



# Island Innovator

**Semi-submersible rig for drilling,  
well intervention, and coil  
tubing operations.**



# ISLAND DRILLING

# A drilling contractor for the future

Island Drilling was established in 2006 by industry veterans and Island Offshore, the leading global player in well intervention, to build and own special purpose semi-submersible rigs for heavy well intervention operations, including coil tubing operations, through tubing rotary drilling (TTRD).

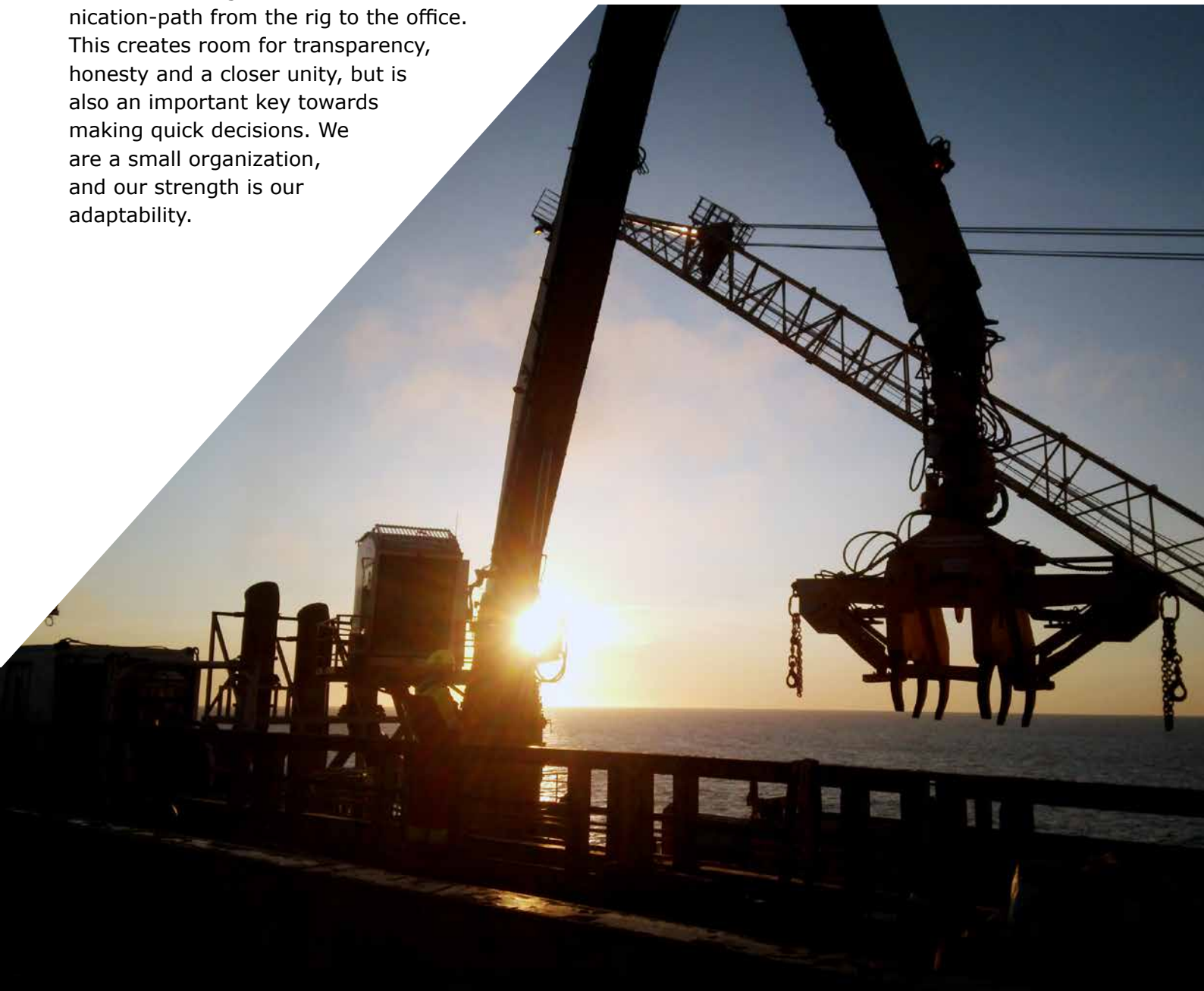
It was intended to complement the fleet of light well intervention vessels. The design, however, was expanded to encompass full drilling capability in Harsh Environment service.

