



●● HS34.145

In situ Vane Shear Apparatus

Known, as Norwegian Vane Borer, this is simple and rugged in design and is meant for penetration boring. It can be used without casing down to 30 meters depth.

The lower part of the apparatus is forced down, with the vane withdrawn into a protection shoe. At the desired depth the vane is unlocked and pushed into the undisturbed soil and rotated at a constant rate of strain of $6^\circ/\text{min}$ or 0.1° per second.

The maximum torque is recorded on the torque meter.

The equipment comprises the following :-

- 1 Torque applicator assembly, capacity 600 kg cm, complete with a metal case.
- 2 Vane with vane rod 37.5 mm dia x 75 mm high.
- 3 vane with rod 50mm dia x 100 mm high.
- 4 Vane protection shoe assembly with sleeve.
- 5 Extension rods 0.5 meter long 10 Nos.
- 6 Extension rods, 1 meter long 25 Nos.
- 7 Extension rods, one each 7.5 cm, 15 cm, 25 cm & 40 cm long.
- 8 Extension tubes, 1 meter long 25 Nos.
- 9 Extension tubes, ½ meter long 10 Nos.
- 10 Set of tools 1 set.



HS34.145

Spares

- 1 37.5 mm dia x 75 mm vane with vane rod.
- 2 50 mm dia x 100mm vane with vane rod
- 3 Extension tube 1 meter long set of 5.
- 4 Extension tube ½ meter long set of 5
- 5 Extension rod ½ meter long set of 5.

ACCESSORIES:

HS34.145.1 Vane Protecting shoe with Vane Assembly 65 mm dia x 130 mm.

HS34.145.2 75 mm x 150 mm vane with rod.

HS34.145 150 mm Hand Auger for removal of surface soil, with handle and a pair of 1 meter handle and a pair of 1 meter long extension rods.

HS34.145.4 150 mm dia steel tube, 1.5 meter long, for casing through surface soil.

HS34.145.5 Ball Cone Clamp

HS34.145.5 EQUIPMENT FOR PUSHING & WITH DRAWAL OF VANE BORER

A sturdy device, the ball cone clamp is used for applying force to extension tube for penetration as well as extraction.

The unit consists of two rows of hardened steel balls in a heavy duty housing. On the application of load these balls are pressed against the drill rod by a conical ring giving a firm grip.

HS34.145.6 Steel Anchor frame with two screw type reaction anchors, complete with handle and fixture.

HS34.145.7 Rack Jack 5,000 kg. Capacity (manually operated) for use with HS34.145.5 and HS34.145.6. Lead 500 mm approximately. This is useful for applying a static load for penetration and extraction of rods.

Note : Steel cases, four required for packing complete kit, can be supplied on order.