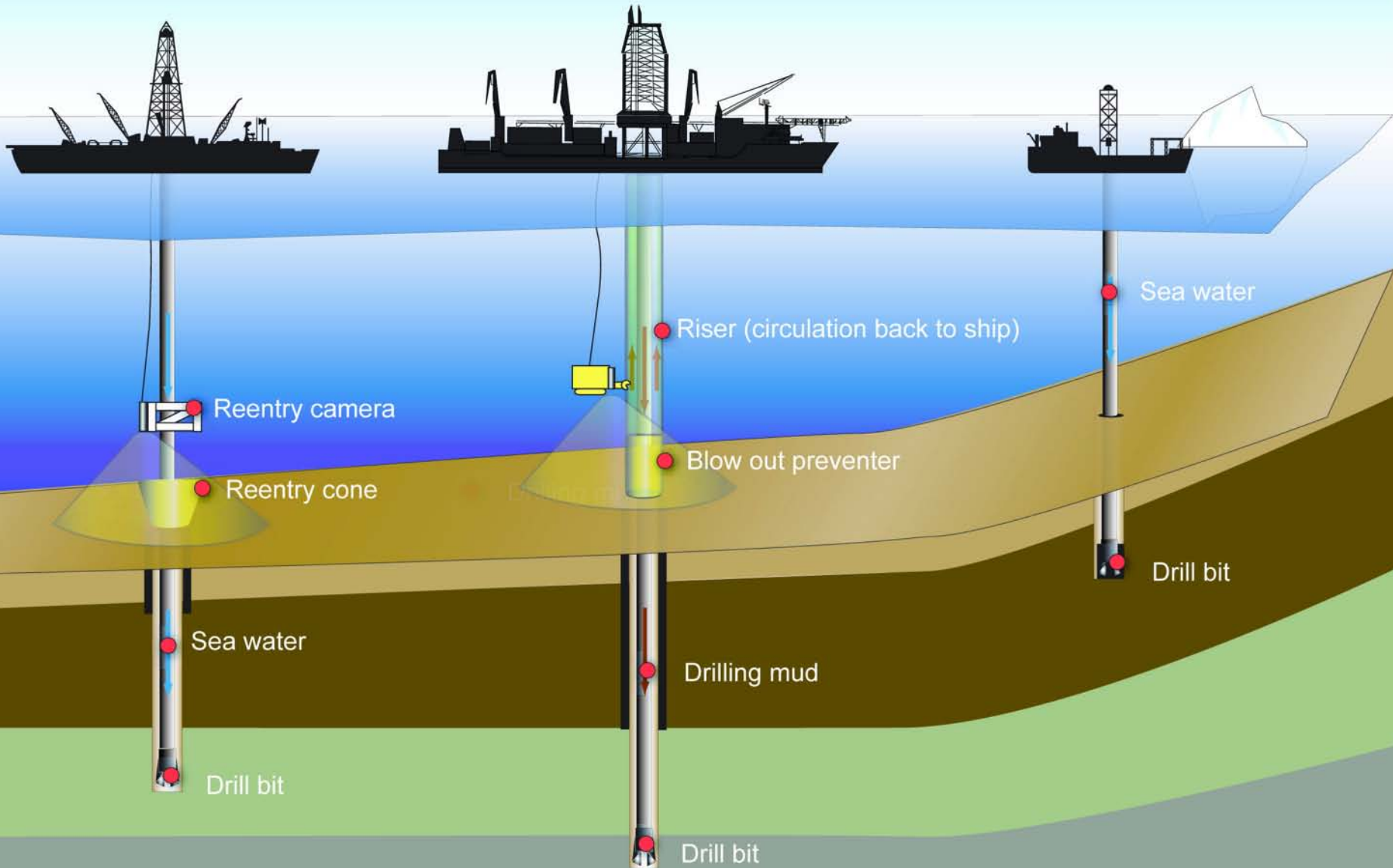


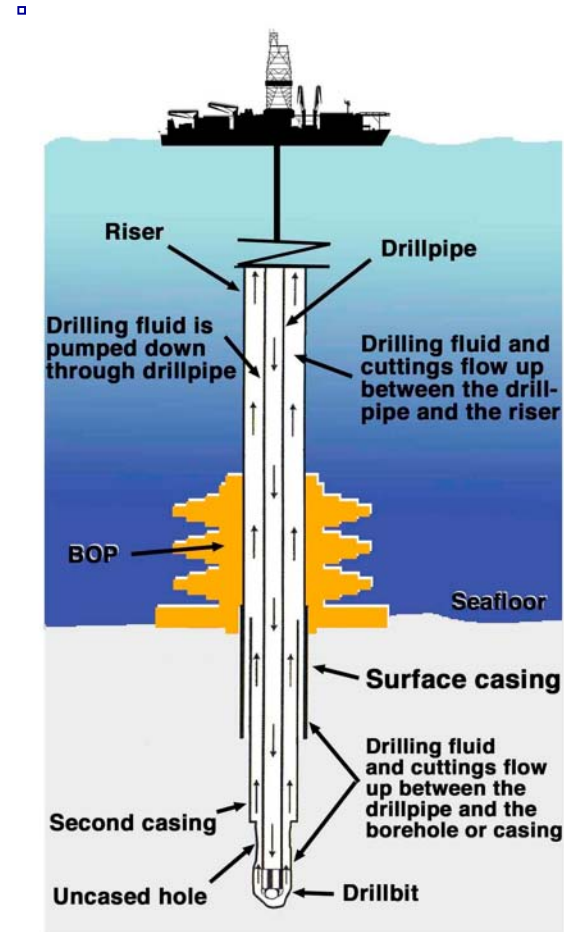
