



Pipeline Trenching

Land & Marine has both subsea and onshore pipeline trenching capabilities. For over 30 years we have designed and developed a diverse range of trenching machines, including pioneering developments at the forefront of subsea engineering technology.

From subsea trenching using ploughs, trenching machines and jetting sleds to subsea rock trenching and onshore trenching machines suitable for rock and soft material, Land & Marine has tremendous experience. Using our engineering and design expertise, we are continually looking to adapt our machines and improve our techniques to offer trenching solutions that best suit individual project requirements.

Provided by the experienced team from Land & Marine

www.landandmarine.com

Did you know?

- In 1960 we developed the first ever submarine pipeline plough. This plough was positioned immediately ahead of a 2.4km outfall pipeline and pulled offshore from Newport in South Wales
- Using multi-pass techniques, our powerful TM III and TM IV trenching machines were regularly used to achieve up to 3m burial depths on major pipeline landfall projects
- We were the first company to plough a pipeline in the North Sea. In 1982 we ploughed the 70km 610mm BP West Sole pipeline
- In 1983/84, Land & Marine cut twin 45km trenches across the English Channel using our 175 Tonne Rock Trenching machine RTM III as part of the contract to connect the UK and French electricity grid. In recognition of this achievement we received a Queen's Award for Technology
- In 1984, we designed and built a fully remote controlled and diverless plough; the PBP3, for which the company was presented with an OTC Technology award. Later upgraded to PBP4 this very successful design was a fore-runner of today's ploughs
- We have light weight subsea trenching machines suitable for use in remote locations. With a minimum of specialist support equipment we have designed our TM5, TM6 and TM7 series of jetting sleds for use around the world

What Techniques do we use?

- Land & Marine has extensive experience of trenching subsea pipelines in the inter-tidal zone, for shore crossings, river crossings and in deeper waters
- Land & Marine also operate onshore trenchers and in 2006 we used one of the largest trenchers in the world, a Tesmec 1675XL to cut a 1.5m wide 3m deep rock trench on various sections of one of our UK gas pipeline projects

Today we use pre- or post-trenching methods depending on the application, our main techniques being:

Subsea:

- Jetting Sleds
- Trenching Machines

Land-based:

- Chain trenchers (Tescmec 950 and Tescmec 1675 XL)
- Bucket Wheel trenchers (Trencor 930 HD)

For more details on this and other services visit:

www.landandmarine.com

What can Land & Marine offer you?

- Highly experienced staff with an extensive background in a wide range of trenching techniques
- Expertise in the design and building of subsea trenching equipment. We can if required, specify, design, construct and operate a machine to suit your particular project
- Land and hydrographic survey capabilities
- We use bespoke software to evaluate pipeline trenching stresses
- We have an extensive range of marine support equipment including winches and barges so we can provide full operational support

What are the ingredients for success?

- A strong tradition of trenching and a wealth of experience to back it up
- Tried and tested equipment, methods and procedures
- Engineers and technicians with a professional attitude and flexible approach
- Project Management expertise
- The capability to operate anywhere in the world

This is Land & Marine

We are proud of our reputation and flexible approach. Whether a lump sum, direct hire of equipment and operating personnel or on an engineering and project management basis, we will always try and tailor our solutions to meet the Client's needs, trenching or burying pipelines to the very highest standards.

Land & Marine operate to the highest quality, safety and environment standards and is accredited to ISO 9001, ISO 14001 and OHSAS 18001.

Land & Marine

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Products & Services Available From Land & Marine include - DOWNLOAD FROM WEBSITE

Marine Pipelines

Landfalls (or shore pulls)
Outfalls and Intakes
Crossings
Marine loading lines and SPM's

Installation techniques include:

Bottom Pulling and Towing
Off-Bottom Pulling and Towing
Controlled Depth Towing
Flow-Lay®

Engineering

Feasibility Studies
Project Engineering
Detailed Design & Analysis
Tank Engineering Services
Waste Water Engineering

Plant & Equipment Hire

Linear and Drum Winches
Trenching Machines
Pipe Handling Equipment
Work Barge

Other Services

Cross Country Pipelines
Major Process Plant and LNG Pipework
Aviation Refuelling Systems
Tank Fabrication
Tank Seals
Horizontal Directional Drilling
Project Management
Land & Hydrographic Survey