

Core splitting

Polycarbonate liners are grooved using a pair of highly adjustable medical cast saws mounted on a frame through which a core cradle slides on rollers. The core is placed in the cradle with attention to any directional and identifying marks (i.e., to maintain orientation and to be certain the core name is on both halves, respectively).

To avoid introducing polycarbonate shreds into the sediment and losing sediment prematurely, the saws are set to stop short of cutting through the liner. The remainder of the cut is made with utility knives. The grooved core is placed on the Schnurrenberger-Hillesheim device (Wagner modification) and repeated firm swipes with the utility knife (running over the same area repeatedly is safer and more effective than catching on one area and pulling hard against it) cut the liner through. Endcaps are cut through as well, and the core is split with high-test fishing line (if sediments are consolidated and firm) or a pair of guillotines placed back to back.

Cores not in polycarbonate liners (most commonly Livingstone extruded cores) can be cut with a filet knife after first making a slit in the plastic wrap with a utility knife. Guillotines may work on the less consolidated of the extruded cores.

Cores are split into working (W) and archive (A) halves and stored under refrigeration in D-tubes. Endcaps (black for W, red for A) should be taped on with one wrap of electrical tape to avoid loss in core shuffling.

Safety:

Ear protection with cast saws
Coveralls for mud
Sharp blades – cutting safety