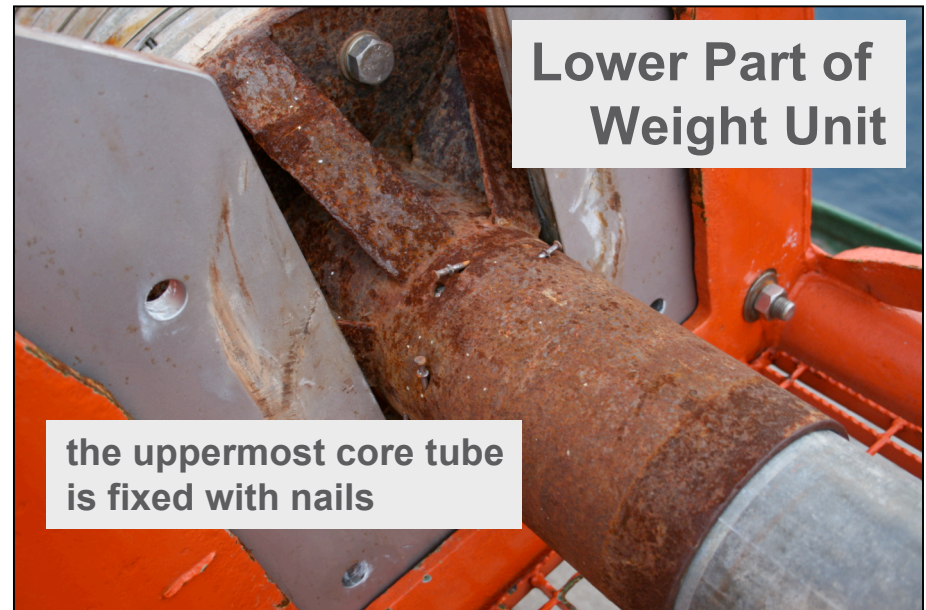
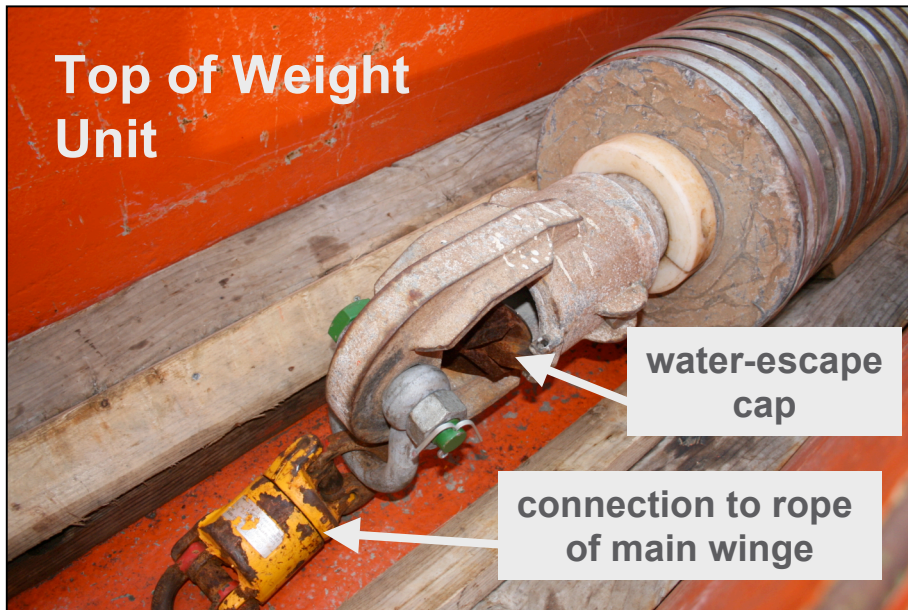


## Gravity Corer (18 m)



- Steel-Core Sections
  - one 3-m tube
  - three 5-m tubes
- Lead Weight Unit (1.5 Tons)





