

新海研1號研究船 R/V NEW OCEAN RESEARCHER 1

「新海研1號」由科技部委託台灣國際造船公司設計建造,歷時1年有餘,2020年7月交船,再由科技部移撥國立臺灣大學管理營運。「新海研1號」採電力推進,擁有精準定位的多音束測深、水文探測與海水採樣等系統,並有海流剖面、海床地貌與底質結構等先進的同步聲納探測設備,是一艘大洋級的多功能海洋研究船。「新海研1號」取代「海研一號」,承接我國海洋科學基礎研究與海洋國土永續發展的使命,航向藍海,放眼國際合作。

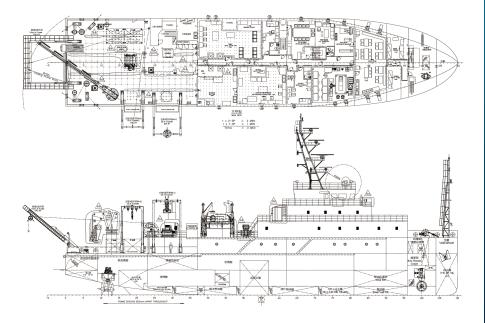




航行短片



船務室





船級	CR & ABS (公務船)
船型	研究船 (貨船證書)
建造船廠	CSBC 台船 (基隆廠)
管理章程	ISM code
總噸位 (GT)	2155 噸
船長(L.O.A.)	66 m
船寬	14.8 m
吃水深	4.3 m
主推進器馬力	1200 kW×2
艏側推器	600 kW
動態定位系統	K-POS DP-11 IMO class 1 (DP1)
主發電機	850 kW×4
船速	巡航 12 節, 最高 >14節
續航力	6500 浬 (船速12 節)
乘員	船員 19人, 研究人員 28人
都卜勒流剖儀 (ADCP)	Teledyne RDI OS 75 / 150 kHz
單音束科學漁探測深儀	Kongsberg EK80, 38/120/200 kHz
單音束深海測深儀	Kongsberg EA640, 12/38/200 kHz, >6000 m
淺海多音束側深儀	Kongsberg EM2040, 0.7°×0.7°, 140°, 200-400 kHz, 0.5-600 m
深海多音束測深儀	Kongsberg EM304, 1°×1°, 150°, 26-34 kHz, 10-7000 m
底質剖面儀	Edgetech 3300, 1.5-12 kHz, >5000 m
聲納運作同步器	K-SYNC
科學用船體運動感測器	MRU5 (科學用聲納儀器用) MRUD (船隻動態定位系統用)
水下定位系統 (SSBL)	Kongsberg HiPAP 502, 5000m
CTD 絞機及 A架	鋼纜長 8000m
深海絞機	鋼纜長 10000m
可攜式絞機	鋼纜長 8000m
捲網絞機	1具
多功能起重機	1具
船首氣象塔	1座



海研一號自1985年啟用以來已服役34年 總航跡逾112萬公里·遍布臺灣四周海域·為臺灣海洋科學研究帶來輝煌的貢獻·如今已為新海研1號取代·功成身退。



R/V NEW OCEAN RESEARCHER 1

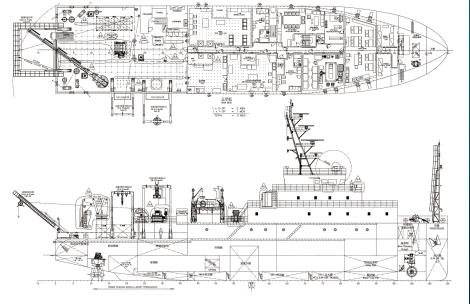
Commissioned by the Ministry of Science and Technology (MOST) of Taiwan, the new research vessel R/V New Ocean Researcher 1 was built by the CSBC Corporation, Taiwan. In May 2020, the shipbuilder delivered the vessel to the MOST. National Taiwan University was subsequently designated by the MOST to operate and manage the vessel. The R/V New Ocean Researcher 1 is a multifunctional and electrical powerpropelled vessel equipped with advanced single- and multibeam echo sounders, acoustic Doppler current profiler, subbottom profiler, synchronization unit for sonar systems, and hydrographic and seawater sampling systems. The R/V New Ocean Researcher 1 replaced the R/V Ocean Researcher I and continues the nation's missions of fundamental research in ocean sciences and sustainable development of the ocean with the ultimate goal of sailing to the blue sea and connecting to the world's oceanographic communities.







