

## BOX CORE



**APPLICATION:** Box cores are deployed from manned submersibles and are used for retrieving quantitative samples from unconsolidated sediments. This method of collection has the capability to preserve sediment and organism spatial distribution.

**DESCRIPTION:** The sample box of the core is 15 cm x 15 cm and can be subdivided into four subcores (3.5 cm squares). Dependent on the type of substrate, the box core can penetrate up to 30 cm of sediment. The box core is inserted into the sediment and a  $\frac{3}{4}$  turn of the "T" shaped handle activates moveable doors, which slide closed on the bottom via a series of pulleys and cables. The doors overlap on the bottom and a flapper valve engages over vents on the top (designed to let water escape during insertion) to effectively seal the sample within the box. The box core lid is easily removed via four wing nuts to allow access to the sediment sample on the surface. The completely assembled box core weighs 12 kg (25 lbs.) in air.