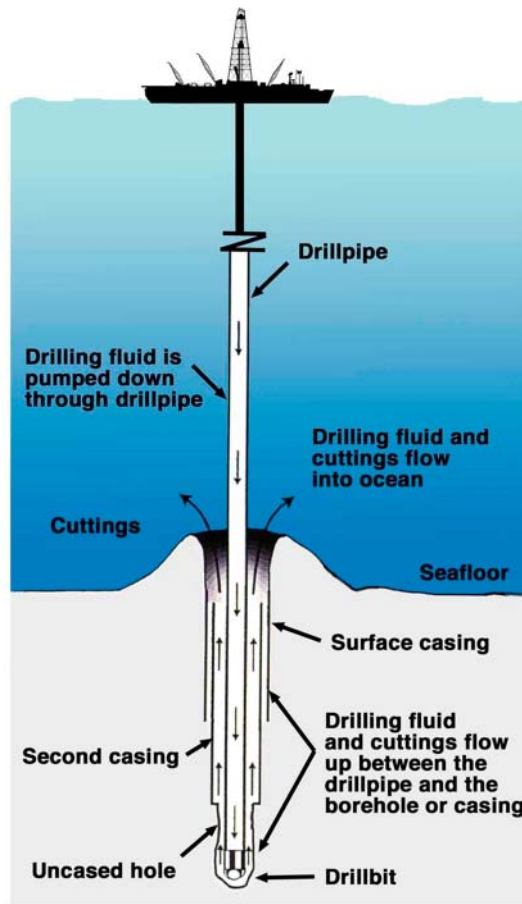
Riserless Drilling

