

CORE SPLITTING

SPLIT CORE READY FOR IMAGE ANALYSIS AND AUTOMATED NON-DESTRUCTIVE TESTING

HIGH-QUALITY SPLIT CORE

Core splitting is a standard operation, generally performed with non-standard equipment.

The quality of the split core affects subsequent image data, and other measurements made on the split core surface.

The Geotek core splitter is designed to enable fine adjustments to be made to produce the best possible split core surfaces, including reproducible thicknesses.

The splitter, with its own self-contained "wet tray", can be provided on its own and mounted on any suitable bench-top.

It can also be supplied as part of a suite of equipment, including non-destructive geophysical testing, core splitting and subsampling, all furnished in a custom 20 ft contained laboratory.

ALL PLASTIC LINERS CUT

The core splitter incorporates two cutting mechanisms (vibratory cutters and hooked slitting blades) for plastic liners, that are used separately or in tandem depending on the thickness and type of core liner.



High quality split core from a Geotek Core Splitter



Fully adjustable and controlled core splitting

Thin liners, up to 3 mm in wall thickness, are cut with hooked blades alone.

Thicker liners are cut using both vibratory cutters and hooked blades simultaneously. Vibratory cutters create a groove in the liner, without penetrating through to the core, leaving a thin sliver of plastic that is then cleanly

WIRE CREATES CLEAN SURFACE

Following the blade or blade/cutter combination, a thin stainless steel wire cleanly splits the sediment. The wire is easily removed if obstructions in the core are encountered.

MANUAL OPERATION RETAINS FEEL

The cutting arch, containing the blades, cutters, and wire, is moved along the core with a large manual hand-wheel.

This manual motion of the splitting mechanism allows the operator to feel obstructions in the core (concretions, drop-stones, shells, woody material) and stop operation, rather than dragging them through the sediment and ruining the core.

The splitting operation is controlled but rapid, taking less than 2 minutes to set up and split each 1 or 1.5 m core section.

IDEAL FOR FURTHER ANALYSIS

The core from the Geotek core splitter is ideal for high-resolution imaging with the Geotek linescan camera system or other automated analyses, such as colour spectrophotometry, X-ray fluorescence, and high-resolution magnetic susceptibility with the Geotek MSCL-XZ or -XYZ.

All these measurements benefit from having the flattest surface possible.



Reproducable split core thickness and surfaces



Safe and easy to use operation

SPECIFICATIONS

CORE ACCEPTED
 Length: up to 155 cm;
 Diameter: 5-15 cm

• LINER CUTTING MECHANISM

Standard hooked utility knife blades with the option of electric vibratory cutters (cast cutters) for thick (> 3 mm) liner

SEDIMENT CORE SPLITTING MECHANISM

Thin wire

DIMENSIONS

Standard system L x W x H (cm): 255 x 70 x 45; Weight: approx. 100 kg