**5-m Core Tube**



**Core-Tube Connection  
via a Steel Sleeve**



**Steel Sleeve**



**Steel Sleeve with fixed  
Core Tubes (Nails)**



## Liner Treatment

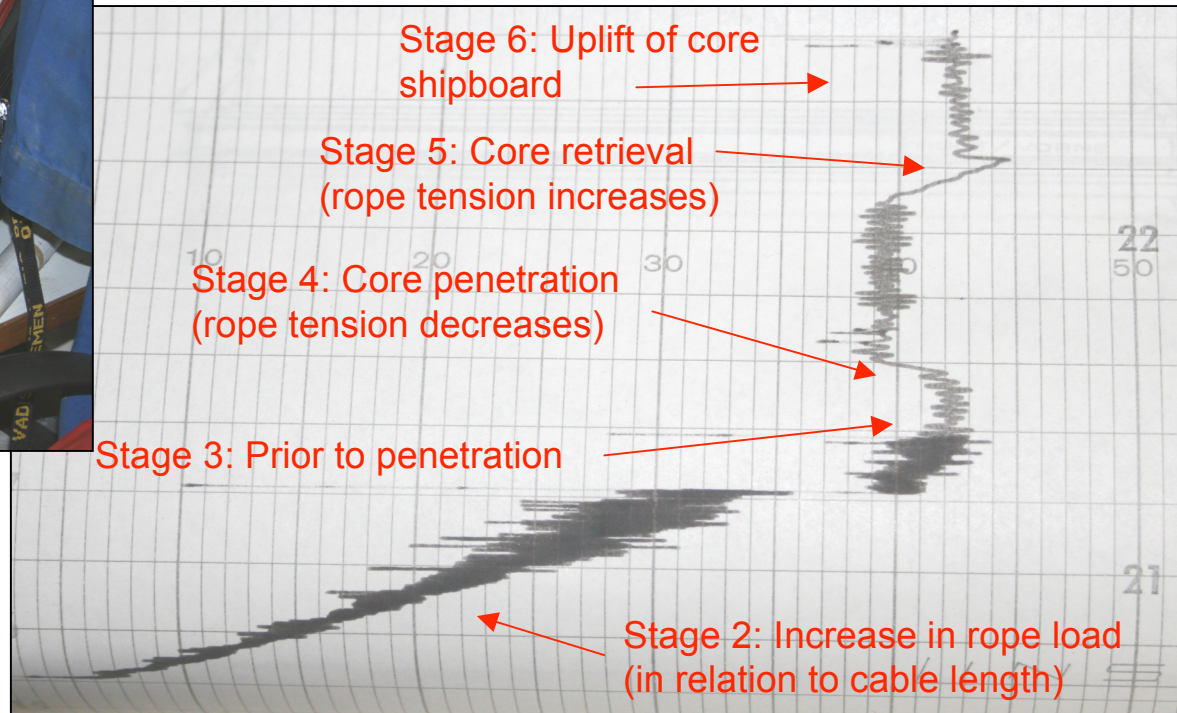
- Acetone
- Cleaning of Liner
- Taping of Liner Pair with 10 cm wide Scotch Tape
- Insertion of Liner into Core Tubes (not shown)



**Fixation of Core Bit with Core Catcher**



# Monitoring Gravity Coring



**Stage 1:** Lowering of core at 0.5 m/sec down to 100 m below sea surface

**Stage 2:** Lowering of core at 1.0 m/sec (1.8 m/sec, if possible) to 50 m above sea ground (according to rope length + core length).

**Stage 3:** Depending on sediment consistence, lowering of core at 0.5 - 1.0 cm/sec until sediment penetration. Hard and stiff sediment needs faster penetration.

**Stage 4:** Core penetration indicated by a sudden decrease in rope load. Winge has to be stopped after rope has been lowered further on, according to core length.

For example, a 20 m core at 0.5 m/sec has to be stopped 40 seconds after penetration.

**Stage 5:** After 30 sec, lift of core at 0.2 m/sec. Increased core weight (sediment fill) and friction of stuck core in sediment leads to strong increase in rope load. Slow uplift at least at core length.

**Stage 6:** After rope load shows stable values (at least after heave of respective core length), the core is out of the sediment (no more friction). Lift at 1.0 m/sec (1.8 m/sec, if possible).