Ship Affairs Office





Classification CR & ABS (Official ship) Vessel type Research vessel (Cargo ship certificate) Shipbuilder CSBC Corp., Taiwan Management code ISM code Gross tonnage (GT) 2155 tons Length (L.O.A.) 66 m Breadth 14.8 m Draft 4.3 m Main thruster power 1200 kW×2 Bow thruster 600 kW Dynamic positioning K-POS DP-11 IMO class 1 (DP1) Main generator 850 kW×4 Ship speed Transit: 12 kt, Max.: >14kt Endurance 6500 nm at 12 kt Accommodation Crew: 19, Scientists: 28 Acoustic Doppler current profiler Single-beam echo sounder 12/38/200 kHz, >6000 m Shallow water multibeam echo sounder 12/38/200 kHz, >6000 m Shallow water multibeam echo sounder 150°, 26-34 kHz, 10-7000 m Sub-bottom profiler Edgetech 3300, 1.5-12 kHz, >5000 m Sonar operation synchronizer Motion sensors MRU5 (for scientific sonar instruments) MRUD (for DP system) Underwater navigation system CTD winch and A-frame Cabel length: 8000m Deep sea winch Cabel length: 8000m Portable winch Cabel length: 8000m Net winch 1 set Multifunction crane Meteorological tower 1 set	74	
Cargo ship certificate	Classification	CR & ABS (Official ship)
Management code Gross tonnage (GT) Length (L.O.A.) Breadth 14.8 m Draft 4.3 m Main thruster power Bow thruster 600 kW Dynamic positioning K-POS DP-11 IMO class 1 (DP1) Main generator 850 kW×4 Ship speed Transit: 12 kt, Max.: >14kt Endurance 6500 nm at 12 kt Accommodation Crew: 19, Scientists: 28 Acoustic Doppler current profiler Single-beam echo sounder Single-beam echo sounder Shallow water multi- beam echo sounder Shallow water multi- beam echo sounder Deep sea multi-beam echo sounder Sub-bottom profiler Sonar operation Synchronizer Motion sensors MRUD (for DP system) Underwater navigation system CTD winch and A-frame Cabel length: 8000m Net winch MRUD (for cabel length: 8000m Net winch Net winc	Vessel type	
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Main thruster power1200 kW×2Bow thruster600 kWDynamic positioningK-POS DP-11 IMO class 1 (DP1)Main generator850 kW×4Ship speedTransit: 12 kt, Max.: > 14ktEndurance6500 nm at 12 ktAccommodationCrew: 19, Scientists: 28Acoustic Doppler current profilerTeledyne RDI OS 75 & 150 kHzSingle-beam echo sounderKongsberg EK80, 38/120/200 kHzDeep sea single-beam echo sounderKongsberg EA640, 12/38/200 kHz, > 6000 mShallow water multi- beam echo sounderKongsberg EM2040, 0.7° × 0.7°, 140°, 200-400 kHz, 0.5-600 mDeep sea multi-beam echo sounderKongsberg EM304, 1° ×1°, 150°, 26-34 kHz, 10-7000 mSub-bottom profiler Sub-bottom profilerEdgetech 3300, 1.5-12 kHz, >>5000 mSonar operation synchronizerK-SYNCMotion sensorsMRU5 (for scientific sonar instruments) MRUD (for DP system)Underwater navigation systemKongsberg HiPAP 502, 5000mCTD winch and A-frameCabel length: 8000mDeep sea winchCabel length: 8000mPortable winchCabel length: 8000mNet winch1 setMultifunction crane1 set		14.8 m