The company took delivery of the rig from China's Cosco Zhoushan Shipyard in 2012. After successfully drilling wells since 2013, the vessel has proved its ability to operate in harsh environment covering the North Sea, Norwegian Sea and the Barents Sea.

In Island Drilling there is a short communication-path from the rig to the office. This creates room for transparency, honesty and a closer unity, but is also an important key towards making quick decisions. We are a small organization, and our strength is our adaptability.



Film\_1





# The rig's potential:

**Island innovator is a 6th generation rig for drilling and heavy well intervention on subsea templates.**

The unique operational advantage of the compensated NOV 165-metric ton AHC crane, in combination with the rig's DP capability, makes a positive difference compared to many other units. Subsea operations, such as template installation and preparation spud of new well / top-hole drilling and P&A operations, can be done simultaneously with mooring activities.



The crane can operate in AHC mode down to 1200 m water depth, and can therefore be very useful for subsea work on templates on seabed, performing work such as:

- Opening hatches, (install – remove) subsea constructions, old well heads, lines
- Installation of templates (Due to DP, the rig can perform wet tow of templates in rougher conditions than other subsea vessels)
- Heavy constructions can be lifted at seabed by use of NOV (590mT) Top drive or AHC (165 mT) crane simultaneously or separate
- PGBs and OTSs running (or pulling) or deployment campaign in batch riser less mode

# Drilling performance

Island Innovator has been engaged in Harsh Environment drilling operations since 2013, and maintains an excellent performance record. Regularity in excess of 99 % available rig for customer. Enhanced design with improved heave characteristics for reduced waiting on weather. Island Innovator is built to operate in the Barents Sea. The rig has achieved good results in exploration, with several good drill stem tests.

