RESEARCH SHIP

- ***SILENT CLASS A&R***
- ***URN ICES 209***

Conceptia is engaged in the basic and detailed design of an advanced research ship tailored for sophisticated acoustic research. This vessel features a state-of-the-art diesel-electric propulsion system, ensuring efficient and reliable operation. Additionally, it is equipped with dynamic positioning capabilities for precise maneuvering during data collection

The ship is designed to minimize underwater radiated noise, making it ideal for sensitive acoustic measurements. It includes special test facilities such as a moon pool, gondola, and drop keel, which facilitate the easy deployment and retrieval of research equipment. Additionally, the ship is equipped with three deck cranes, high-resolution acoustic modules for detailed surveys, and comprehensive oceanographic equipment for extensive data collection, including the deployment of underwater moored systems.

Please write to info@conceptia.in for more information.

CONCEPTIA MARINE

96 M REASEARCH VESSEL

MAIN DESCRIPTION

The Vessel is designed as research vessel capable of speeds between 4 to 12 knots and an endurance of about 30 days or 4,000 nautical miles at top speed. The design prioritizes acoustic silence, with measures to minimize underwater radiated noise. It includes a dynamic positioning system to ensure precise maneuvering during operations, crucial for accurate data collection. The ship is equipped with special test facilities such as a moon pool, gondola, and drop keel, allowing for the easy deployment and retrieval of research equipment.

THE VESSEL HAS THE FOLLOWING FEATURES:

- **Hull Form:** Optimized for minimal hydrodynamic noise and reduced drag.
- **Superstructure**: Designed to minimize above-water noise and vibrations
- **Acoustic Silence**: The ship is designed to minimize underwater radiated noise, making it ideal for sensitive acoustic measurements
- **Dynamic Positioning System**: Ensures precise positioning during operations, which is crucial for accurate data collection
- **Special Test Facilities**: Includes a moon pool, gondola, and drop keel for deploying and retrieving equipment
- **Deck Cranes**: Three deck cranes for handling research equipment.
- **Oceanographic Equipment**: For collecting ocean data and deploying underwater moored systems.
- **Multibeam Echo Sounders**: For detailed bathymetric surveys.
- **Side-Scan Sonar**: For high-resolution imaging of the sea floor.
- **Sub-Bottom Profilers**: To study the composition of the seabed
- **Acoustic Modules**: For high-resolution surveys and sound velocity profiles.

MAIN PARTICULARS

Length overall	:	96.00 M
Length between perpendiculars	:	90.00 M
Depth (moulded)	:	7.70 M
Draft	:	5.50 M
Complement	:	70 Nos
Service speed	:	12 Knots
Frame Spacing	:	600 MM

MACHINERY

Propulsion	:	Diesel-electric
Generating set	:	2000KW x 2 & 1500KW x 2
Emergency Generator	:	1 x 1000 KW
Bow thrusters	:	2 x 750 KW
Propeller	:	2 x Azipods (1500 Kw each)
Lubricating oil purifier	:	Alfa Laval
Ballast water treatment	:	UV type
Fresh water generator	:	RO Plant
Oily bilge separator	:	MEPC 107 (49) centrifugal type
Sewage treatment plant	:	120 MEN Capacity
Combined windlass& Mooring Winch	:	De-Clutchable / Free warping end