Bow thruster 600 kW Dynamic positioning K-POS DP-11 IMO class 1 (DP1) Main generator 850 kW×4 Ship speed Transit: 12 kt, Max.: >14kt Endurance 6500 nm at 12 kt Accommodation Crew: 19, Scientists: 28 Acoustic Doppler current profiler Single-beam echo sounder Shallow water multibeam echo sounder 12/38/200 kHz, >6000 m Shallow water multibeam echo sounder 140°, 200-400 kHz, 0.5-600 m Deep sea multi-beam echo sounder Sub-bottom profiler Edgetech 3300, 1.5-12 kHz, >5000 m Sonar operation synchronizer Motion sensors MRU5 (for scientific sonar instruments) MRUD (for DP system) Underwater navigation system CTD winch and A-frame Cabel length: 8000m Portable winch Cabel length: 8000m Net winch 1 set Multifunction crane 1 set	Draft	4.3 m
Bow thruster 600 kW Dynamic positioning K-POS DP-11 IMO class 1 (DP1) Main generator 850 kW×4 Ship speed Transit: 12 kt, Max.: >14kt Endurance 6500 nm at 12 kt Accommodation Crew: 19, Scientists: 28 Acoustic Doppler current profiler Single-beam echo sounder Shallow water multibeam echo sounder 12/38/200 kHz, >6000 m Shallow water multibeam echo sounder 140°, 200-400 kHz, 0.5-600 m Deep sea multi-beam echo sounder Sub-bottom profiler Edgetech 3300, 1.5-12 kHz, >5000 m Sonar operation synchronizer Motion sensors MRU5 (for scientific sonar instruments) MRUD (for DP system) Underwater navigation system CTD winch and A-frame Cabel length: 8000m Portable winch Cabel length: 8000m Net winch 1 set Multifunction crane 1 set	Main thruster power	1200 kW×2
Main generator Ship speed Transit: 12 kt, Max.: >14kt Endurance 6500 nm at 12 kt Accommodation Crew: 19, Scientists: 28 Acoustic Doppler current profiler Single-beam echo sounder Deep sea single-beam echo sounder Shallow water multi- beam echo sounder Deep sea multi-beam echo sounder Deep sea multi-beam echo sounder Sub-bottom profiler Sub-bottom profiler Sub-bottom profiler Motion sensors MRU5 (for scientific sonar instruments) MRUD (for DP system) Underwater navigation system CTD winch and A-frame Cabel length: 8000m Net winch Net winch 1 set Multifunction crane 1 set		
Ship speed Transit: 12 kt, Max.: >14kt Endurance 6500 nm at 12 kt Accommodation Crew: 19, Scientists: 28 Acoustic Doppler current profiler Single-beam echo sounder Shallow water multibeam echo sounder 12/38/200 kHz, >6000 m Shallow water multibeam echo sounder 140°, 200-400 kHz, 0.5-600 m Deep sea multi-beam echo sounder Sub-bottom profiler Edgetech 3300, 1.5-12 kHz, >5000 m Sonar operation synchronizer Motion sensors MRU5 (for scientific sonar instruments) MRUD (for DP system) Underwater navigation system CTD winch and A-frame Cabel length: 8000m Deep sea winch Cabel length: 8000m Net winch 1 set Multifunction crane 1 set	Dynamic positioning	K-POS DP-11 IMO class 1 (DP1)
Endurance 6500 nm at 12 kt Accommodation Crew: 19, Scientists: 28 Acoustic Doppler current profiler Single-beam echo sounder 38/120/200 kHz Deep sea single-beam kongsberg EK80, 38/120/200 kHz Deep sea single-beam kongsberg EA640, echo sounder 12/38/200 kHz, > 6000 m Shallow water multibeam echo sounder 140°, 200-400 kHz, 0.5-600 m Deep sea multi-beam echo sounder 150°, 26-34 kHz, 10-7000 m Sub-bottom profiler Edgetech 3300, 1.5-12 kHz, > 5000 m Sonar operation synchronizer Kongsberg EM304, 1°×1°, 150°, 26-34 kHz, 10-7000 m Sonar operation synchronizer K-SYNC Wolfor De system) Underwater navigation system CTD winch and A-frame Cabel length: 8000m Deep sea winch Cabel length: 10000m Portable winch 1 set Multifunction crane 1 set	Main generator	850 kW×4
