

RAPID IMPACT AND DYNAMIC COMPACTION

Van den Heuvel RIC and RDC hammers compact the underground fast, homogeneously and with a very high accuracy and in a much faster way than before. Our hammers are powerful and deliver the best performance under all conditions.

In close consultation with the customer we provide the most suitable solution. We have our own engineering department, so customizing is always a possibility. To serve you all over the world, we have a skilled and experienced sales and service team.

COMPACTION EQUIPMENT

The equipment consists of a reinforced hammer, compaction foot, a special cradle and monoboom. The hammer is a powerful VDH hydraulic impact hammer. VDH is a leading manufacturer of foundation equipment. The drop weight that can be used depends on the required soil compaction grid and the necessary impact depth. The hammer has a strengthened frame with U-guides for the cradle.

A distinguishing feature of the compaction equipment is the special designed cradle, to optimize the working power of the compaction hammer. With this cradle, the hammer has a much greater stability and can achieve much more power compared to a connection at the back of the hammer. The cradle and the hammer are connected to the base machine with a special monoboom, designed by our engineers. The compaction foot can be produced in any desired diameter.

Our units have been supplied with drop weights of 9, 12 and 16 tonnes. Depending on the size of the machine used, the soil type and moisture content, the treatment is effective in the top layers 3 to 6 meters depth, though improvements up to 10 meters have also been reached.

Over the years we have produced a lot of soil compaction machines and we are very experienced in this area. Our machines have proven reliability and functionality for a long time.

COMPACTION PROCESS

In the hammer a drop weight is hydraulically lifted to a predetermined height. Once the drop weight is lifted up to the maximum height, the weight will be dropped using hydraulically powered acceleration. The drop weight hits the cushion and drive cab. The compaction foot remains in contact with the ground. Which drop weight can be used depends on the required soil compaction grid and the necessary impact depth.

The entire process of lifting and dropping takes place with a frequency of 40 up to 100 times a minute, depending on the hammer. The compaction can be optimized using an advanced GPS- and logging system. During the compaction process, the settlement, the settlement per blow and the applied energy are some parameters that can be logged.

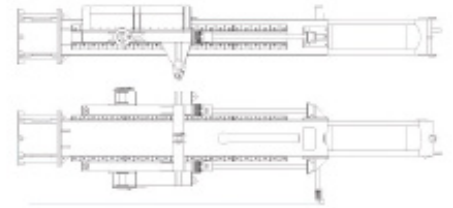
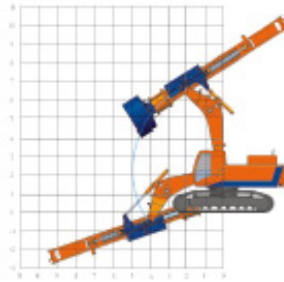
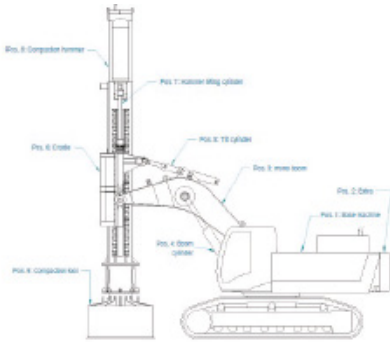


BENEFITS OF OUR RIC AND RDC

- Proven reliability and functionality
- Rugged design drawn and calculated by our own engineering department
- Much more stability and working strength thanks to cradle
- Powerful VDH hydraulic impact hammers
- Excellent performance under all circumstances
- Compliant with all safety requirements applicable
- Compaction equipment delivered with CE-certificate
- Onsite service all over the world

RAPID IMPACT AND DYNAMIC COMPACTION

Van den Heuvel is a specialized construction and repair company with extensive experience and knowledge in the field of civil engineering, handling & recycling and also the construction sector. Our engineers develop a thoroughly design and our experienced bankers and certified welders ensure a high quality end product. Our RIC and RDC machines have been successfully used to harden gravel, sands, silts and industrial waste fills.



	VDH-RDC-9	VDH-RDC-12	VDH-RDC-17
Machine type	50-55 tons	65-70 tons	85-90 tons
Hammer type	VDH-9-1500	VDH-12-1200	VDH-17-1200
Drop height	50-1500 mm	50-1200 mm	50-1200 mm
Blows p. min.	30-100	40-100	40-100
Max. energy	132 kNm	141 kNm	200 kNm
Drop weight	9000 kg	12000 kg	16000 kg
Total weight	16000 kg	20500 kg	25000 kg
Oil flow	328 L/min	795 L/min	795 L/min
Working pressure	260 bar	157 bar	220 bar
Theoretical power needed	142 kW	208 kW	292 kW
Drive cab type	880 mm	1080 mm	1080 mm
Compaction foot	1600 mm	1600/2000 mm	1600/2000/2400 mm

