

**TOP NOTCH
DEEP-SEA
EQUIPMENT**



CLK300 SHIP HULL CLEANING ROV

Technical Specifications

Technical Specifications

1. Technical Parameters



Fig.1:CLK300 Side View / Front View

1.1 Robot System

Robot System	
Basic parameter	
Total Power	45kW
Dimensions (L×W×H)	2250mm x 1380mm x 610mm
Weight	800kg
Payload	80kg
Depth rating	100m
Working speed	0-25m/min
Cleaning efficiency	1400-1600m ² /h
Walking driven	Track, Adsorption: Permanent Magnets + Vertical Thrusters
Cleaning System	
Cleaning mechanism	6 x Cavitation water jet brush discs
Permanent Magnetic Adsorption System	

Permanent magnetic adsorption mechanism	12 sets of permanent magnetic adsorption mechanisms, with a single-set adsorption force of 30 kg.
Emergency release mechanism	The permanent magnetic adsorption mechanism is equipped with an emergency release system.
Pumping System (Robot Side)	
Pumping Mechanism	Two sets of pumping systems are integrated in the front and rear cleaning discs of the robot, assisting the water surface recovery system in transferring the cleaned debris to the deck.
Shredding Mechanism	A shredding mechanism is integrated at the front end of the pumping system to pre-shred the cleaned debris, effectively preventing clogging of the main recovery pipeline.
Power Performance	
Thrusters	4 × THR.D210 (horizontal), 4 × THR.D210 (vertical)
Bollard Pull Forward/aft	156kg
Bollard Pull Lateral	110kg
Bollard Pull Vertical	185kg
Current Resistance Capacity	3.0 knots (forward) 2.0 knots (transverse) 2.0 knots (vertical)
Sensor Capacity and Electrical Interfaces	
Sensor Interfaces	Customizable interfaces (including IMU, DVL, sonar, baseline, depth gauge, altimeter, etc.)
Camera	6 × 2- megapixel color wide-angle lenses
Lighting	2 × 100W adjustable LED lights, 4 × 50W LED lights
Manipulator	1 interface for 3-axis manipulator, power 200 W (expandable)
Other Configurations	
PTZ	Optional (expandable)

DVL	Optional (expandable)
Forward-looking multi-beam sonar	Optional (expandable)
Ultra-short baseline (USBL)	Optional (expandable)

1.2Cable Winch & Lifting Platform System



Cable Winch & Lifting Platform System

Winch Platform

Winch Platform Dimensions (L×W×H)	4000mmx2300mmx1700mm
Total Weight of Winch Platform	3600kg (Including robot and winch system)
Winch Power Supply	Voltage 380v/Power 2.2kW
Winch Cable Capacity	100m
Cable length	100m
ROV umbilical Cable	ROV cable and high-pressure water hose

Crane Platform System (Optional)	
Crane Platform Dimensions (L×W×H)	4000mmx1700mmx2200mm
Weight of Crane Platform	3000kg
Crane Power Supply	380V voltage, 7.5kW power
Boom Length	4000mm horizontal extension, 2400mm horizontal retraction
Vertical Swing Angle of Boom	Horizontal 90°–120°
Horizontal Slewing Angle of Boom	0-180°

1.3 Control System



Control System	
Dimensions (L×W×H)	1100mm x 650mm x750mm
Weight	125kg
Display	3 × 19-inch monitors Resolution: 1920 × 1080p
System	Embedded host with Intel i7 processor, 16 GB RAM, 1 TB HDD, supporting one-click video recording and photo capture.
Steering Wheel Control	Dimensions: 270 mm × 280 mm × 250 mm Signal transmission: Wired Function: Controlled by steering wheel with linear pedals
Handheld Wireless Controller	Dimensions: 380 mm × 200 mm × 150 mm Power supply: 12 V lithium battery, 9000 mAh Signal transmission: Wireless Function: 2 three-axis joysticks with self-reset buttons, 4 two-axis joysticks, 4 single-axis joysticks, and multiple control buttons
Keyboard & Mouse	Full metal ruggedized mechanical keyboard and mouse buttons for easy operation
Power Supply	AC220v

1.4 High-pressure Water Pump Station System



High-pressure Water Pump Station System

Dimensions (L×W×H)	3500mmx2000mmx2200mm
Weight	2000kg
Diesel Engine Power	240HP
Pressure	25MPa (adjustable)
Flow Rate	210L/Min
Filtration Precision	500 mesh

1.5 Collection System



Collection System	
Dimensions (L×W×H)	Transport dimensions: 2929 mm × 1960 mm × 2539 mm Operating dimensions: 3343 mm × 206 mm × 2539 mm
Weight	3165kg
Suction flow rate	80m ³ /h
Suction port diameter	DN80
Suction hose length	100m
Conveying distance	450m

Screening capacity	120m ³ /h
Vibration intensity	≤7.5G(adjustable)
Separation particle size	25μm
Screen area	1.4 m ²
Hydrocyclones	8 x4"
Transfer tank capacity	3.4m ³
Recovery power supply system	Voltage: 380 V Total power: 36.08 kW Suction system: 11 kW Screening system: 25.08 kW



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