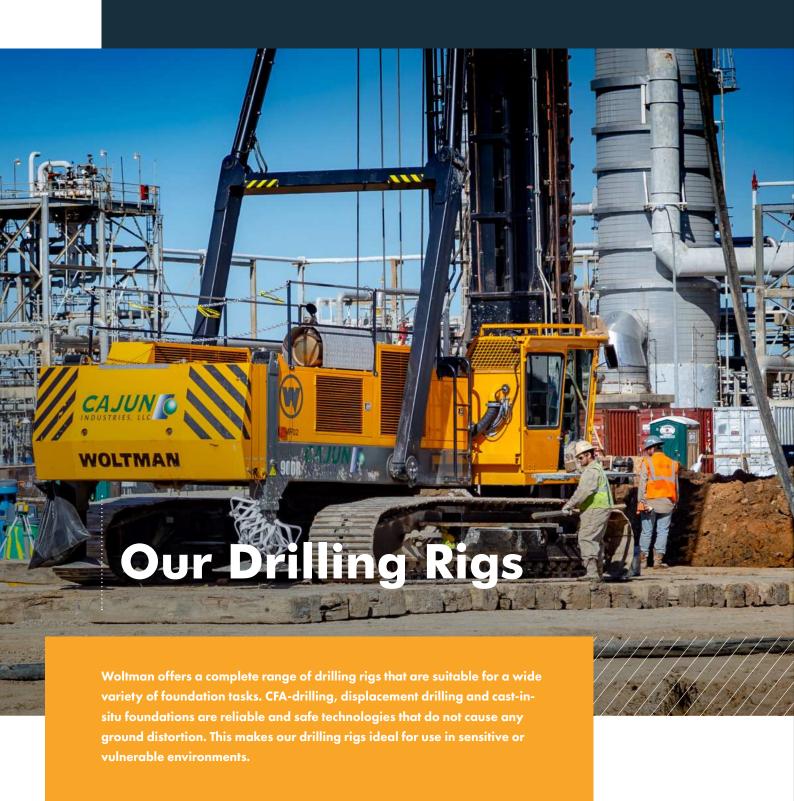
The high efficiency of Woltman piling rigs is achieved by the powerful engine and hydraulic system. Woltman only uses top quality parts for its rigs such as Caterpillar engines and Bosch Rexroth hydraulic pumps and parts.





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#### 6 reasons to choose a Woltman Rig

- Designed for the job
- High mobility increasing cost effectiveness
- Excellent stability ensures suitability for every jobsite
- High efficiency by reliability
- In house manufactured accessories
- Woltman's long experience and wide product range

#### Applications drilling and piling rigs

- Timber piles
- Steel caisson piles and beams
- Sheet piles
- Prefabricated concrete piles
- Cast-in-situ concrete piles
- CFA-drilling
- Vibro replacement drilling

#### **Features**

The Woltman drilling rigs come with a powerful engine that works in tandem with a special hydraulic system to power the rotary head directly. These rigs boast exceptional mobility and can be mobilized and erected in a very short amount of time. They are particularly suitable for use in urban areas and job sites that are difficult to access.

The Woltman drilling rigs can be equipped with rotary heads from 80 kNm up to several high torque rotary heads providing a maximum torque of 500 kNm (50 ton/meter) Our drilling rigs feature a pull-down system that adjusts to drill resistance, improving control of drilling operations.

As the Woltman drilling rigs are equipped with powerful high performance engines and high torque resistant leaders they are also perfect to use as multi-purpose rigs. They can also be equipped to perform several foundation and ground improvement applications e.g. vibrating, impact hammering, and sheetpile pressuarizing with our pressing machines.

" Woltman piling and drilling rigs are incredibly versatile due to their ability to be equipped with a wide range of accessories, that are manufactured in-house by Woltman These accessories include impact hammers, vibratory hammers, rotary heads, ring vibrators, vibroflots, resonators, pressing machines, power packs and much more. By manufacturing all accessories in-house, the ideal and most dependable configuration can be achieved for each job"



#### **Piling & Drilling Rigs**

Woltman Piling & Drilling Rigs is a specialist when it comes to foundation and ground improvement equipment.

