



HYSUB 150HP – 3000M DIVING DEPTH ROV

SHIN NIPPON KAJI 'HAKUYO', JAPAN (2010)

ISE-ISER

International

Submarine

Engineering Ltd.

Port Coquitlam

British Columbia

CANADA



CHARACTERISTICS	ATTRIBUTES
ROV	
Max Dimensions (m)	L=3.02m, W=1.8m, H=1.9m (without skid). Skid Height=0.6m
	[L=119", W=70", Height=75" (without skid). Skid Height=25"]
Diving Depth (msw)	3000
Payload (Kg)	200
Vehicle Weight (Kg)	3800Kg [8400 lbs] plus skid weight nominal values
PROPULSION	
Power Packs	Electro hydraulic. Two (2) 75HP power packs, 3000VAC, 3-phase, 60Hz
Valve Packs	Two (2) thruster valve packs (mounted horizontally). Each pack fitted with eight (8) proportional pressure control valves and one HPU bypass/soft start valve
	One (1) tooling valve pack with seven (7) proportional valves.
	Additional proportional and/or rate valve packs available
THRUSTERS	
Horizontal	Four (4) 18" vectored thrusters
Vertical	Three (3) 14" vertical thrusters
	Forward 2500 lbs
NAVIGATION (TYPICAL)	
Lights	Eight (8) 250W halogen lights 3000m rated, three (3) with wide flood reflectors and five (5) with spot reflectors. Light cable are sufficient length to relocate six (6) lights around the front, skid, two (2) for the aft lights. Two (2) HID lights.
Cameras (Typical)	Camera function can to support eight (8) cameras with focus and zoom capability
	One (1) high definition colour zoom camera (eg. Insite Mini-Zeus)
	One (1) low light black & white navigation camera (eg. Insite Mercury)
	Three (3) high resolution, wide angle colour CCD cameras (eg. Insite Aurora)
	Two (2) low light black & white CCD wide angle cameras (eg. Insite IT100)

SNK HYSUB 150-3000 'HAKUYO'

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CHARACTERISTICS	ATTRIBUTES
Pan & Tilt	Three (3) electric with position feedback
Heading	3-axis fluxgate compass (Gyro optional)
Depth	Paroscientific 8000 series depth transducer
DVL	RDI Workhorse Navigator
Sonar	Kongsberg MS1000 multi-frequency
Emergency Location	Novatech xenon strobe flasher
Positioning	APS to be customer supplied. Interface on ROV and consoles accommodated
MANIPULATORS	
7 Function	Two (2) manipulators with surface control station
JET SKID (OPTIONAL)	
Dimensions	L=3.02m, W=1.8m, H=0.6m [L=119". W=70", H=25"]
Weight	1150Kg [2500 lbs]
Functional	Minimum 60HP jetting pump, control valves, forks and cylinders, each jet leg is independently adjustable
	Two (2) lights and two (2) CCD cameras easily relocated from the ROV to the Jet skid as required
	Pipe / cable tracker mount and interface to telemetry system
WINCH & HANDLING (DYNACON)	
Umbilical	3500m long. Six (6) power conductors, twelve (12) fibers, four (4) instrument conductors and ground return (Section 4)
A-Frame	To suit system. SWL 7500Kg
Winch & Sliprings	Dynacon with MOOG (Focal or Prizm) sliprings
CONTROL VAN	
	ISO 20' Container fitted with AC, Control Consoles and Surface Power System
	Smoke Detector, fire extinguisher, emergency lighting
	Load rating lifting slings and fork lift pockets provided for convenient handling
	Lights for dimming controller
SURFACE POWER SYSTEM	
Domestic Power	Three (3) 110V power outlets
Ship Supply Required	440VAC 60Hz 3 phase
Deck Cable	50m power deck cable
HV Transformer Units	Two (2) HPU boost (3000VAC 3 phase) and hotel power boost (2000VAC 1 phase)
PDU	Includes primary voltage sensing, power monitoring, and safety interlocks
UPS	Console, 30 minute backup
CONTROL CONSOLES	
Operators Console	2-station or 3-station
Control / Power Console	19" standard rack swivel tower
Chairs	Two pilot/navigator chairs
VIDEO & DATA DISPLAY	
Displays	Two (2) 37" to 50" flatscreens, three (3) 17" touch flatscreens, one (1) 18" touchscreen, two (2) 19" touchscreens
Video Switching	Standard definition (PAL/NTSC) sixteen input by sixteen output video matrix switcher (eg. Kramer VS-162V)
Logging	Four (4) user ports, eight (8) computer ports
Video Logging	Standard definition (PAL/NTSC) 8-channel DVR (500GB) with DVD burning
Data Logging	Realtime logging of synchronous and asynchronous events.