Unveiled at a client open day at the company’s testing facility in Peterhead, the 110-tonne 4-track pipelay tensioner has been newly incorporated into the MDL Offshore Service, making it the only system of its capacity readily available to take on projects worldwide.

Despite being nearly double the size of its predecessors, the system retains the unique safety and operational features of the TTS-4 range, making it an unparalleled solution for global offshore operators and vessel owners looking to maximise their project opportunities while simultaneously reducing costs. In fact, the solution has already been scooped for its first project for the end of this year with an international contractor in Asia Pacific.

“Ever since we announced our plans to bring to the market a larger model of our patented 50-tonne tensioner, the interest in the system has been on a constant up,” said Mike Gaskin, MDL commercial director.

“This has confirmed that we read the sector’s needs well, and demonstrates our commitment to delivering value propositions to the industry, rather than a single project-oriented commodity.

“Our flex-lay Offshore Service, which includes a highly-skilled team of operators, is available to companies around the world who want to effectively reduce risks and costs on their flex-lay projects.”
Reducing risk with increased tension

MDL has upscaled its patented tensioner to allow larger markets to benefit from the super-safe design.

Featuring a unique failsafe hydraulic grip system, which maintains a hold of the product at all times – even in the event of a hose or HPU failure – the tensioner proves the safest pipe handling solution on both vertical and horizontal projects.

The safety aspect is reinforced by an active self-centring track system, monitored and managed via state-of-the-art control system and software developed by MDL in-house. Profinet architecture provides easy interface with other pipelay equipment on board and facilitates multiple remote readouts where required.

This is also coupled with an extended 5m track contact length on the caterpillar tracks fitted with V-shaped pads, nursing products of varying diameter during deployment or retrieval.

The 110Te system is the biggest delivered by MDL to date, with three 50Te systems preceding it – one of which is currently employed in South East Asia, and another used for operations in the North Sea.

This latest addition to MDL Offshore Service suite complements a smaller, 50Te 4-track system, three reel drive systems (RDS) and an overboarding chute, as well as a range of deck radius controlling equipment, control and power units and ancillary products – all operated by MDL experienced offshore crew.

Read more about it on pages 4-5.

Success story for new RDS

The latest addition to Maritime Developments’ Offshore Service fleet has successfully concluded a long string of projects – two years since delivery to its original client.

The equipment in question is a 400-tonne reel drive system, originally purchased by Ceona Offshore. Although delivered to client in mid-2014, the system remained on MDL’s premises, where it awaited mobilisation on board the client’s new-build deepwater field development vessel.

After Ceona went into administration in late 2015, MDL secured a deal for the purchase of the reel drive in March 2016. Shortly afterwards, the system – now known as MDL RDS 400-02 – was deployed on its first ever mission: to install flexible risers and umbilicals in the North Sea.

Despite the nearly two-year shutdown, the system was fully operational upon launch with updated software, developed by MDL engineers in-house.

Following the successful conclusion of the project, the RDS moved onto its next job, offshore Canada, before returning to the UKCS for further work.

George Mackintosh

“we are extremely proud of this system, which stands testament to the quality engineering behind our equipment, and the value of our durable design,” said George Mackintosh, MDL operations director.

“Although recently our third-generation RDS has been gaining huge interest among operators, our second-generation systems are still a class above the traditional offering on the market, representing higher operational efficiency and safety, coupled with reduced mission time, and therefore campaign costs.”

The 400Te RDS was one of six delivered by MDL in the space of 20 months between 2014-15.
MDL Offshore Service Flex-lay spread marks first anniversary

The MDL flex-lay spread has racked up an impressive track record of offshore work in its first year on the market.

Concluding a busy Spring/Summer period for the company’s Offshore Service, the MDL Spread has completed a long string of jobs in the Northern Hemisphere. A number of successive projects in the North Sea and Canada amounted to more than 170 days of utilisation of MDL’s unique portable solution in its first year – and the system is set for yet more work throughout the Autumn/Winter season.