**Pessing machine** 

### various rig attachments

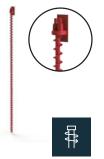
Double rotary drilling



**CFA** drilling



Liniair vibratory hammer



**Ring vibrator** 

Impact hammer





Resonator



Vibratory hammer





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#### Product range

## **Drilling Rigs**

Woltman Drilling Rigs rigs are specially designed for high torque drilling methods as displacement drilling and big diameter CFA.

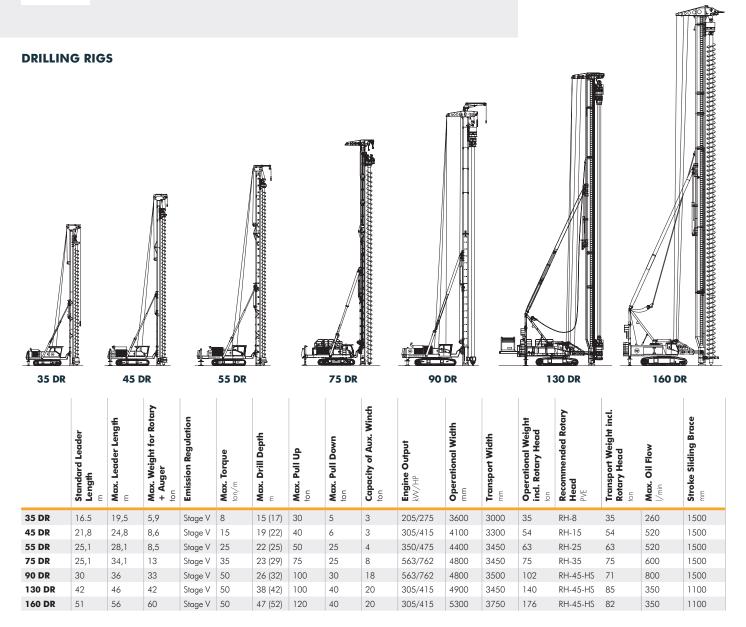
- No excavator or crawler crane is used as undercarriage which has made it possible to guarantee the highest possible stability and low centre point of gravity.
- All Woltman rigs have a solid and strong undercarriage which is hydraulically extendable and is fitted with wide track plates.
- The winches of the Drilling rigs are fully synchronized in pull-up and pull-down operation.
- Lots of accessories available to enable multipurpose operation.





#### **Drilling Rigs**

More information can be found on our website.

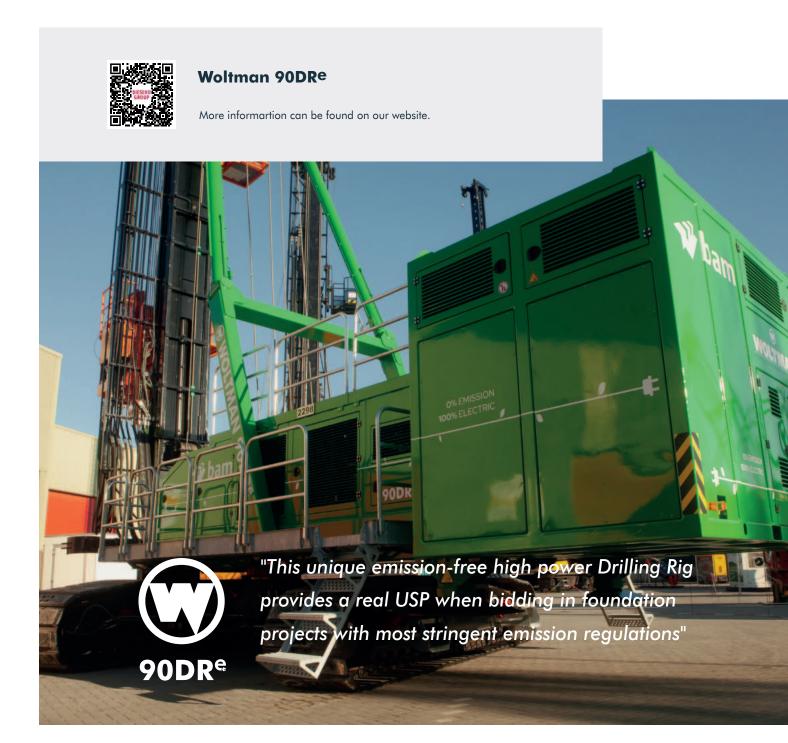




## ZERO EMISSION WOLTMAN 90DR<sup>e</sup>

The Woltman 90DRe is the first zero-emission Drilling Rig in its class for building sites with the most stringent emission regulations.

