

**TOP NOTCH
DEEP-SEA
EQUIPMENT**



VKG1100 ROV

Technical Specifications

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1. Technical parameters

1.1 ROV System

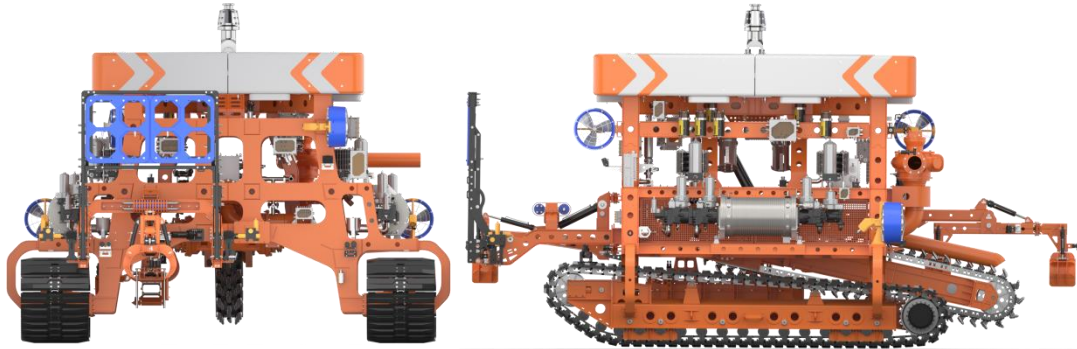


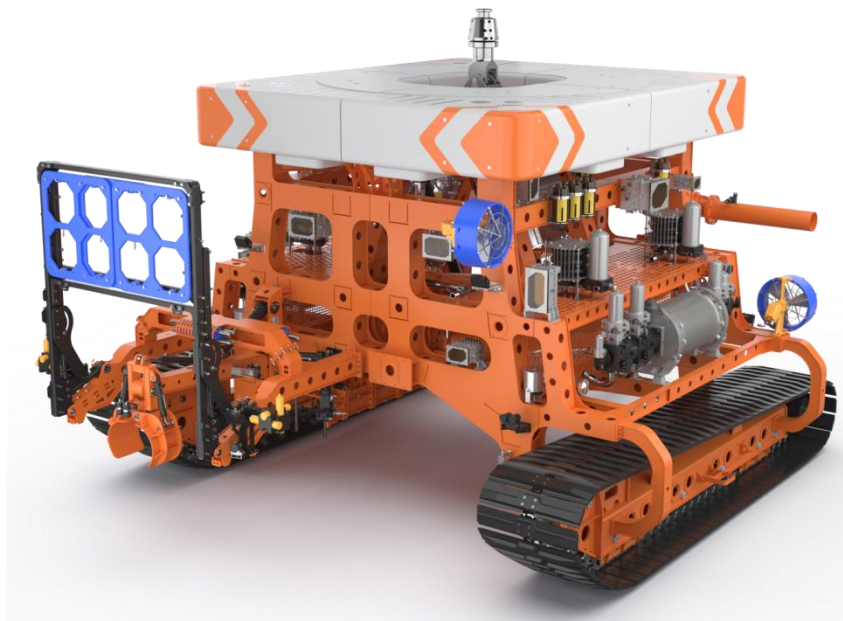
Fig.1:VKG1100 Side View / Front View

ROV System	
Basic parameter	
Total Power	410kW × 2
Power supply voltage	6kV
Dimensions (L×W×H)	8.7m × 6.5m × 4.8m (11.1m × 6.5m × 4.8m Pipeline Instrument Deployment)
Weight	31.5T (in air) / 16T (in water)
Depth rating	1000m
Performance	
Trenching depth	3m
Trenching width	400mm
Speed	48-2114m/h
Maximum climbing angle	15°
Maximum cable passing diameter	300mm

ROV System	
Soil strength	10-400KPa
Ground pressure	Maximum 25KPa
Flow resistance capacity	> 5Kn
Mechanical	
Main structure	High-strength steel
Vulnerable parts	Replaceable wear-resistant steel
Others	stainless steel, aluminum alloy
Trenching system	
Configuration	Single vertical hydraulic drive chain
Trenching depth	3m (vertical depth)
Ditching chain power	410kW
Ditching chain speed	4m/s
Ditching chain width	400mm
Ditching chain type	Heavy-duty chain with cutting teeth
Rear mud discharge pump	95kW, 900m ³ /h
Other configurations	
Cable Tracking System	1 set (optional)
USBL	1 set (optional)
Other configurations	
Altimeter	1 set

ROV System

Depth gauge	1 set
Inertial navigation system	1 set
Flowmeter	1 set
Forward looking sonar	1 set
DVL	1 set (optional)
Flashlight	1 set (optional)
USBL	1 set (optional)



2.2 Deck Support Unit



Fig. 3:Control System



Fig.4:Power supply system

Deck Support Unit	
Control container	
Dimensions (L×W×H)	6100mm×2450mm×2900mm
Weight	6T
System composition	The cabin, ROV control system, ROVpower supply system, refrigeration system, dehumidification system, alarm system, emergency escape system, etc.
Control system	
System composition	all the necessary elements for controlling the ROV and the PDU are integrated into the operator's console.

	•2 All-in-one touch screen computers •4 monitors 48 inches.
ROV control software	Chinese/English
Power supply system	
Dimensions (L×W×H)	6058mm×2438mm×2591mm
Weight	14T
System composition	Integrated independent power distribution unit (PDU), which includes circuit breakers, contactors, overload relays and transformers, terminals and isolation points for all high voltage connections.
Spare parts container	
Dimensions (L×W×H)	6058mm×2438mm×2591mm
System composition	spare parts racks, crane, air conditioner, emergency and escape system.
Workshop container	
Dimensions (L×W×H)	6058mm×2438mm×2591mm
System composition	workbench, air conditioner, emergency and escape system.

2.3 Launch and Recover System



Fig. 5:LARS System



Fig. 6:Cable Winch



Fig. 6:Hydraulic power unit



Fig. 7:LARS Control Room

LARS	
A-Frame	
Safe working load	300kN
Horizontal distance of A frame	9.7m

Clear Width of A frame	7.3m
Amplitude change time (average)	~150s
Swing angle	100°outboard, 40°inboard
Extension distance of Swing stopper	2.3m
Rotation angle of Swing stopper	270°
Cable winch	
Safe working load	Outer layer 30T/Inner layer 42T
Cable retracting and Releasing speed	30T@20m/min
Cable length	1000m
Operating Sea State	Suitable for operation in Sea State 5, emergency recovery in Sea State 6
HPU Hydraulic power unit	
HPU Power	2×200kW
System pressure	260L/min x2
System pressure	23Mpa
Hydraulic oil type	L-HM46 (can be replaced with No.22 depending on the environment)
Weight	5000kg (without hydraulic oil)



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