Maritime Developments is tackling the oil market downturn by targeting one of the major costs in offshore operations - vessel time.

The company’s portable flex-lay spread, delivered in second half of last year to Technip UK, has already proved itself as a game-changer in pipelay operations, by significantly reducing vessel downtime during its first riser installation campaign in the North Sea.

Cuts in vessel utilisation were achieved thanks to the forward-thinking design of the equipment, focusing on reducing mobilisation and demob time in port, as well as increasing operational efficiency while at sea.

The overside configuration of the spread increased the operational weather window; while the compact footprint of the MDL integrated systems, compared to a typical HLS, allowed the operator to carry more product on board, reducing the number of port calls required for reloading – and meaning smaller vessels could be used for similar operations going forward.

“We recognised long ago the premium of the vessel back deck space and the true cost of slow mob and demob operations,” said Derek Smith, CEO of MDL. “Reducing mission time and back deck footprint have been the key drivers for our design from the onset, and in this current climate our equipment is even more relevant than ever.”
Portable spread creates new opportunities

With its fully modular systems, easy sea-fastening and Plug & Play functionality, the portable MDL Spread has become the single solution needed for a variety of offshore flex-lay projects and vessel types.

Consisting of a portable vertical lay system (PVLS), with MDL patented 4-track tensioner, third-generation reel drive system (RDS) and deck radius controlling equipment, the spread can be installed on any vessel of opportunity to turn it into a pipelaying solution, for the duration of the project.

Once complete, the systems can be easily demobilised and reinstalled on another vessel for a different job—which means better fleet utilisation and more global opportunities within the operator’s reach.

This flexibility of use is achieved thanks to the modular design of MDL equipment, which allows all of its systems to be transported by road, and to meet the product reels at their home ports—including the company’s unique vertical lay system.

The PVLS is the only truly road-transportable vertical lay system on the market, and can be reassembled in a three-day operation.

The vertical orientation of the tower lends itself to a compact layout allowing more mission equipment to be carried on deck; all the ancillary equipment is pre-installed on the system before being lifted onto the vessel, which allows for quick mobilisation and demobilisation once the project is complete.

The system can be mounted over a moonpool or over the side of the vessel, which often increases the weather operational window. Additionally, the efficient layout of the tower allows direct access to the firing line—all of this contributing to reducing mission time.

Further savings are delivered by the MDL tensioner, which can open two tracks when in vertical, presenting an unparalleled opening during product retrieval or abandonment.

This versatile tensioner can also be utilised on other flex-lay projects outwith the PVLS, operating in either horizontal mode or on an incline.

Complementing the spread is the company’s third-generation RDS, powered by a built-in powerpack. Supplied with tracks with integrated reel cradles and reel rigging pad eyes, this system eliminates the need for the product reels to be sea fastened to the deck, which significantly reduces vessel downtime during mobilisation and demobilisation operations.

Since the successful conclusion of the MDL Spread’s first project, the company has developed a range of variations to the original concept, taking into account different requirements for line pull, water depth and specific region demands to suit its global client base.

Contact MDL today to find the portable spread for your business’ needs.
The orange fleet set off to work early in the year, as the demand for Maritime Developments’ cost-cutting technology reaches new peaks.

The latest addition to MDL Rentals’ portfolio, the company’s third-generation reel drive system, began its 2016 campaign with a 30-day pipelay project offshore Nigeria. The 350-tonne portable system firstly traveled to the Canary Islands in modules, where it was reassembled by a team of MDL offshore technicians, before resuming its journey to Africa.

Just like its predecessors in the MDL range, the latest RDS features an automated raising and lowering system which negates working at height.

A unique feature of the third-generation system is its integrated electro-hydraulic power pack, reducing the back-deck footprint taken up by the solution. The RDS is also supplied with tracks with built-in reel cradles and reel rigging pad eyes, eliminating the need for the product to be sea-fastened to the deck, which significantly reduces vessel downtime during mobilisation and demob operations.

For its first 2016 job, the 350Te RDS was accompanied by two MDL deck deflectors in a vertical frame, with a built-in load monitor to ensure safe back tension throughout operation.

The spread is run by an experienced team of MDL technicians, which operate the company’s hire equipment as well as MDL clients’ own equipment.

Elsewhere, the company’s patented 4-track tensioner has secured a full schedule for 2016 and will be accompanied by MDL reel drive system on a number of global projects.

“In the current market, where generating Capex can be challenging, our hire fleet allows operators to benefit from MDL equipment’s cost-saving features,” said Mike Gaskin, commercial director at MDL.

“These orders demonstrate the growing demand for our systems globally, and we are open to working closely with clients on providing them with the best solutions for their budgetary needs.”
The MDL kit for your flex-lay fleet

Forward Thinking
Back-Deck Systems

Products
- Tensioners 3Te to 150Te/2 and 4 track
- Reel Drive Systems 30Te to 500Te (reel + product)
- Compensators vertical or horizontal
- Overboarding Chutes
- Winches
- Reel Under Rollers up to 400Te capacity
- Small Turntables for flying leads/flexible jumpers
- Spoolers & Level Winders
- Radius Controllers
- Horizontal / Vertical Lay Systems
- Product Deployment Systems

Systems & HPUs/EPUs
- Manifold Systems & HPUs
- Control Systems & EPUs

Services
- Full Life of Product Support/Service
- Maintenance and Repair
- System Adaption/Upgrades
Portability reaches new heights

With the growing market demand for the MDL PVLS, the company has set out to deliver an even more flexible solution, for even wider applications.

