

WORKCLASS ROV

ÆGIR 6000



Technical System Overview:

ROV System Overview:

- Manufacturer: Kystdesign sub-sea Technology
- Power: 95 / 125 kW / HP
- 6000 m depth rating (buoyancy 4000m)
- 2,75 x 1,7 x 2,2 m (LxWxH) (incl. toolskid & 4000m buoy.)
- 350kg payload
- 3600kg total weight
- 1,6 m/s max. speed (fwd), 0,8 m/s (lat)
- toolskid with one hydraulic drawer
- special toolskid 480mm with 2 hydraulic drawers

Manipulators:

- Schilling TITAN 4 - 7F (Schilling 3-finger jaw) with arm camera and LED-light, lift capacity: 122kg full extended, 454kg max.
- Schilling ATLAS - 7F, lift capacity: 250kg full extended, 500kg max.

Auxiliary Sensors:

- IXBLUE PHINS 6000 Gyro and Compass
- KONGSBERG 1071D Sonar
- TRITECH Altimeter
- SAIV TD303 Temp/Depth-Sensor
- LINKQUEST Doppler log

Overall System:

- 20' high cube control container with 2 pilot chairs (10' control-container available*)
- 20 m² Workshop container (special size: 4x5m)
- Portable winch (45t) with 4400m umbilical & A-Frame
- Light portable winch with 2000m umbilical for "free fly" (without TMS-System) and running latch

Camera and light configuration:

- Upper P/T: 1 x IMENCO Spinner II (HD), 1 x BOWTECH Explorer-Lite (composite)
- Lower P/T: 1 x IMENCO Spinner II (HD), 2 x DSPL MicroLaser, distance between laserpoints 100mm
- 16 x DSPL Sealite Sphere dimmable LED-lights, max. 3700lm (each)@6000K
- 1 (3)* x IMENCO Greytip Shark camera (composite)
- 1 IMENCO SixGill Shark (b/w composite) 170° view angle (aft-cam)

TMS-System Overview:

- TMS-System with 1000 m tether
- 2 additional down-looking Camera-arms, P/T heads and IMENCO HD-Camera
- TMS max. depth: 6000 m
- 6 Additional lights for TMS

Telemetry overview:

- up to 6 separate fiber optic channels
- 8 composite video channels
- 36 serial ports (RS232/RS485)
- 4 HD video channels
- Gigabit Ethernet

Additional sensors on ROV-side are connected with Seacon Min-K-8 or Min-K-10 connectors

- Total system weight: ??? to
- Input power 3-Phase 400/420/440VAC, 50/60Hz / ca. 250 KVA
- 10' high cube PDU container

ROV ÆGIR is part of the 'NORMAR'-project – Norwegian Marine Robotics Facility

*) planning phase



Scientific Tooling:

- METAS ROV Suction Samper with 5 sampling containers and Ø=80mm suction hose
- CONTROS CO₂ Sensor
- FRANATECH CH₄ Sensor
- Fluid Sampler
- Temperature Probes
- PushCores
- Hydraulic chainsaw
- Hydraulic rock drill
- High Resolution photo camera
- "Manipulator-Flashlight" with 3 DSPL sealite sphere 6100K and Fish-tail-grip
- Gas Sampler, samples gasbubbles from seafloor in stainless steel pressure bottles (up to 600bar)

Specials:

- IMENCO shackle



- Up to 250 to WWL
- Manual release

- Versatile Super Grinder



- For steel and concrete
- Blade interface 1" (25,4mm)
- 2700 rpm@210 bar/50L

- Subsea Intervention Basket (S1)



- Lift capacity 5000 kg
- Weight: 500kg
- Inner size: 1,5 x 1,5 x 0,8 m
- Outer size: 1,66 x 1,66 x 1,76 m

- ROV Scissor S260 T-REX



- 260 mm max. opening width
- 32 mm max. cutting diameter
- 210 bar operating pressure

- wire cutter WCOS54(D) and RCV75HD



- For cutting wire, cable and rope up to 115 mm
- Operating pressure max. 700 bar

- IMENCO Claw



- extralong fingers for T4 manipulator
- opening width 333mm

Small mobile winch (10')



ROV ÆGIR 6000 front



PDU Container (10' highcube)



ROV and TMS at launch



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Equipment for Geology/Oceanography/Mapping

- Kongsberg EM2040 Multibeam echosounder



- For technical details please see at <https://www.kongsberg.com/>

- R2sonic Multibeam echosounders "SONIC2026" or "SONIC2024"



- For technical details please see at <https://www.r2sonic.com/products/>

- Innomar SES-2000 ROV Parametric Sub-bottom Profiler



- For technical details please see at <https://www.innomar.com/ses2000rov.php>

- Saiv SD204 – CTD/STD



- For technical details please see at <http://saiv.no/sd204.html>

- Niskin bottles mounted on ROV

(Niskin bottle picture)

- Technical data Niskin bottles

- Kystdesign gas sampler



- Collects gas bubbles from seafloor in stainless steel pressure bottles, bottles must be opened and closed by ROV; gas amount can be viewed inside a transparent cylinder before collecting...

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