Accommodation Crew: 19, Scientists: 28 Acoustic Doppler current profiler Single-beam echo sounder Shallow water multibeam echo sounder Deep sea multi-beam echo sounder Sub-bottom profiler Sonar operation synchronizer Motion sensors MRUS (for scientific sonar instruments) MRUD (for DP system) Underwater navigation system CTD winch and A-frame Cabel length: 8000m Net winch Net winch Multifunction crane Teledyne RDI OS 75 & 150 kHz To kissen Kongsberg EK80, 38/120/200 kHz Kongsberg EA640, 12/38/200 kHz, >6000 m Kongsberg EM2040, 0.7° × 0.7°, 140°, 200-400 kHz, 0.5-600 m Kongsberg EM304, 1° × 1°, 150°, 26-34 kHz, 10-7000 m K-SYNC Sonar operation Synchronizer MRUS (for scientific sonar instruments) MRUD (for DP system) Cabel length: 8000m Cabel length: 8000m Net winch 1 set	Ship speed	Transit: 12 kt, Max.: >14kt
Acoustic Doppler current profiler Single-beam echo sounder Single-beam echo 38/120/200 kHz Deep sea single-beam cho sounder Shallow water multibeam echo sounder Deep sea multi-beam echo sounder Sub-bottom profiler Sonar operation synchronizer Motion sensors MRUD (for DP system) CTD winch and A-frame Cabel length: 8000m Net winch Net winch Multifunction crane Kongsberg EM2040, 0.7° × 0.7°, 140°, 200-400 kHz, 0.5-600 m Kongsberg EM304, 1° × 1°, 150°, 26-34 kHz, 10-7000 m Kongsberg EM304, 1° × 1°, 150°, 26-34 kHz, 10-7000 m K-SYNC WRUD (for scientific sonar instruments) MRUD (for DP system) Cabel length: 8000m Cabel length: 8000m Net winch 1 set Multifunction crane	Endurance	6500 nm at 12 kt
Current profiler Single-beam echo sounder Deep sea single-beam echo sounder Shallow water multibeam echo sounder Deep sea multi-beam echo sounder Sub-bottom profiler Sonar operation synchronizer Motion sensors Underwater navigation system CTD winch and A-frame Deep sea winch Deep s	Accommodation	Crew: 19, Scientists: 28
Sounder 38/120/200 kHz	Acoustic Doppler current profiler	Teledyne RDI OS 75 & 150 kHz
Deep sea single-beam kongsberg EA640, echo sounder 12/38/200 kHz, >6000 m Shallow water multibeam echo sounder 140°, 200-400 kHz, 0.5-600 m Deep sea multi-beam echo sounder 150°, 26-34 kHz, 10-7000 m Sub-bottom profiler Edgetech 3300, 1.5-12 kHz, >5000 m Sonar operation synchronizer K-SYNC MRUS (for scientific sonar instruments) MRUD (for DP system) Underwater navigation system CTD winch and A-frame Cabel length: 8000m Deep sea winch Cabel length: 8000m Net winch 1 set Multifunction crane 1 set		
echo sounder 12/38/200 kHz, > 6000 m Shallow water multibeam echo sounder 140°, 200-400 kHz, 0.5-600 m Deep sea multi-beam echo sounder 150°, 26-34 kHz, 10-7000 m Sub-bottom profiler Edgetech 3300, 1.5-12 kHz, > 5000 m Sonar operation synchronizer K-SYNC Underwater navigation system CTD winch and A-frame Cabel length: 8000m Portable winch 1 set Multifunction crane 1 set		Kongsberg EA640,