Since the delivery of the 75-tonne system, the MDL design department has been working on boosting the PVLS, to cater for the 150-tonne line pull market.

The latest development offers the best of both worlds: a modifiable portable vertical lay system, that can be upscaled or downscaled between 50Te and 170Te line pull on case-by-case basis, depending on individual project requirements.

Despite the increase in size, the system still features the same cost-saving specifications as its predecessor: it is fully road-transportable, can be lifted onboard the vessel fully or partly assembled using the vessel's crane and can operate either via the moonpool or over the side or stern of the vessel.

“The success of our first PVLS has whet the appetites of the industry for a portable VLS that is not tied to a single vessel or geographical region,” said Derek Smith, CEO of MDL.

“We have used the experience from the system’s first missions and combined it with our in-house expertise to develop an upgradeable solution that can be modified to suit the client’s varying flex-lay needs.

“This means both vessel owners and operators – particularly those who run global projects – can benefit from the system’s cost-cutting features utilised at a larger number of offshore opportunities: in different basins, water depths and line pull requirements.”

The larger, double-tensioner system will be available with optional service cranes, A&R and PLET handling systems.

“Ingenious: Scaled-up PVLS doubles offshore opportunities

Putting innovation into intervention

Maritime Developments’ bespoke integrated deployment package is set for entry into the light well intervention market this summer.

Designed to handle the ultra-durable m-pipe by Magma Global, the m-IDP is currently in the latter stages of manufacture at MDL Peterhead premises, where it will be fully assembled and tested.

It will then be dismantled for road transit to Magma’s base in Portsmouth, where it will be rebuilt and installed with the carbon fibre and PEEK polymer pipe for its first job.

The m-IDP is a compact multi-function system for installation, retrieval or storage of the m-pipe, combined of an integrated reeler and tensioner, capable of operating either in vertical or horizontal orientation.

Thanks to the diverse functionality and compact footprint of the m-IDP system, combined with m-pipe’s light weight and unparalleled capabilities in HPHT environments, the package presents a unique solution capable of significantly reducing well intervention costs.

Compact: m-IDP is a self-contained system
MDL opens door in America

Maritime Developments has opened a new office in the United States to cater for its growing client base across the Atlantic.

Operating as MDL Americas, the Houston-based business will focus on developing the company’s relationships in the region and building the MDL brand overseas.

Heading the new entity is Mark Williamson, who joined the company as president, bringing in years of business development and senior management experience in the marine industry around the globe.

“I am thrilled to be joining such a vibrant business at a time when Maritime Developments is ramping up its international activity,” Mark said. “This region offers some great opportunities for MDL and I am looking forward to working with the company’s existing and future clients on delivering the best engineering solutions for their project needs.”

The new office will become a foothold for the company’s growing global business, adding to its established manufacturing and business development bases in the north-east of Scotland.

Currently, MDL is delivering equipment to leading offshore contractors across five continents, with increasing demand for its products and services in the American region in recent months.

“We are pleased to welcome Mark as part of our team as I believe he will be a true asset to the company, bringing in a thorough understanding of the US market and sharing our passion for the marine sector,” said Derek Smith, MDL CEO.

“The new base will help us communicate our ideas better with the local industry and allow us to capitalise on the increasing demand for clever, value-driven equipment in this region.”

Vessel order winds down

As the last of four new-built PLSVs was launched in an official ceremony, MDL concluded its biggest winch delivery to date.

The company attended the launch and naming of two remaining pipelay support vessels which have entered the fleet of one of its major clients at the start of the year in Rotterdam, The Netherlands.

Just like their predecessors, the two PLSVs will sail across the Atlantic later this year equipped with a set of MDL purpose-built winches and an Overbender Tensioner (OBT), used to support vertical lay operations.

The fourth and final OBT was signed off at the end of 2015, following the last set of winches delivered ahead of schedule, and completing the 44-system work scope.

All of the winches, delivered to the client in four instalments of 10 and ranging between 5-tonne and 40-tonne line pull, feature electric drives to maximise operability and minimise maintenance costs.
MDL tensioner range continues to grow

Maritime Developments is planning a new, larger addition to its unique tensioner range.

The company’s patented tensioner design has been generating increased industry interest, following the successful application of the solution on the portable vertical lay system (PVLS) in late 2015.

With more companies globally looking to benefit from the solution’s unique time-saving features, MDL has designed an 85-tonne tensioner, adding to the 100-, 75- and 50-tonne designs previously engineered.

The TTS-4/240 features a unique failsafe hydraulic grip system and self-centering active alignment to maximise the safety of the product.

Thanks to its design, patented in 2014, the MDL tensioner can be used vertically, horizontally, or on an incline; while its two track opening offers unparalleled entry for the product, speeding up abandonment and retrieval operations.

Furthermore, the track design facilitates quick changeover of pads when handling products of different diameters, reducing the typical associated downtime by 75%.

“The increased level of interest in our 4-track tensioner comes to show the industry is keen to find new, smarter ways of conducting global pipelay operations, and that MDL equipment is being widely recognised as a market-disruptor in this field,” said MDL operations director, George Mackintosh.

“We are committed to supporting the industry globally by continuing to turn our 16-year experience in the marine environment into cutting-edge technology that reaps returns for our clients on every campaign, wherever they are in the world.”