This drilling rig was developed after intensive market research and a unique starting point here is electrification based on capacity demand. The varying energy requirements have been optimized using two electric PM-motors, in combination with two battery units. As a result, the Woltman 90DRe is energy efficient and extremely powerful when needed.



Piling and drilling rigs

### Piling & PDS type rigs

#### Piling rigs

The purpose-built Woltman Piling Rigs are specially designed to drive piles.

- A thoughtful design, equipped with the most modern measurement tools and accessories
- The undercarriage guarantees the highest possible stability and a very low centre of gravity.
- The solid and strong undercarriage is hydraulically extendable and is fitted with wide track plates.
- The winches of the Woltman machines are synchronized in a sophisticated way to ensure the most efficient pile driving operation.

#### **PDS Piling Rigs**

Woltman offers heavy pile driving machines that can be used as a regular lifting crane as well. The unique design requires a lot less working space compared to conventional crawler cranes with a hanging leader. The range starts at 100 tons class up to 300 tons.

- All PDS rigs have a patented design which offers the perfect solution for projects in which pile driving and lifting work are combined. The PDS rigs can be used as a normal HD-crawler crane or as a pile driver with leader lengths up to 60 meters.
- With help of the outriggers that are mounted to the rear of the boom of the crane, bigger rake positions are achieved and less working space is required compared to traditional pile driving installations.
- The PDS machines can be used onshore but also offshore on a barge or pontoon.

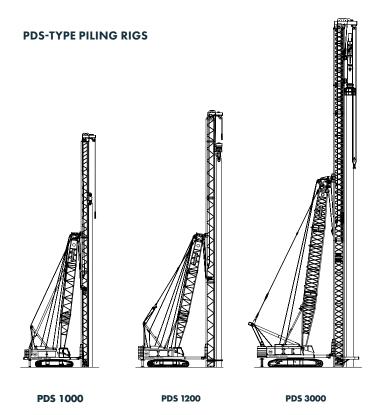




#### **Piling Rigs**

More information can be found on our website.





#### PILING AND DRILLING RIGS PILINGS RIGS & PDS TYPE RIGS

	Standard Leader Length m	Max. Leader Length	Max. Weight for Hammer + Pile	Max. Pile Length	Emission Regulation	<b>Hammer Winch</b> Ion	<b>Pile Winch</b> Ion	Capacity of Aux. Winch	Engine Output kW/HP	Operational Weight incl. Hammer ton	Recommended Impact Hammer PVE	<b>Transport Weight incl. Impact</b> <b>Hammer</b> ton	Max. Oil Flow  /min	Transport Weight excl. Hammer
30 PR-FF	16,5	19,5	10	13 (16)	Stage V	7	6	3	183/250	36	3NL(S)	36	260	30
40 PR-FF	21,8	24,8	13	17 (20)	Stage V	10	7	3	183/250	48	4NL	48	390	40
50 PR-FF	24,8	27,8	18,5	21 (24)	Stage V	14	10	4	183/250	62	5/7 NL	62	390	51