beam echo sounder 140°, 200-400 kHz, 0.5-600 m Deep sea multi-beam echo sounder 150°, 26-34 kHz, 10-7000 m Sub-bottom profiler Edgetech 3300, 1.5-12 kHz, >5000 m Sonar operation synchronizer Mction sensors MRU5 (for scientific sonar instruments) MRUD (for DP system) Underwater navigation system CTD winch and A-frame Cabel length: 8000m Deep sea winch Cabel length: 10000m Portable winch 1 set Multifunction crane 1 set	echo sounder	12/38/200 kHz, > 6000 m
Deep sea multi-beam echo sounder 150°, 26-34 kHz, 10-7000 m Sub-bottom profiler Edgetech 3300, 1.5-12 kHz, >5000 m Sonar operation synchronizer MRU5 (for scientific sonar instruments) MRUD (for DP system) Underwater navigation system CTD winch and A-frame Cabel length: 8000m Deep sea winch Cabel length: 8000m Portable winch 1 set Multifunction crane 1 set		
echo sounder 150°, 26-34 kHz, 10-7000 m Sub-bottom profiler Edgetech 3300, 1.5-12 kHz , > 5000 m Sonar operation synchronizer K-SYNC Motion sensors MRU5 (for scientific sonar instruments) MRUD (for DP system) Underwater navigation system CTD winch and A-frame Cabel length: 8000m Deep sea winch Cabel length: 10000m Portable winch Cabel length: 8000m Net winch 1 set Multifunction crane 1 set		
>5000 m Sonar operation synchronizer Motion sensors MRU5 (for scientific sonar instruments) MRUD (for DP system) Underwater navigation system CTD winch and A-frame Cabel length: 8000m Deep sea winch Cabel length: 10000m Portable winch Cabel length: 8000m Net winch 1 set Multifunction crane 1 set		150°, 26-34 kHz, 10-7000 m
synchronizer Motion sensors MRU5 (for scientific sonar instruments) MRUD (for DP system) Underwater navigation system CTD winch and A-frame Cabel length: 8000m Deep sea winch Portable winch Cabel length: 8000m Net winch 1 set Multifunction crane 1 set	Sub-bottom profiler	
MRUD (for DP system) Underwater		K-SYNC
navigation system CTD winch and A-frame Cabel length: 8000m Deep sea winch Cabel length: 10000m Portable winch Cabel length: 8000m Net winch 1 set Multifunction crane 1 set	Motion sensors	
Deep sea winch Cabel length: 10000m Portable winch Cabel length: 8000m Net winch 1 set Multifunction crane 1 set		Kongsberg HiPAP 502, 5000m
Portable winch Cabel length: 8000m Net winch 1 set Multifunction crane 1 set	CTD winch and A-frame	Cabel length: 8000m
Net winch 1 set Multifunction crane 1 set	Deep sea winch	Cabel length: 10000m
Multifunction crane 1 set	Portable winch	Cabel length: 8000m
marinance crane	Net winch	1 set
Meteorological tower 1 set		1 set
	Meteorological tower	1 set



Launched in 1985 and operated/managed by National Taiwan University, the R/V Ocean Researcher I has supported researchers to carry out multidisciplinary campaigns for 34 years. The shipborne surveys covered Taiwan's surrounding waters, advancing Taiwan's ocean sciences and observational technologies, and broadening our knowledge of regional oceanography. The numerous field experiments also helped cultivate next-generation scientists and technicians.