

400 Series Vibroflots - BD 400 & BD 500



Vibroflot Details

The BD 400 & 500 vibroflots are unique to Pennine and purposefully designed for use in deep vibro compaction projects.

The 400 series systems have primarily been utilised in the Middle East, where there has been requirements for deep sand compaction for ports, airports and other large civil engineering applications.

Under these circumstances there is no need for the addition of granular material as the saturated sands collapse into the hole formed by the penetration and withdrawal of the vibroflots, compacting and densifying the ground and improving bearing capacity in the process.

The BD 500 vibroflot is Pennine's largest vibroflot to date, specifically built to maximise treatment diameters and minimise programme times and cost.

Please note that all specifications listed are typical values and may change according to requirements or design improvements.

BD 400 Specifications

Diameter	400 mm
Centrifugal force	310 kN
(maximum)	426 kN
Frequency	30 Hz
(maximum)	35 Hz
Power	215 kW
(maximum)	254 kW
Amplitude at tip	17 mm
Weight of vibroflot	4,400 kg
(for 11.5m treatment)	
Weight of extension tubes	850 kg
(per 5m)	
Hydraulic flow	450 lpm
(maximum)	525 lpm
Hydraulic pressure	290 bar
(maximum)	350 bar

BD 500 Specifications

Diameter	500 mm
Centrifugal force	314 kN
(maximum)	397 kN
Frequency	20 Hz
(maximum)	22.5 Hz
Power	215 kW
(maximum)	240 kW
Amplitude at tip	45 mm
Weight of vibroflot	5,500 kg
(for 11.5m treatment)	
Weight of extension tubes	3,350 kg
(per 5m)	
Hydraulic flow	426 lpm
(maximum)	480 lpm
Hydraulic pressure	300 bar
(maximum)	325 bar