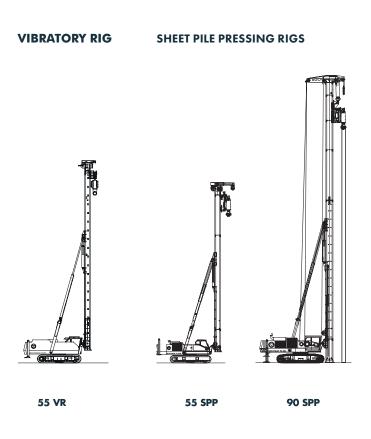
	Max. Pile & Hammer Weight ton	Max. Lifting Capacity at 4.2 m	Standard Boom length	<b>Standard Leader length</b> m	Emission Regulation	Capacity Main Winches	Capacity Auxilary Winch	Output Diesel Engine kW/HP	<b>Transport Width</b>	Transport Length	<b>Transport Height</b> mm	<b>Transport Weight</b> mm
PDS 1000	37	100	42	40	Stage V	15	6	305/415	3.500	14.625	3.500	78
PDS 1200	48	120	42	40	Stage V	15	7,5	305/415	4.110	15.900	3.500	71
PDS 3000	100	300	62	60	Stage V	20	15	350/475	4.820	12.500	3.700	98

<sup>\*)</sup> this machine can be transported in different configurations, detailed packing lists are available.



