

150 kN Modular Penetrometer Pusher



The requirement to carry out CPT(U) soundings in areas with limited access, restricted head clearance or simply confined working space is becoming more and more common.

For especially this purpose, Geomil designed the MPP 150© a small but powerful twin ram 150 kN portable penetrometer system.

In cases where it cannot be moved in position on its wheel set, the modular design allows for all components to be hand carried with the weight of the heaviest items - the hydraulic cylinders - less than 38 kg or 84 lbs.

With a building height (w/o handles attached) of only 1 100 mm and a free stroke of 550 mm, the pusher is still suitable for 1 m tubes when the GeoMil push-/pull clamp 3655 is used.

When soil anchoring becomes necessary, the GeoMil hydraulic anchoring device "Hygand" can be applied. For locking the MPP 150 to concrete floors we recommend Dywidag Gewi® soil nails. Of course the unit can also be placed and locked on any other firm and solid base and reaction force created by ballast weights.

The separate power pack provides a wheel-set and strong lifting bars. It can be connected to the pusher with long hoses (up to 12 m or 40 ft) provided with leakage free flat couplings.

Hydraulic Penetrometer

- Two vertical hydraulic cylinders, (Stroke = 550 mm)
- Maximum push/pull force: 150/220 kN
- Max. push/pull unloaded speed: 90/130 mm/s
- Performance speed: 20 mm/s calibrated for CPT
- Modular and portable: All components detachable, cylinders and push/pull bridge with handles
- Detachable wheel-set for easy transport when assembled
- Total weight: approx. 204 kg
- Height (w/o handles attached): 1 100 mm
- Max. height (extended cylinders): 1 650 mm
- Two loose anchoring beams with attachments for 2 screw anchors each
- Hydraulic control unit (complete with connections)
- Set of flexible hydraulic hoses for connecting the penetrometer to the valve control unit

Hydraulic Power-pack

- Honda 1-cylinder, 4-stroke gasoline engine of 9.6 kW @ 3 600 RPM
- 6.5 litres fuel tank
- Electric starter and battery 12 V/30 Ah
- Engine mounted on 4 shock-absorbing supports
- Hydraulic axial piston pump flanged to the motor
- Hydraulic tank of 65 litres volume; filter and flat-face quick-couplings

