The SEAS Piston Coring System is a robust multi-purpose coring tool that can be configured for Piston Coring or gravity / drop coring in water depths to 7000m and core samples up to 24m in length.

The SEAS Piston Coring System can be easily mobilized by road or sea freight and can be configured on-site for different coring conditions. The weight package can include up to ten 250kg weights to cater for varying seafloor conditions and core lengths. The core barrels include re-useable outer steel barrels and matching PVC or polycarbonate core liners to facilitate easy handling of core samples. For short cores, a single-use 3m aluminium barrel can also be used.

In addition to the main core a 1.5m gravity corer can also be attached to the trigger weight. This can provide a good sample of the uppermost sediments which are often disturbed in long piston or gravity cores.
Specifications

Depth Rating 7000 m
Core Length Up to 24 m

Weight Package:
  Material: Galvanized Steel.
  Weight Stand Dimensions: OD: 560mm  Stem: 125mm square section, Height: 1500mm
  Weight 150kg
  Weight in water 130kg

Weights:
  Material Galvanized Steel and Lead
  Dimensions Diameter: 560mm  Height: 100mm
  Weight 258kg each.

Piston (Optional): SEAS 3-piece stainless steel piston with brass shear-pin.
Non-Return Valve: 101.6mm (4") wafer check valve inserted for gravity / drop coring
Outer Core Barrels: Up to eight x Boart Longyear 3m steel outer core tubes.
  OD: 117.5mm, ID: 103.2mm, Weight: 60kg each
  Outer barrel section screw together with PHD thread.
Core Barrel Liners: Polycarbonate: OD: 100mm, ID: 94mm
  PVC: OD: 101.6mm, ID: 94mm. SEAS custom PVC liner sections screw together
Core Cutter / Retainer: Screw-on stainless steel cutter with stainless steel finger core retainer or,
  SEAS proprietary total-close core shoe assembly (for long piston cores)
Trigger Mechanism: Adjustable clamp to secure to lift cable for different core lengths.
  Hydrostatic safety pin release mechanism to prevent tripping during deployment through splash-zone.

Trigger Weight Gravity Corer:
  Weight Stem: Diameter: 310mm, Height: 650mm
  Weights: Diameter: 310mm, Height: 55mm, Weight: 27kg, Material: Galvanized Steel and Lead
  Core Barrel: Polycarbonate, PVC or Aluminium: OD: 100mm, ID: 94mm Length: 1.5m.
  Core Cutter: Stainless Steel with stainless steel finger core retainer.

Accelerometer (Optional) SENS multi axis accelerometer in Titanium housing.