



Subsea without limits

**Decom North Sea
August 2019 Networking Event**

Presented by Eddie Grant, Sales Executive

David Will, Engineering and Tom Smith, Projects

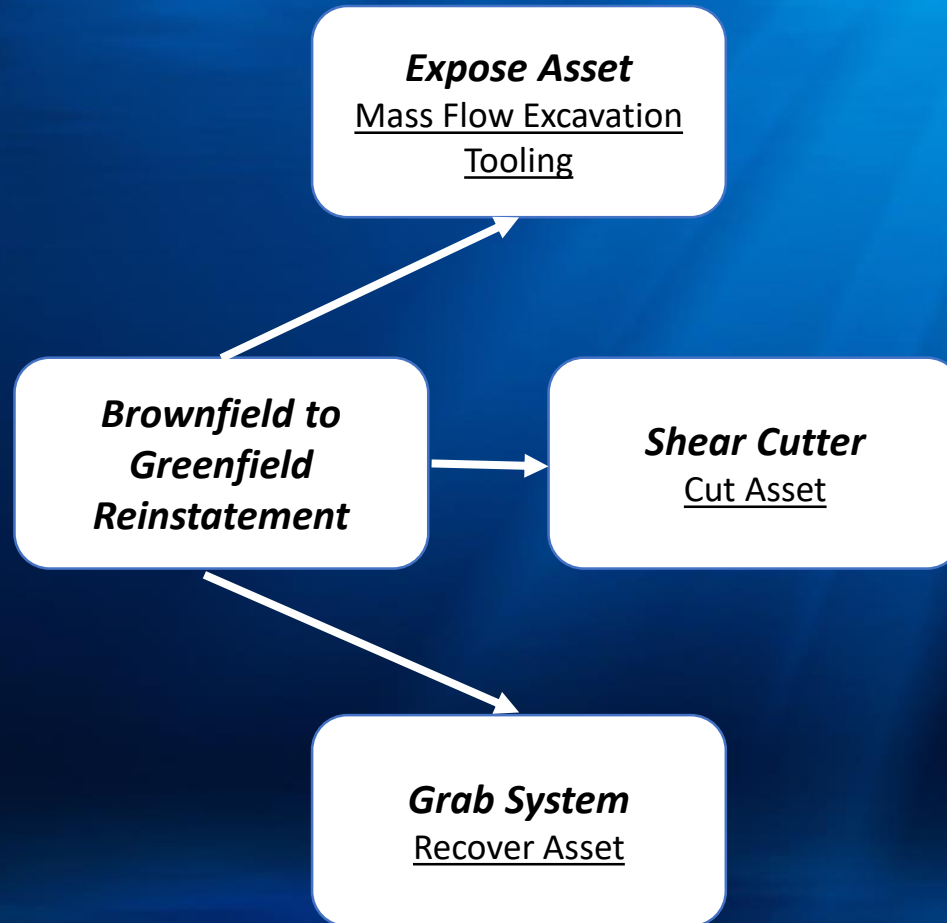
www.marinsubsea.co.uk

What Services do Marin™ Provide?

- Decommissioning Solutions
- Bespoke Consultancy
- Global Operational Services
- Troubleshooting
- Emergency Response
24/7/365



One Stop Shop Concept
Comprehensive Decommissioning Package



- Minimal multi-disciplined crew required to run the full package for 24hr operations
- Reduction in requirement for deck space and crew accommodation
- Reduced timescales for scope of work due to operational efficiency
- Surface operated remote tooling
- Patented plug and play compatible technology
- Proven 30 years track record

Marin™ design, manufacture and operate the largest range of full ocean depth excavators (MFE) globally
EVO 250,000, EVO 750, EVO 250, EVO 150 to meet Client requirements



- Environmentally friendly – 100% sea-water driven
- Deployable by drill-string, handling system, hose or crane
- Unique patented add-on V-Jet System increases performance in targeting challenging soil conditions
- Non-contact so can be used on live pipelines, enabling production to continue safely during operations

EVO™ BTE 80 WROV Unit

Marin™ Balanced Thrust Hydraulically Operated Excavation Unit is attached to a work class ROV. The BTE 80 can be made neutrally buoyant and is only limited by the operational depth of the ROV's capacity.

The BTE 80 unit is not surface driven, which means there is no requirement for deck space, enabling a more compact spread.

A high volume column of water is directed at the work face, the thrust of which is counterbalanced by an equal and opposite flow from the top of the tool.

Primarily utilized in light and non-cohesive soils.
Applications include burial or de-burial of:

- Flexibles' and pipelines <10"
- Subsea structures
- Unexploded ordinance
- Wreck excavation



