



INSTITUTE OF MARINE RESEARCH
HAVFORSKNINGSINSTITUTTET







Skipsteknisk 





Norwegian Marine Robotics Facility

Hosted by the University of Bergen

Rolf B. Pedersen
professor in geology and the director
of Centre for Geobiology



INSTITUTE OF MARINE RESEARCH
HAVFORSKNINGSINSTITUTTET

ROV for Deep Marine Research

- Funding 46 mNOK (5.6 m€).
- Operational by fall 2015.
- Operated from several IMR vessels:
 - G. O. Sars
 - Håkon Mosby
 - Kronprins Haakon
- International access through OFEG



- Rated to 6000 m
- Payload 150 kg
- 7-function arm
- Grabber
- Hydrolics
- Camera and lights
- Auto-line tracking
- Auto-hold



Work-class ROV from Kystdesign A/S



- TMS with 400 m Kevlar-reinforced cable
- LARS for TMS mode
- 20-foot control container
- Free-swimming mode for smaller vessels



Ship size	Large Vessel	Large Vessel	Small vessel
Examples	Kronprins Haakon	R/V G.O. Sars	R/V Håkon Mosby
Operation mode	TMS-mode	Free-swimming	Free-swimming
Depth range			
Ultra-deep water (6000 m)		x	
Deep water (3000 m)	x	x	
Shallow water (1500 m)	x	x	x
ROV-modules used			
ROV	x	x	X
TMS	x		
Mobile crane		Where needed	Where needed
Large Winch (6000 m)	x		
Small Winch (1500 m)			x
Workshop container (10")	x	x	x
Transformer container (8")	x	x	x
Large control container (20")	x	x	
Small control container (10")			x

Table 1. Overview of ROV-modules showing how the components of the system are combined to nfi different sized ships and different modes of operation.