## Vibratory & pressing rigs



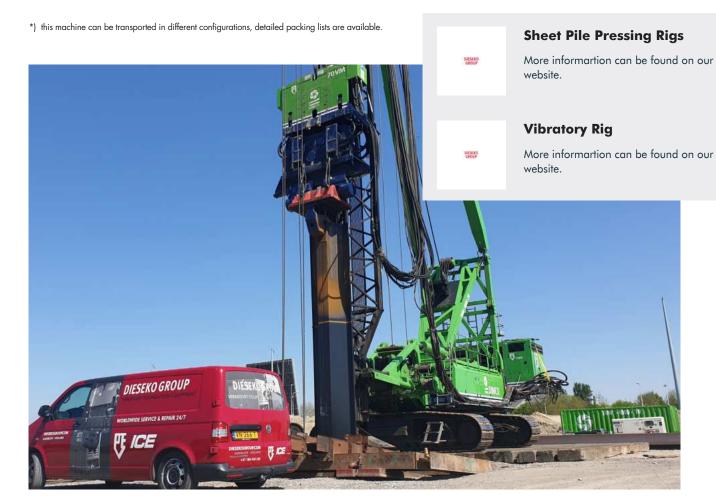


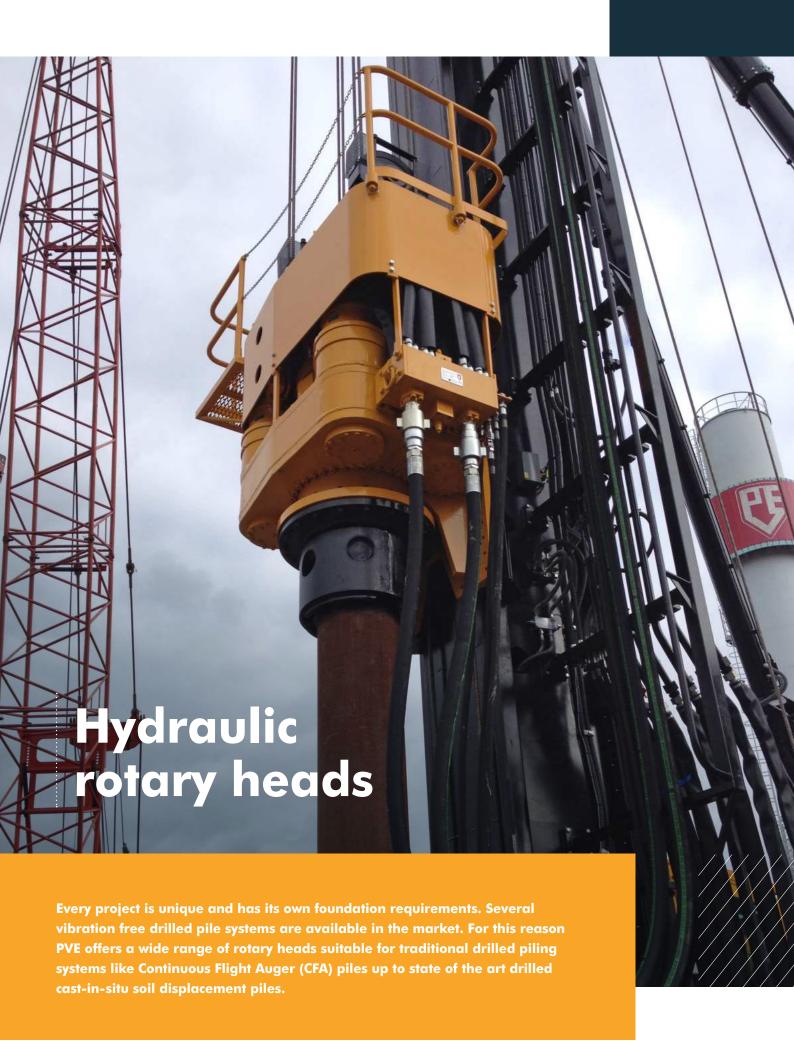


#### **PILING AND DRILLING RIGS VIBRATORY RIGS & SHEET PILE PRESSING RIGS**

	Standard Leader Length	Max. Weight Vibratory Hammer + Pile Ion	Emission Regulation	<b>Capacity Main Winches</b> Ion	Capacity Pull Down Winches	Capacity of Aux. Winch	Engine Output KW/HP	Operational Weight excl. Hammer	Recommended Vibratory Hammer PVE	Transport Weight incl. Vibratory Hammer ton
55 VR	25,4	15	Stage V	15	10	4	563/762	59	23VML	64

	<b>Standard Leader Length</b> m	Max. Leader Length	Max. Weight Pressing Machine + Sheet Piles ton	Emission Regulation	Capacity Main Winches	Capacity Pile Winches	Capacity of Aux. Winch	Engine Output W//HP	Operational Weight excl. Hammer	Recommended Pressing Machine PVE	Transport Weight ind. Pressing Machine	Max. TPressure Force	Max. Torque on Leader ton/m	<b>Мах. Oil Flow</b> //min	
55 SPP	20,75	24,75	15	Stage V	75	25	10	350/475	63	4240	65	240	25	520	
90 SPP	30,0	36,0	30	Stage V	100	30	10	563/762	92	4240	85	240	50	800	





## **Experience the advantage** of PVE rotary heads

#### **CFA Drilling**

Continuous Flight Auger (CFA) piling is a fast and sound proof piling system. An auger driven by the rotary head is drilled to the required pile tip depth while transporting soil to the work surface. After the required pile depth is reached concrete is pumped through the rotary head in the hollow shaft of the auger. During concreting the auger then is extracted and the drilled shaft is filled with concrete. PVE also supplies Woltman crawler mounted concrete pumps to support your CFA piling operations.

#### **Double Rotary drilling**

Double rotary drilling is actually a CFA pile where the CFA auger is separated from the soil by an outer casing. Both auger and outer caisson are driven by independent rotary heads in counter rotation. The two independent rotary drivers are coupled to each other to ensure simultaneous lowering and lifting of auger and casing. Double rotary drilling is often used for secant piling or contiguous piles for shoring purposes.



#### **Full displacement Drilling**

Drilling cast-in-situ soil displacement piles has the advantage of relatively high bearing capacities without soil coming to the surface. A drill shaft with a special pile nose pushes the soil sidewards into the surrounding layers. After reaching the required pile depth, the casing is filled with concrete and rebar. The drill shaft then is ready for extraction, leaving the drill nose behind and a smooth and strong reinforced pile is formed. The described drilling operation can also be performed while injecting grout through a nozzle in the drill shaft and pile nose.

#### **Benefits**

- Wide range of PVE rotary heads for every job
- PVE rotary heads are suitable for multiple piling
- High quality resulting in cost efficient pile drilling
- Designed to perform pile drilling close to adjacent
- Long pile lengths are possible with pile casing clamping system
- Safe CFA drilling with auger cleaner

#### **Rotary Heads**

GROUP

Efficient pile driving operations and high production rates.