Forming the spread is the company’s patented 4-track tensioner, used vertically on the MDL PVLS – the world’s only road-transportable vertical lay system, delivered to Technip UK last summer.

The PVLS is complemented by an array of project-specific ancillary equipment, integrated into the tower and linked to the central control system, allowing for a seamless, Plug & Play operation.

Completing the spread are MDL 350-tonne or 400-tonne reel drive systems – depending on the project – and a set of deck deflectors: all together forming a complete surface-to-seabed solution for flexible lay.

The vertical spread was first used to install flexible risers and umbilicals as part of the Kraken field development in a two-phase operation. It then moved offshore Canada to conduct a riser replacement, before returning to the North Sea to complete three more flex-lay projects and initiate a fourth one by the end of August this year.

Thanks to its portable and compact design, the spread did not require additional deck reinforcement on either of the two vessels used for the projects; while the systems’ highly efficient handling, including reduced mobilisation time, and the expertise of MDL’s experienced crew, all allowed for quick turnaround between jobs to maximise the vessels’ utilisation by the client.

“Many of the projects were conducted in remote areas, typically with long-term stays on site, and we were able to switch between customers quickly,” said Derek Smith, MDL’s CEO. “We were operating at the outer edge of the summer season and the spread was still on the move – an indication of how well it handled challenging weather conditions and fit into the customer’s schedule.”

“Couple that with an expert crew that knows it inside out, thanks to participating in the equipment’s delivery process from start to finish – that combination makes for a truly cost-effective pipelay solution for any market.”

“The industry’s understanding of the benefits of MDL design grew at the same pace – one client at a time,” said Derek Smith, MDL’s CEO.

“However, it was that first campaign of a complete MDL flex-lay spread in 2015 that truly demonstrated the time and cost savings achievable with state-of-the-art equipment designed to be the most portable, versatile and user-friendly.”

MDL PVLS: The world’s only road-transportable vertical lay system
Linking back deck to seabed...

Forward thinking back-deck systems

Products
- Tensioners
- Reel Drive Systems
- Compensators
- Overboarding Chutes
- Winches
- Reel Under Rollers
- Small Turntables
- Spoolers & Level Winders
- Radius Controllers
- 150Te 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 Adaptation/Upgrades
Not long after delivering the most innovative reel drive system yet, Maritime Developments is introducing an even more versatile and cost-effective solution to the flex-lay market.

Nearly six years after delivering a 3-tonne flying lead turntable to Subsea 7 UK, the MDL manufacturing team set out to build a larger version of the system for the client’s American business.

Now, the new, 12-tonne unit has been delivered, together with a dedicated power pack, destined for both onshore and offshore operations across the Atlantic.

When the inaugural third-generation RDS successfully completed its maiden project in late 2015, it quickly became the in-demand flex-lay solution of MDL clients. The unparalleled compact footprint and minimum sea-fastening have proven to reduce vessel time in port and mission time at sea, resulting in a tangible cost saving for the operator.

Now, MDL is expanding the design to allow for scaling up of the system – which will mean an upgradable RDS that could handle any reel weight up to 500 or 800-tonne. In other words, one system for varying project requirements.

“Innovation is ingrained into our DNA, so once we demonstrated that the third-generation concept did exactly what it promised, we couldn’t stop there,” said Derek Smith, MDL CEO.

“It was clear the system was the preferred solution for the industry, but the 350-tonne unit that we launched doesn’t cater for all the clients that would like to use it.

“We knew that the key to true cost savings in flex lay is versatility, so we looked at how we could develop the third-generation concept to work on a wider range of projects – and we came up with this latest design iteration.”

The system can be upscaled or downscaled for individual projects by removing or adding modular sections to meet the individual project requirements.

Over the years, the company had developed the original reel drive system into an actual money-saving machine, making it easier and safer to use than ever before.

By making the towers self-supporting (eliminating the need for the towers to be chained together), as well as introducing wireless remote control, an automated raising and lowering system and automated clamping system, MDL was able to improve on the equipment’s efficiency when operating reels or moving between reels – effectively introducing the second-generation RDS.

