

GEOTECHNICAL DRILLING & SURVEY VESSEL

MV NG DRILLER



The **NG DRILLER** is a DP2 geotechnical survey vessel with 70tons drilling tower on the moonpool permanently installed to perform the following activities:

- Borehole drilling and piston sampling
- Down-hole and Seabed PCPT testing
- Wireline rock coring
- Onboard laboratory analysis
- Onboard data analysis & preliminary engineering

With over 73m length and 16,6m beam she provides a stable platform for offshore geotechnical operations with drilling capabilities up to 1000m combined water and borehole depth (max water depth 700m).

The offshore laboratory enables geotechnical engineers direct access to the following geotechnical data:

- Water content, bulk and dry density
- Qualitative carbonate content
- Laboratory vane, torvane, pocket penetrometer
- Unconsolidated Undrained (UU) triaxial
- Point load (determination of I_s (50) for rock)

Onboard data processing and preliminary engineering capabilities include:

- Axial, Lateral and driveability pile analysis
- Jack-up spudcan penetration analyses
- Mud-mat sizing
- Substructure foundation
- Pipeline route assessments
- Burial assessment



MAIN FEATURES & SPECIFICATIONS

VESSEL DETAILS

Vessel name	NG Driller
Vessel built	2008 Karmsun Maritime Service AS Yard 032 - Reconditioned in 2023
Vessel type	Geotechnical drilling and survey vessel
Vessel design	VS 470 MK II
Class notation	tba
Flag	Italian
IMO Number	9420186
Call Sign	ICEA
Gross Tonnage	2589t
Length o.a.	73,4m
Breadth mld	16,6m
Summer draft	5,14m + 0m Skeg/Nozzle
Accommodation	45 in total
Main Engine	2x Caterpillar, mod. 3606, 2030 kW
Aux Engine	2x Caterpillar, mod. C18, 1800 kW
Generators	2x Shaft generators 1300 kW/each
Propulsion	2x CP TYPE, FINNOY
Bow thrusters	2x 800BHP
Stern thruster	2x 800BHP
Endurance	Approx. 50 days

NAVIGATION & COMMUNICATIONS

DP System	2 x Navis DP Operator Stations
Radar	1 x Furuno 10 cm (S-band) w/Arpa 1 x Furuno 3 cm (X-band 9 Ghz) w/Arpa
Survey systems	2x C-NAV X1 c/w QC software 1x Veripos LD8 c/w QC software
Survey Gyro	2x Octans MkV
Wave monitoring	Aas WaveSystem
Echo Sounder	1 x navigation echo sounder
USBL	Sonardyne Ranger 2 HPT7000
Weather	2x wind sensors
Communications	V-SAT and Starlink
VHF	2 x VHF w/DSC 1 x VHF
MF/HF	1 x MF/HF w/DSC
Inmarsat	2 x Inmarsat-C with SSAS alarm
GMDSS	1 x GMDSS A3



VESSEL CAPABILITIES

DRILLING, SAMPLING & ANALYSIS

Derrick	27m
Drilling derrick capacity	40 tons static - 70 tons (max)
Heave compensation	Passive heave compensation with a stroke length of 4.0m (typical Hs of 2-2.2m)
Top drive	Foremost F-150T
Seabed frame	10t with 40 tons clamps and 50 tons shear ram
Drill pipes	128x 9m 4"1/2 OD API
Mud pump	Triplex Gardner Denver THE 150
Mud tank	3 compartments tot volume 7000 gallons guar gum seawater miscible
Wire-line tools	Orca90 Cpt Tools 3m Orca90 Cpt Tools 1.5m Piston Sampling Tools Push Sampling Tools Coring Tools
Additional features	Laboratory within vessel structure Refrigerated sample storage container Pipe handler Iron roughneck Record of drilling parameters Capability to run deep SCPT (200kN) via moon pool Stern A-Frame for shallow geotech and geophysical/UXO survey equipment