#### Suitable cranes for drill & rotary head applications











crane

Multi purpose

PDS rig Excavator

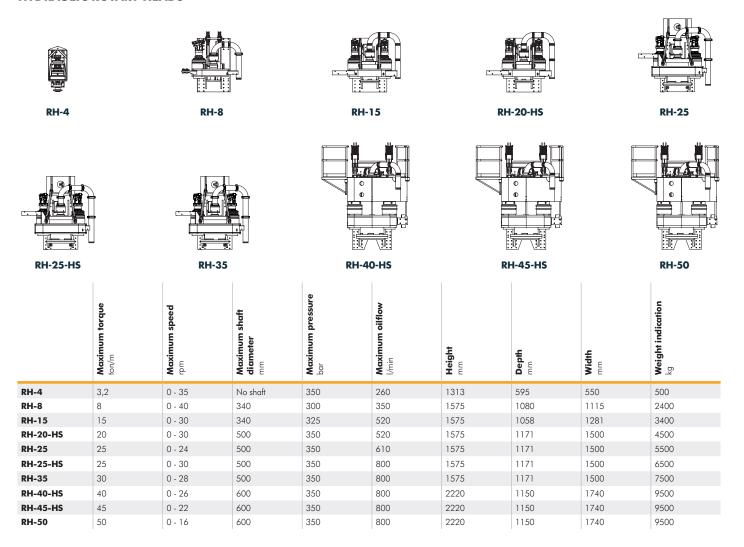
Piling and drilling rigs

## Rotary heads for drilling

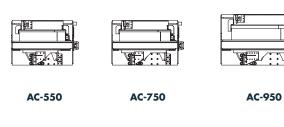
With a complete range of rotary heads PVE offers a solution for several drilled pile systems. From small compact rotary heads suitable for pre-drilling and CFA piles up to large high torque rotary heads for large diameter CFA piles and of course drilled soil displacement piles. In case your drilling rig needs more power to perform pile drilling, PVE manufactures and supplies power packs which are very suitable to power hydraulic rotary heads, when the power and hydraulic system of the drilling rig are not sufficient.

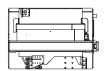


#### **HYDRAULIC ROTARY HEADS**



#### **AUGER CLEANERS**





AC-1150

	Maximom drill diameter mm	Required oil flow	Working pressure	Min. distance leader - center cleaner mm	<b>Length</b> mm	<b>Width</b> mm	<b>Width</b> mm	Weight indication kg
AC-550	550	100	200	500	1065	1215	900	1250
AC-750	750	100	200	600	1225	1300	900	1350
AC-950	950	100	200	750	1450	1550	1000	2000
AC-1150	1150	100	200	800	1600	1675	1200	2750