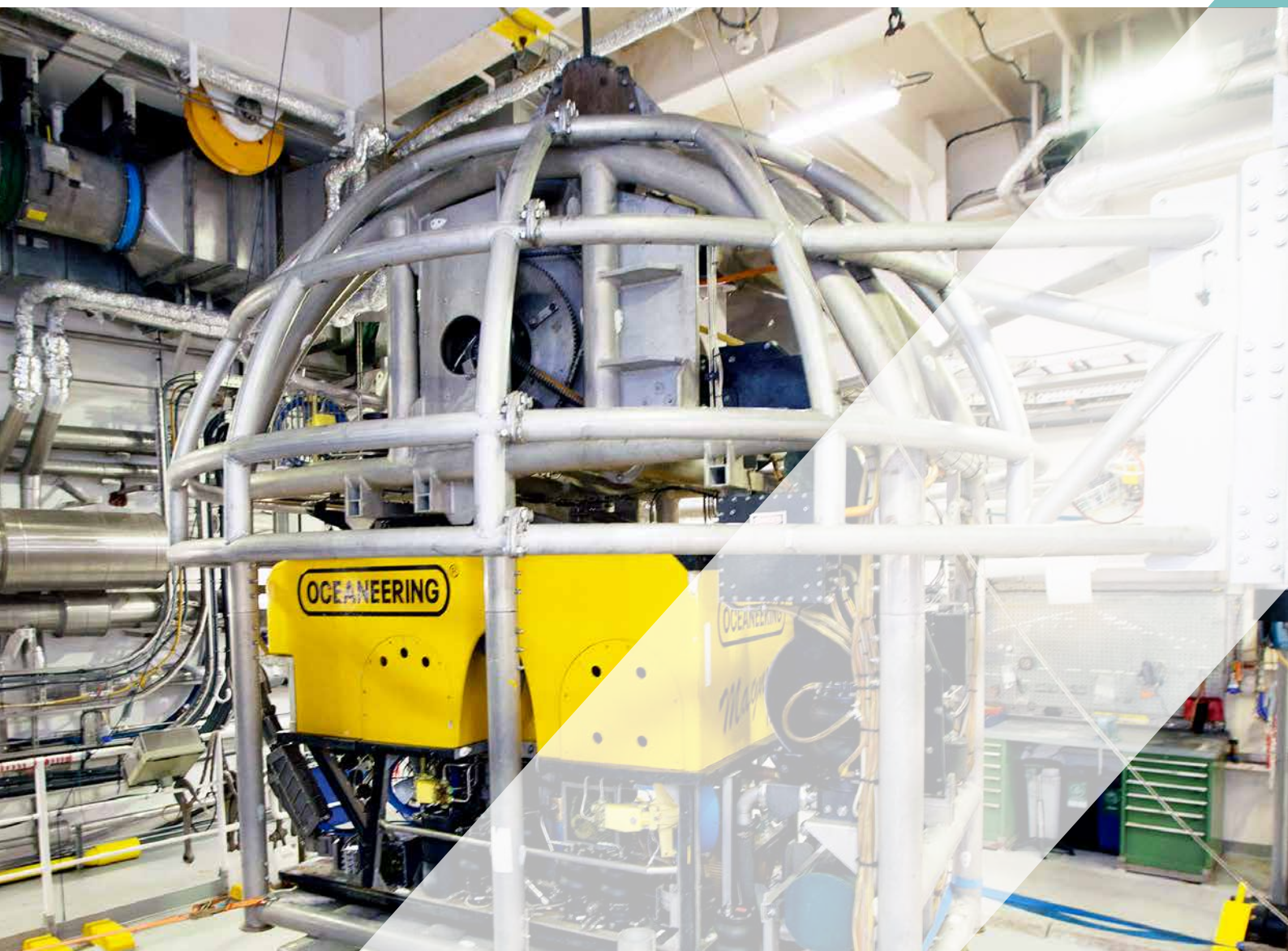
## **DP/MARINE:**

The rig has extensive experience with spudding on DP for station keeping while connecting to pre-laid anchors, before continuing in Posmoor ATA mode. The rig has also performed P&A of top-hole sections on DP. This capability reduces time spent on anchor operations with up to 2 days.

## **ROV:**

The ROV facilities, with integrated control room for ROV pilots and a well sized ROV hangar is functioning in an effective manner. The launching is set up by using a cursor system, placed close to the rig centre.

Constant tension wires to pontoon enables the ROV to be launched up to 4 m significant wave height. Launching and recovery above 4 m significant is pending wave and wind direction.





# Features and capabilities

Island Innovator is equipped with a NOV HP ram-rig type cylinder rig with hydraulic active heave compensation and separate pipe racking tower. It has NOV BOP handling system and a five ram BOP stack from Cameron. The rig is purposely built for production drilling on subsea templates with large designated area for storage, and a skidding system to bring XMTs in position for the moonpool elevator.

The improved rig hull design increases the variable deck load capacity significantly. In combination with a lowered setback location design, this allows for transiting to site with fully loaded setback, which in hand improves rig efficiency.



Film\_2





# Rig specifications

The Island Innovator is a 6th generation, GM4000 WI Enhanced design, 2012 built semi-submersible drilling, well intervention and completion unit. The rig is currently equipped to operate in water depths from 60m up to 600m (drilling), and 1200m (well intervention and completion riser).

Island Innovator is designed for the Norwegian Continental Shelf and for worldwide harsh environments, and upgraded according to OTG 013 and 014 requirements.

**Station keeping is maintained by an 8-line mooring system or by dynamic position maintained by 6 fixed pitch, variable speed thrusters (DP3)**



## MAIN DIMENSIONS

Overall length	106,8 m
Overall width	75,8 m
Helideck (D value)	Sikorsky S 61/ S 92/22,2 m
Moonpool dimensions	22,1 x 7,2 m

## DISPLACEMENT

Operating displacement	38 853 mT
Survival displacement	36 976 mT
Transit displacement	28 649 mT

## STATION KEEPING

<b>DP system</b>	Kongsberg Maritime SDP-22 + SDP-12 back up.
<b>Thrusters</b>	6 x Wärtsila LIPS type FS3500-571/NU
<b>Thruster motors</b>	6 x 3800 kW Siemens AC
<b>Mooring</b>	4 double Rolls Royce winches SL400-2T

