



## Vibrocorer

Superb geological sampling device

- ➔ variable coring speed, frequency and depth (2 - 6 m)
- ➔ maximum vibrating force 3 „tons“ (30 kN)
- ➔ operation depth up to 1000 m
- ➔ realtime measure of penetration (USB output)
- ➔ reliable operation at minimum maintenance
- ➔ unique folding and dismantling

## Vibrocorer VKG-6

The vibrocorers VKG-6/3 (designer Ing. Wolfgang Schmidt) have been successfully operated for more than 30 years now and worked at fullest satisfaction. As for reference see the one operated at the "Institut für Ostseeforschung Warnemünde", Germany. The federal agency "Bundesamt für Seeschifffahrt und Hydrographie" Hamburg uses a VKG-6 for more than 15 years now, whereas the "Bundesanstalt für Geowissenschaften und Rohstoffe" Hannover operates it since September 2004.

The VKG is an electrically driven vibrocorer system, vibrating at around 30 Hz, coring bottom samples up to 200m water depth with

- optimum cores in fine, middle and grain sands and any mixtures thereof
- good results in peats and sands with silty-argillaceous and/or gravel components
- limited to loose sediments in principle, but smaller stiff stratum are penetrated too

Standard is the VKG - 6, i.e. a 6 m length of cores. The maximum inner diameter is 102 mm (barely or by using a plastic

hose, with PVC-liner inserted 96 mm, transparent ones are available too). System may be switched to 3 m core barrel length, further easing all handling and operating procedures.

The unique design of the VKG-6 allows fast and eased assembly and take apart runs, by parts handled manually. This is a USP feature within this class of coring systems.

The perfected design and a high quality manufacturing guarantees a superb reliability at a minimum of maintenance works. The constant (and relative) high penetration speed causes cores of very good qualities as well as a good filling of the core barrel.

Variable uploads optimise the VKG penetration force/ speed for differing sediments. An unlimited runtime of the vibrator unit gives efficient operation with up to twenty cores/ sites per day at advantageous conditions and routine based works.



## Technical Data/Dimensions

	VKG-6	VKG-3
Height	7500 mm	4700 mm
Basement diameter	4600 mm	2700 mm
Gross weight (exc. uploads)	750 kg	
Gross weight (full uploads)	1000 kg	
Core barrel diameter (inside)	102/ 96 mm (liner)	
Core barrel diameter (outside)	108 mm	
Core net length	6000 mm	3000 mm
Hoisting wire rope diam.	12 mm	
Power supply (threephase AC)	400 V, 4 kVA	
Frequency	50 Hz	
Vibrating force	30 kN	
Vibrating frequency	28 Hz	
Starting/ steady current	50/ 8 A	
Max. working deepness	200 m	
Corrosions protection	hot zined/ INOX steel	
Transport	in dismantled state	

## VKG-3

The VKG-3 is the smaller version. Therefore the overall handling is eased, esp. the core recovery is fastened, what has been valuable at the exploration of gravel sites in the western Baltic Sea.

manufactured by **Wissenschaftliche Geräte - Dr. Thomas Schmidt**