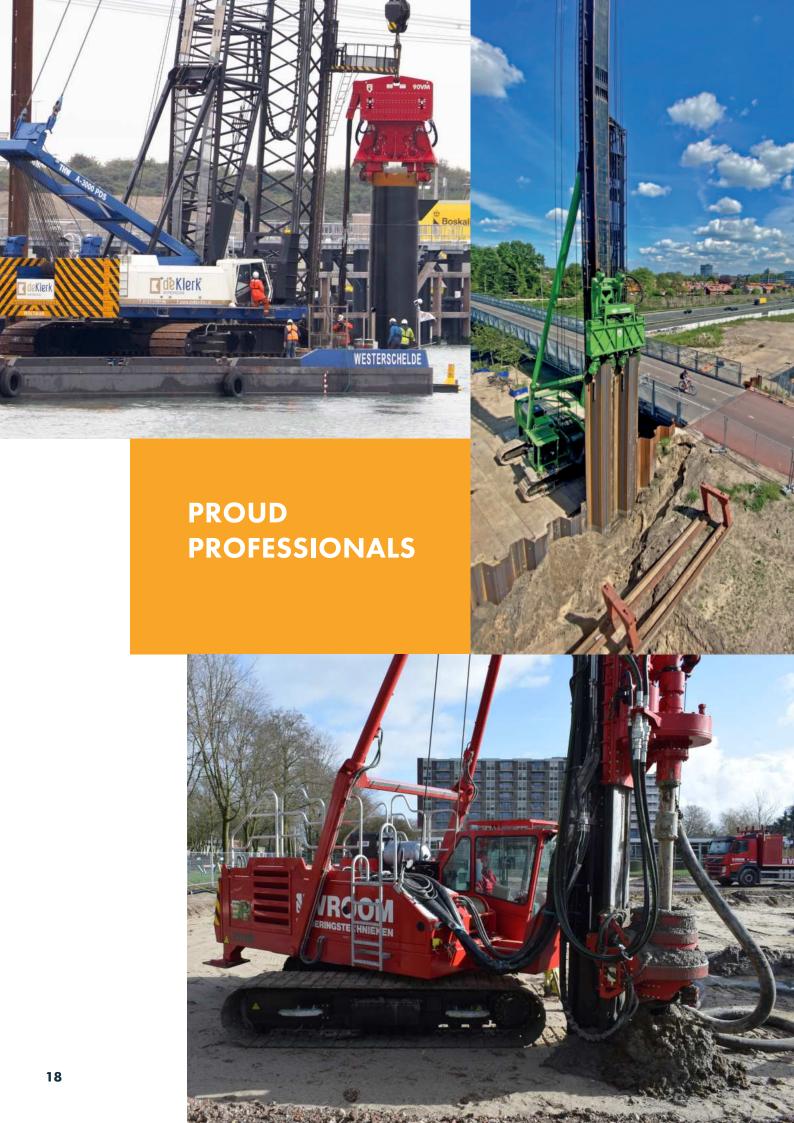


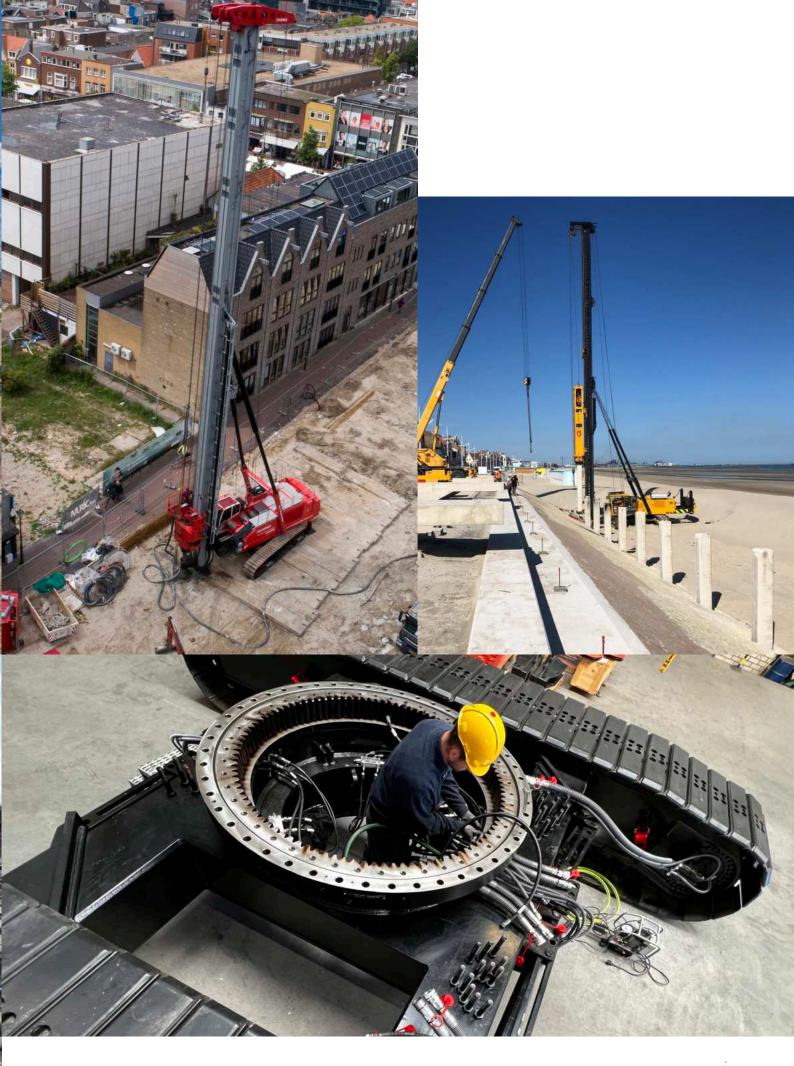
#### **Rotary Heads**

website.

More information can be found on our







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