## ACCOMMODATION

110 single bed cabins

## STORAGE CAPACITIES

Drill water	2038 m <sup>3</sup>
Liquid mud	726 m <sup>3</sup> +195 m <sup>3</sup>
Bulk Bentonite / Barite	240 m <sup>3</sup>
Bulk cement	240 m <sup>3</sup>
Base oil	980 m <sup>3</sup>
Brine	195 m <sup>3</sup> +195 m <sup>3</sup>
Variable deck load	4 800 mT
Variable deck load – transit	3 800 mT
Transit speed	8 knots

## MACHINERY

<b>Engines</b>	6 x Wärtsila W 12V32, 5760 kW ea., 720 RPM
<b>Generators</b>	6 x Siemens 1DK4536-8ALO5-2, 4840 kW ea. 6,5 kV 60 Hz
<b>Emergency power</b>	1190 kW Mitsubishi S12R-MPTA – 1500 kVA Newage Stamford PM734C
<b>Power distribution</b>	690V essential, 440V, 230V

## SAFETY EQUIPMENT

<b>Free fall lifeboats</b>	4 x 55 persons
<b>Mob boats</b>	2 x Norsafe Mako 655
<b>Liferafts</b>	8 x 35 persons



# Specifications Drilling / Subsea

## BOP

BOP Stack	Cameron 18 3/4", 15K EVO Stack
Annular Preventer	2 ea. Cameron DL, 18 3/4" 10K
Shear Rams	2 ea. Extended double Ram (Shear seal & CSG Shear)
Pipe Rams	3 ea. Fixed & variable Rams
BOP Control System	Cameron EVO, Subsea Pods for all functions

## RISER

GE Vetco MR-6E 21" with KT ring adapter – Riser System
50ft joints – 16,6m
2 x 3" ID Choke lines, 4" boost line, 2 x 3" ID hydraulic return lines
650m riser (70% with buoyancy)

## DERRICK

Hook Load Capacity	650 ton (590mT)
Base	14,8m x 6,8m (45 x 21 ft)
Height	55m (165 ft) operational working height 36m
Racking Capacity	192 std drillpipe (5760m) + 16 std drillcollar
Hoisting system	NOV Cylinder Rig 4600 HP – hydraulic active heave compensated
Top Drive	NOV HPS 750-E-AC-SG – 680 T (590 mT) 1000 hp. Max cont. Torque 54 500 ft. Lbs at 0-94 RPM. Max 188 RPM
Rotary	National VBJ-RST, 60,5" opening. 1000 mT
Traveling / crown block	NOV sheave cluster – 590 mT
Cyber Base Drillers Control	NOV cabin system with 2 operating stations

## PIPE HANDLING SYSTEM

Pipe Racker	NOV Hydra racker HR-III
Iron roughneck	NOV MTP-200 with mud bucket 200kNm break out torque Range 3 1/2" - 9 3/4"
Catwalk machine	NOV PR25-50LS with tail in arm. Fully equipped for tubular and riser handling
Drill floor manipulator arm	NOV DFMA-P-6750. 3 1/2" - 9 5/8" guide head and 48" riser guide head
Pipe handler crane	NOV Pipe deck knuckle boom crane. Capacity: 12 mT

## MUD TREATMENT AND SUPPLY

Mud pumps	3 x NOV HP-P-220, 2229 hp, 2044 lpm (6" liner) /7500 psi each
Shale shakers	5 x VSM 300 Brandt shakers
Degasser	M-I Swaco CD 1400 degasser
Mud mixing	NOV fully automated mixing system Sack slitting and big bag slitting machine

# QHSE

Island Drilling aims to be an attractive and modern company. We believe in improving the attitudes of our employees on an individual level so everyone feel ownership to, and is committed to, QHSE matters. This way, the organization is systematically steered towards an innovative and robust safety culture.

Island Drilling always seeks for improvement with regards to QHSE-matters, and maintains high focus in reduction of our ecological footprint. We also make all our operation performances safe and effective to reduce the risk for our employees and customers.

An extensive energy management plan has been established, where the top priority is to work systematically on reducing the company's carbon footprint. We are also continuously improving chemical handling, and our main QHSE focus is Energy Management and Human Factor Awareness.

Island Innovator has high standards with regards to working environment, welfare for the employees, and high safety culture onboard. We believe that satisfied employees are focused employees, and focused employees have a lower risk for failure.