Shear Cutting Services EVO™ 30" Cut Capacity Shear

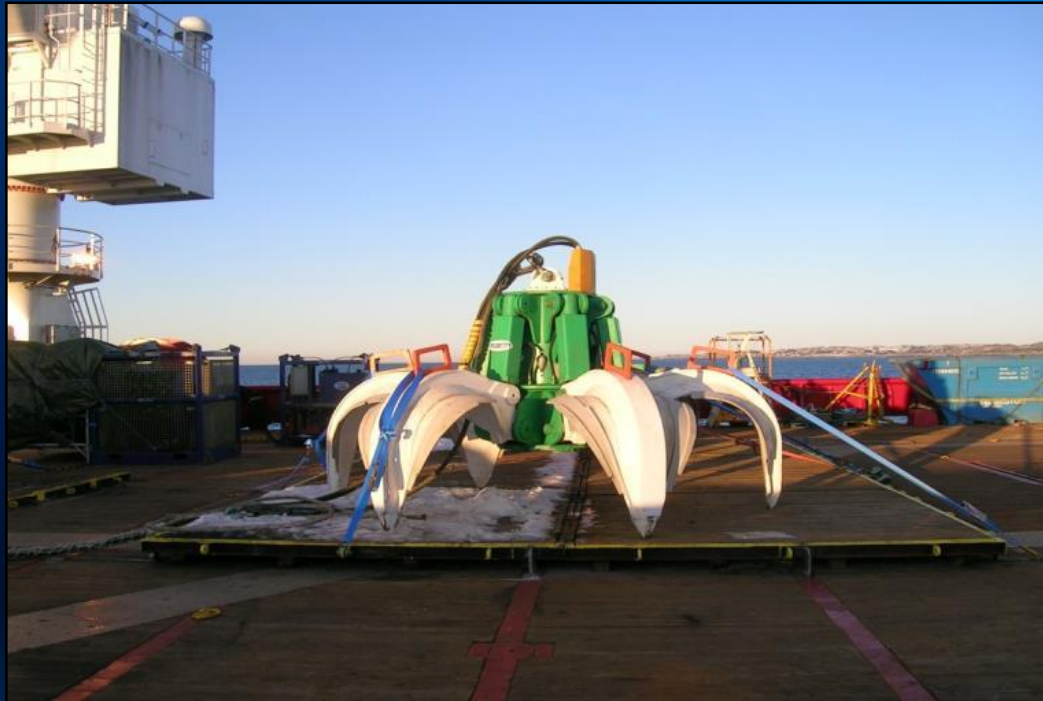
- Patented blade design
- Capable of shearing multistring reinforced pipe $\leq 30''$
- 450te of cutting force
- 90 sec cutting time



*60" EVO™ Super Shear – Currently Under Development
Capable of shearing multistring reinforced pipe $\leq 60''$
Cutting force – 1555 Tons*

MARIN RECOVERY SYSTEMS

MRS GRAB - purpose built and designed specifically for mattress and debris removal

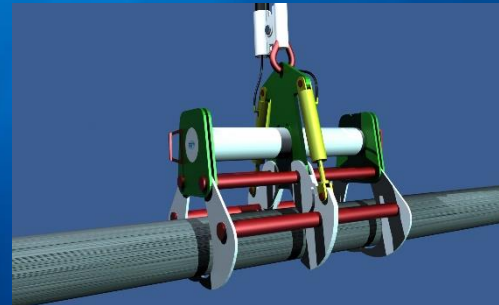


TOOLING DESIGNED TO HIGH SPEC

- Ability to operate in variable sea states and challenging subsea environment
- Deployable via crane wire or drill string
- Hardox 400 Tips on tines
- Scuttle plate sure close capture points
- Three operational modes – hydraulic, water or bio oils
- 6 clasp, 30 second closing, can be surface controlled or subsea ROV hot stabbed
- Range of 8 different methods of safe recovery available

MMRS – PIPELINE/TOWED BUNDLE RECOVERY GRAB

- 3.5m open span, capture volume >12,000 ltr
- Weight: 26Te in air (variable)
- 50 - 100T Workload
- 2 x 3,000 psi cylinders
- Designed with safety auto lock (pressure off failsafe)
- Surface supply or deep water hot stab functions
- Variable tine configuration, ability to fit sister tines to parents
- Bulk debris recovery
- Clasp force grip at 800te
- Purpose built for Decommissioning Market
- Track record proven
- Tip closing force 1000te puncture force
- Maximum pipeline capacity 46" OD (variable)
- Deployable via crane wire or drill string



MDRS: Mattress - Pipe – Boulder & Debris Grab

- 9.5m open span (4m closed)
- Weight: 19te in air
- 50-100T Work Load – High Volume.
- Cubic capacity - 40m³
- Deployable via crane wire or drill string
- Operate in variable water depths for recovery of buried mattresses
- Pipeline gauges, locks and magnetic sources can be fitted
- 6 x 3500 psi cylinders. Plus contingency seals kit
- Designed with safety auto lock (pressure off failsafe)
- Surface supply or deep water hot stab functions
- Minimal subsea environmental impact from recovery operations
- Variable configurations of tines, tips, gauges and wedges
- Ability to load and stack multi mattress, operational efficient and reduces costs
- Capable of bulk debris, incl. wire mesh netting & harsh material relocation, mattress removal or boulder recovery





Marin™ Quality Management Systems

- Marin™ Ltd Quality Management Systems are in accordance with globally recognised ISO standards.
- Marin are proud of their zero LTI record spanning 30+ years

Marin™ Ltd adhere to ISO 9001 Quality Standard

Marin™ Ltd adhere to ISO 14001 Environmental Standard

Marin™ Ltd adhere to OHSAS 18001 Health & Safety Standards





Closing Summary

Marin TM Ltd would be pleased to welcome you to our presentation stand and answer any detailed questions regarding our tooling applications. Some additional services are detailed below for your information.

- Claycutting/Escarpment
- Pipeline Lowering
- Material Placement
- Wellhead Top Hole Clearance
- Site Preparation
- Seabed Engineering
- Emergency Response BOP Recovery
- Spud Can Excavation
- Freespan Rectification
- Unexploded Ordnance De-Burial
- Diver Hand Held Tooling Solutions
- Cable Burial/Deburial
- Pile Debris Removal
- Jet Sled – Cable (De) Burial



Thank you for your time and attention to our presentation.

Marin would welcome further questions.



Please call to arrange to visit us at:
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(01358) 722526

Located in the Energetica Corridor