

## Geotechnical Drilling Rig GMR300 Series



### Introduction

Geoquip Marine have designed and built a fully heave compensated, offshore geotechnical drilling system based around the GMR series. A major consideration in the design of the rig is to reduce mobilisation time and cost in logistically challenging locations by creating a set of simple system components which minimise the requirements for interfacing with the vessels services.

### Equipment

The GMR300 type rig and associated equipment can deploy in excess of 360m of drill string. The GMR300 series is being configured to handle our standard drilling and down-hole sampling, coring and in-situ testing tools. A comprehensive range of wireline downhole sampling and testing tools is available including PCPT (Piezocone Penetration Test), piston sampling, push sampling, wireline core barrel and percussion (hammer) sampling. All downhole tools (coring, sampling, P-S logging) are fully compatible within the 5½" or 6¾" API drill string.



<b>GMR300 Series</b>	
<b>Power Swivel</b>	Dando 500 swivel 9500N/M max rpm 200; 20 ton load capacity
<b>Drill String</b>	5½" or 6⅝" API drill string
<b>Seabed Frame</b>	20t, with hydraulic clamps
<b>Heave Compensation</b>	Drill string and seabed frame heave compensation with an effective stroke from 0.0 to 4.0m
<b>Mud</b>	4,000l mix tank, 8,000l storage tank guar gum seawater miscible
<b>Downhole Sampling</b>	Tools piston/push sampler, percussion/hammer sampler, marine wireline core barrel
<b>Downhole <i>in situ</i> Testing Tools</b>	WISON-APB PCPT (cone penetration test with pore water pressure measurement) WISON-APB S-PCPT (cone penetration test with pore water pressure and seismic velocity measurements)
<b>HPU</b>	Electro-hydraulic, 3 x 125hp
<b>HP Air</b>	2,000l HP Air with associated compressors, filters and driers
<b>Drill Control Cabin</b>	Lever controlled operations, fully HVAC
<b>Drill Rig Workshop</b>	ISO 20ft container sized fully equipped workshop c/w suitable tools and equipment. 220v supply
<b>Equipment Winches</b>	Braden draw works winch, 8t seabed frame umbilical winch, piston sample winch (electro mechanical), headline tugger winch, tail line tugger winch