Infrastructure name	**MeBo**
Code	
Owner/Institution	Marum- Centre for Marine Sciences
Manager	Dr Tim Freudenthal
Equipment type	Remotely Operated Drill Rig
System description	2000m
WEB LINK	http://www.marum.de/en/Sea_floor_drill_rig_MeBo.html
WEB LINK TECH SPECS	http://www.marum.de/en/MeBo_Specifications.html
Vessels normally used	Meteor, Celtic Explorer, Marian S Merian
Ship requirements	Dynamic positioning preferred , A FRAME (16T) usbl see also attached sheet
Techical requirements	
Power	
Frequency	50-60hz
Voltage	380-440v
KVA	
Max Amps	600
Other power requirements	
Hydraulic	
Pressure	n/a
Flow rate	
Compressed air requirements	
Cooling water	yes for winch
Subsea positioning requirements	
Compatible USBL systems	all IXSEA gaps, sonardyne etc etc
Vessel GPS Feed or other requirements	USBL display, ships GPS, usual depth etc
Networking requirements	
No. of System configurations possible	1
Configuration 1	Vehicle launched off the stern using ships A frame and MEBO lars
Configuration 2	
Configuration 3	
Configuration 4	
Deck Layout Drawing	
Configuration 1	
Configuration 2	
Configuration 3	
Configuration 4	
System weight/COG in each configuration	
Configuration 1	75 t total, winch 28t, containers c. 10 t, MeBo 9.5 t in air (fully loaded) 7.5 t in water

Configuration 2	
Configuration 3	
Configuration 4	
Number of containers/Items, Footprint Area required	
Configuration 1	3 x 20' containers , 1 x winch on 20' container base, 1 x 4.5 x 9m lars 2 containers may be stacked, if space tight drill containers can be dropped
Configuration 2	
Configuration 3	
Configuration 4	
Deck securing arrangements	
Configuration 1	containers on iso bases with twistlocks (2 may be double stacked). Winch needs to be secured for c. 2g loading
Configuration 2	
Configuration 3	
Configuration 4	
Deck strength/Deck loading	
Configuration 1	28 tonnes on 20' base is the single heaviest load,lars secured on cross deck beams (Celtic Explorer)
Configuration 2	
Configuration 3	
Configuration 4	
Transportation requirements (total weight and number of loads)	
Configuration 1	6 x 20' containers, total 75t
Configuration 2	
Configuration 3	
Configuration 4	
V.A.T. + Customs clearance practice	
Mobilisation Details	
Typical Mobilisation duration	3 days (Celtic Explorer)
Typical Mobilisation cost	cranage 5000,
Typical Demobilisation duration	2 days
Typical Demobilisation cost	
Insurace arrangements	
Own use	
Barter	
Charter	
Co-operation	
Transporation insurance	
Technicians	
Number and type of technicians required to operate system in various scenarios	10 technicians and scientists required to operate system
System payloads	
Total maximum payload	
Existing specific payloads	specific payload of up to 70 metres of drill string for acquistion of rock/sediment cores