## OF SPECIAL ADVANTAGE FOR INNOVATOR IS:

- Well-functioning welfare club
- Indoor shooting range (simulator)
- Internet café
- The most well-functioning hospital in the business, prepared for video consultations from specialist onshore
- High focus on good and healthy food
- Good training facilities





# COMPANY HEAD QUARTERS

Situated in Bergen within close distance from the airport

Island Drilling Company AS

Sandslimarka 61– 63

N-5254 Sandsli

Norway

Contact Island Drilling:

E-mail: [post@islanddrilling.no](mailto:post@islanddrilling.no)

Phone: +47 55 20 30 40



**ISLAND DRILLING**



[www.islanddrilling.no](http://www.islanddrilling.no)



Film\_3

## SPECIAL THANKS TO:

**We would like to use this opportunity to thank all our suppliers and partners who contributed to this brochure.**



**Bunker Oil  
Bergen**

**Salg av**

- Drivstoff
- Smøreoljer
- Filtre
- Vaskestoff
- Batterier
- Mobilt smøreolje

Stamsneset 100, 5252 Søreidgrend • Tlf. 55 11 95 30  
[ekspedisjon@bunkeroilbergen.no](mailto:ekspedisjon@bunkeroilbergen.no) • [www.bunkeroilbergen.no](http://www.bunkeroilbergen.no)



## OFFSHORE - ONSHORE - SUBSEA

Offices - Workshop- Warehouse - Course facilities



**Torq/Lite Europe AS**

[www.torqlite.eu](http://www.torqlite.eu) - Tlf. 51 31 33 90



**Techno Dive** is your partner for Safe and Efficient Subsea Work. We have global experience gathered throughout the years.

[www.techno-dive.no](http://www.techno-dive.no)

**STAY COMPLIANT,  
SAFE AND UP TO DATE**  
with NAVTOR's unique and  
award-winning e-Navigation Suite



[navtor.com](http://navtor.com)

**NAVTOR**   
e-Navigation made easy



**RTC  
OFFSHORE**

## Seasoned professionals within Oil & Gas

RTC Offshore AS offers premium qualified consultancy to the Oil & Gas industry, both on short- and longterm basis.

Our objective is to supply the right personnel with technical skills and knowledge to our customers satisfaction.

We supply consultancy services within:

- Drill and Well Services
- Subsea and Maritime
- Administrative Functions (Logistics, Radio Operator, Offshore Nurse etc.)
- Process Technology
- Engineering/Planning (El, Instruments, Automation, Process, Safety)

We are key on HSE, quality and development. Our field of delivery is both national and international to operators/contractors.

Certificates and Qualifications:

NS-EN ISO 9001:2015

MLC 2006, regulation 1.4

Epim jqs

Achilles jqs

WEB: [www.rtcoffshore.no](http://www.rtcoffshore.no) - LINKEDIN: [www.linkedin.com/company/rtc offshore](http://www.linkedin.com/company/rtc offshore)





**polyflex**

Polyflex Black Eagle  
Hose Assemblies up to 2"

Hydrafit AS

Bleivassvegen 30F, 5347 Ågotnes, Norway

Due to its equipment, quality of work, test operations, documentation, qualification and training, the above-stated company is certified as a "Parker Hose-Assembly Manufacturer" for Black Eagle / Golden Eagle hose assemblies up to 2" ID.

*Sebastian Leggin*

Sebastian Leggin  
Division Distribution Manager  
Polyflex Division Europe

*Christian Wacker*

Christian Wacker  
Trainer  
Polyflex Division Europe



ENGINEERING YOUR SUCCESS.

Certificate

## Unik new product

### DNV TypeApproved 2" Black Eagle Hose Fig1502 API 7K FSL-1 Mud & Cement

#### Benefits:

- Flexible Hose up to 690 Bar WP\*
- Hammerlug Male/Female end Connections
- Increases User Safety
- Reduces on-site assembly cost
- Reduces on-site assembly time
- Easier on-site Hook Up,  
reduces or eliminate need of scaffolding
- Reduces potential leak points
- Reduces cost of maintenance
- Reduces need of Chicksan Hard pipe





A drilling contractor for the future



**ISLAND DRILLING**