

BMS – Benthic Multi-coring System



Above – Computer visualization of BMS.

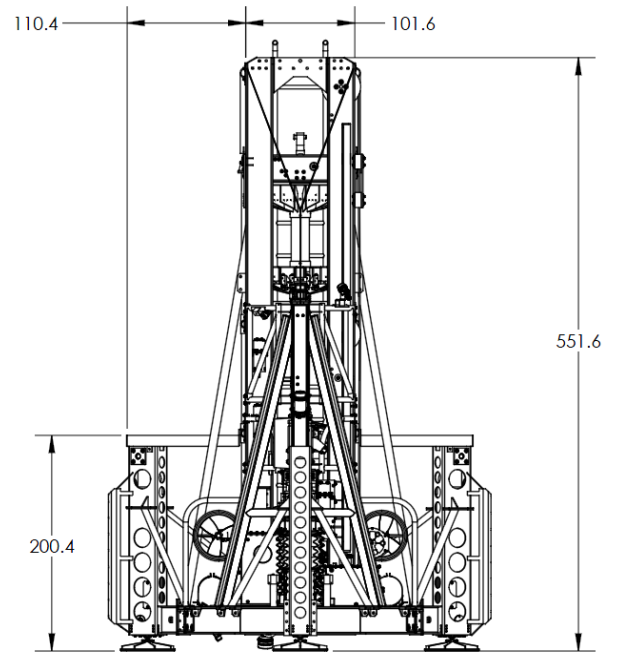
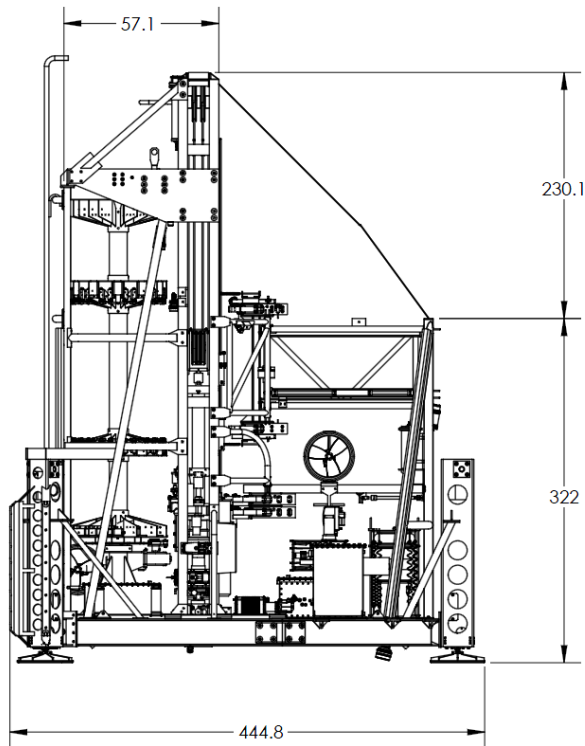
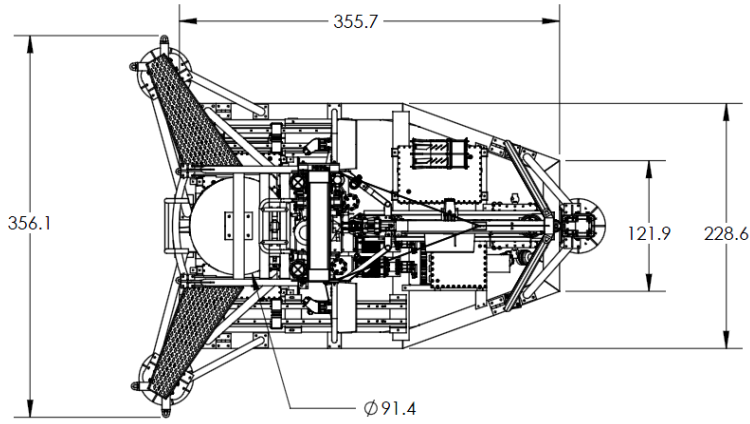
Top Right – Deployment of BMS drill for JOGMEC on the Hakurei Maru No. 2.

Bottom Right – Depiction of seafloor deployment.

DESCRIPTION

The BMS (Benthic Multi-coring System) is an innovative remotely operated seafloor coring system. This well proven ROV is designed to operate at depths of up to 6,000 meters and to recover 20-30 m of core samples from the substrate. The BMS uses standard BW size drill tools, which recover a 44 mm core sample from a 60 mm hole diameter. A rotary magazine holds the drill tools, rods, and casing for obtaining the core samples. The BMS is capable of coring both soft and hard consolidated rock materials. The system uses conventional rotary hard-rock and soil sampling tools combined with computer controlled automation to assemble and disassemble the drill string. A full suite of sensors along with cameras and lights provide the operators with excellent oversight of the drilling process.

For the last 16 years, Williamson & Associates has designed and built a range of BMS drills and can customize the equipment to suit your specific needs. Williamson & Associates provides continual support and training with each drilling system. For further information, or to talk to our engineers, please contact us.



NB. Dimensions are in centimeters

SPECIFICATIONS

Total Weight (air)	5,100 kg (with tools and core samples)
Total Weight (sea)	3,940 kg (estimated, with tools and core samples)
Operating Depth	6,000 m
Device Envelope	4.5 m length x 3.6 m width x 5.5 m height
Drill Tool Type	BW standard
Hole Diameter	60 mm
Core Diameter	44 mm
Core Depth (total)	30 m