Riser Drilling

Mission-Specific



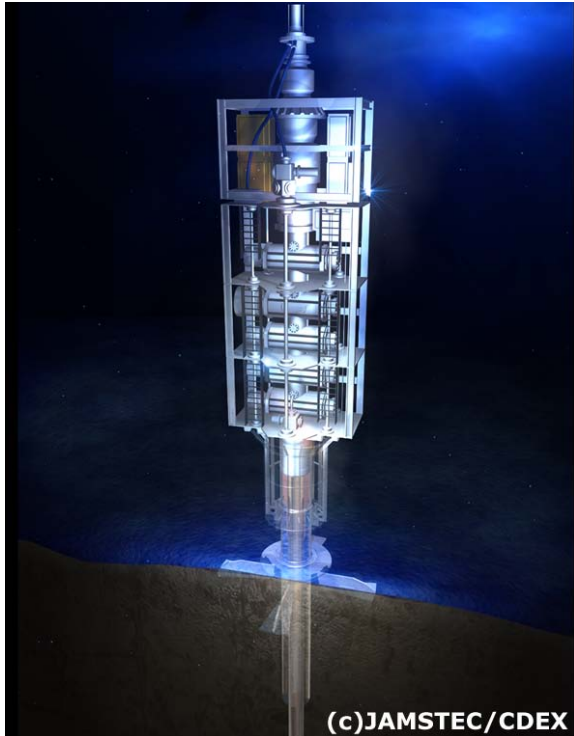
THE 'RISER' DRILLING SYSTEM





<https://www.youtube.com/watch?v=yuu0QcnOVbo>

<http://www.jamstec.go.jp/chikyu/>



CORE ON DECK

http://www.youtube.com/watch?feature=player_embedded&v=wC9IDPvvze0

http://www.iodp.org/images/stories/swf/jamstec_english_1_deepsea_drilling.swf

http://www.iodp.org/images/stories/swf/jamstec_english_2_rotary_drilling.swf

http://www.iodp.org/images/stories/swf/jamstec_english_3_riser_system.swf

http://www.iodp.org/images/stories/swf/4core_procedure_eng.swf

<http://www.iodp.org/core-analyzing-process/2/>

JOIDES Resolution Riserless Drillship

Length	143 m
Width	21 m
Height of the rig	61.5 m
Crew	111 people
Drilling pipes	9 km

Deepest hole penetrated:

2,111 m Leg 148, Hole 504B, E Pacific Ocean

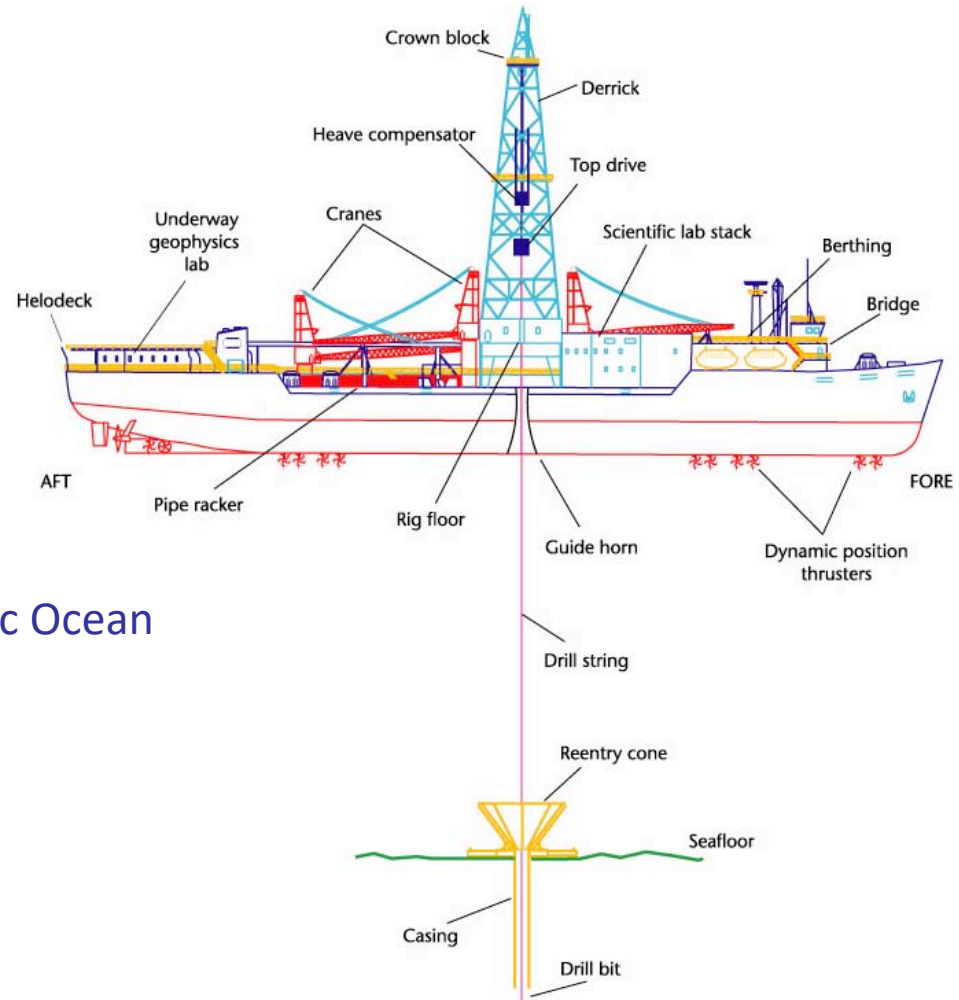
Shallowest water depth:

37.51 m, Leg 143, NW Pacific Ocean

Greatest water depth:

5,980 m, Leg 129, W Pacific Ocean

Minimum water depth according to specifications: 75 m





Site Surveys



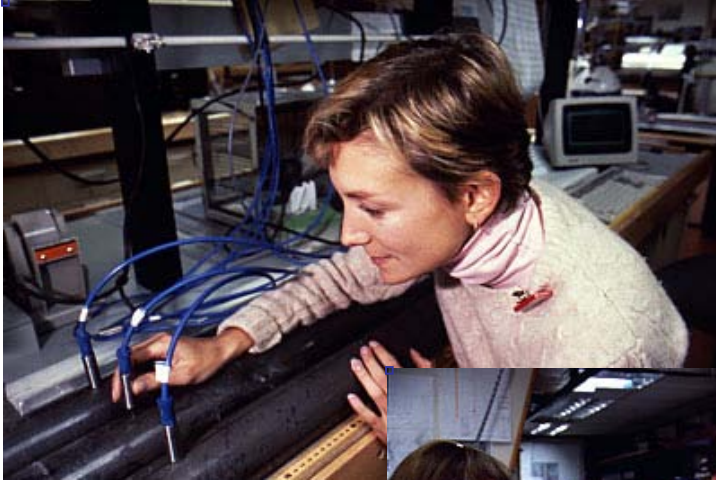
Dynamic Positioning



Drilling



Hole Re-entry

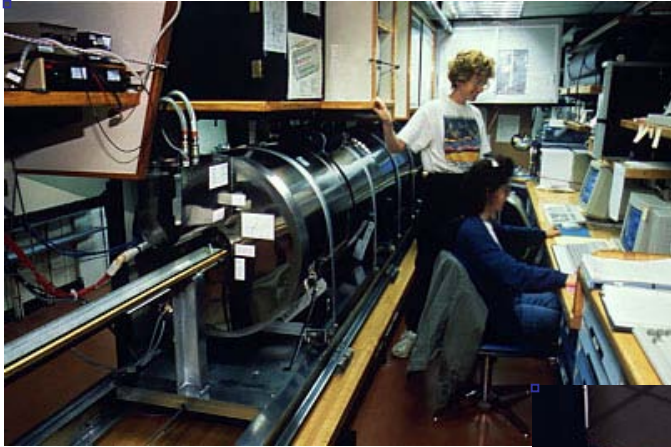


Core Handling



Core Logging

Geomagnetic logging



Microbiology



Micropaleontology



Geochemistry



Downhole Logging

Chikyū Riser Drillship



Principal Particulars

Length Overall	210.0m
Length Bpp	192.0m
Breadth (mld)	38.0m
Depth (mld)	16.2m
Draught (mld max.)	9.2m
Gross Tonnage	57,500t
Riser Length	4,000m
Drill String Length	10,000m

JAPAN (MEXT)

Japan invests in the new deep sea riser drilling vessel Chikyū. The vessel will then be offered to IODP as drilling platform.



Chikyu Riser Drillship



Length	210 m
Width	38 m
Draft	9.2 m
Weight	57000 Ton
Crew	150 people
Pipes	10 km
Riser length	4 km



The ship is built and operated by **JAMSTEC**, The Japan Agency for Marine-Earth Science and Technology

<http://www.jamstec.go.jp/chikyu/>





<http://www.jamstec.go.jp/chikyu/>

(c)JAMSTEC/CDEX





The **U.S.A.** (through the National Science Foundation, NSF) will re-fit and improve the drilling and laboratory capability of the JOIDES RESOLUTION, and will cover manage the operations of the **non-riser deep water drilling**.

JOIDES Resolution Riserless Drillship



Europe + Canada (ECORD) manages drilling operations that neither the JOIDES Resolution nor the Chikyu can do (ice-covered seas, shallow water).



ACEX (Arctic Coring Expedition) IODP Exp. 203 (year 2004)





ACEX (Arctic Coring Expedition)
IODP Exp. 203 (year 2004)



Vidar Viking: the drill ship

<http://www.ecord.org/>

Swedish Ice Breaker Oden

ACEX (Arctic Coring Expedition)
IODP Exp. 203 (year 2004)



<http://www.ecord.org/>

Russian Ice breaker Soviety Soyuz

ACEX (Arctic Coring Expedition)
IODP Exp. 203 (year 2004)



DP Hunter, IODP Tahiti Sea Level Expedition (IODP Expedition- 310)



photo A. Skinner © NERC for ECORD Science Operator

<http://www.ecord.org/>

DP Hunter, IODP Tahiti Sea Level Expedition (IODP Expedition-310, year 2005)