But when the oil price crash led many of the company’s clients to seek effective cost reduction, close discussions identified areas where further time saving could be achieved, to deliver reduced mission costs.

With a slimmer base and the HPU integrated into one of the towers, the third-generation RDS takes up less space on deck, allowing for more product to be carried on board, or for the use of a smaller vessel. While with the cradles and chain lashing points integrated into the tracks, the reel mobilisation is quicker at port and offshore.

These unique cost-saving features are reinforced in the new RDS design, set to benefit a larger number and type of projects, without the system ever leaving the deck, or using any vessel of opportunity – but only when required.

The portable system rotates at 2.5rpm and features an integrated torque control system. It is bi-directional and can be modified to handle different types of pallet.

“It was great to get back to the roots of our relationship with Subsea 7 with the delivery of this system,” said George Mackintosh, MDL operations director.

“The original 3-tonne unit was one of our early deliveries to the client, shortly following a lower chute compensator and a deck radius controller – the tallest structure in our portfolio in those days.

“Those were the beginnings of a close working relationship, which resulted in an order of 40 winches and four tensioners for operations offshore Brazil, completed ahead of schedule last year, among others.

“We hope that with timely deliveries like these we can continue to strengthen this connection, despite the challenging times.”

MDL’s latest USA project has brought back memories of an early delivery to one of the company’s longest standing clients.

Nearly six years after delivering a 3-tonne flying lead turntable to Subsea 7 UK, the MDL manufacturing team set out to build a larger version of the system for the client’s American business.

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“We hope that with timely deliveries like these we can continue to strengthen this connection, despite the challenging times.”
Well intervention welcomes the m-IDP

MDL’s flexible pipe deployment and retrieval system is set to reduce costs and risks of light well intervention.

The first MDL Product Deployment System (PDS) was unveiled at the company’s assembly and testing facility in Peterhead, at an open day co-hosted with the system’s receiver Magma Global.

Well intervention project managers and engineers from across the UK were able to take a close look at the system at the event, before attending a technical session explaining the combined application of the system, with Magma’s m-pipe, designed for high flow rate, high pressure hydraulic pumping from the back deck of smaller vessels.

Christened by Magma as the m-IDP (Integrated Deployment Package), the compact, multi-function system is designed specifically for installation, retrieval and storage of 3000 metres of 3-inch bore 15ksi m-pipe.

Thanks to the flexible m-IDP design, m-pipe can be installed over the moon pool, side, or over the stern of the vessel, as required.

“We are pleased to present this custom-built addition to our portfolio, which, combined with Magma’s m-pipe, opens up a whole new proposition for offshore light well intervention,” said Derek Smith, MDL CEO.

“In delivering this system, we combined our knowledge of the harsh marine environment and challenges faced on the vessel’s back deck, with our ethos of delivering the most compact, safe and user-friendly equipment to offshore operators globally.

“This integrated system, coupled with the unique capabilities of the m-pipe, is set to become an invaluable solution for operators with multiple well intervention projects, regardless of their geographical location.”

Steve Hatton, technical director at Magma Global said: “This high performance offshore m-IDP system has evolved steadily from the original concept that we started discussing with MDL over a year ago.

“After a lot of detailed meetings, what we have now is a truly integrated package.

“Thanks to the combination of the m-IDP system, m-pipe’s durability and its ability to withstand high pressures, high temperatures and highly corrosive intervention fluids, the whole system can be reused on multiple intervention projects for many years with confidence.

“Detailed calculations show this combination offers potential savings of 30% in comparison to traditional offshore light well intervention operations, like coiled tube systems.”

“We will continue to work with MDL to support our activities offshore – there’s no doubt MDL are going to be the best people to assist us with the maintenance and operation of the m-IDP, and we see this as a very positive partnership going forwards.”
MDL goes East with new appointment

The company has increased its support to the Asia-Pacific market with the appointment of a business development director for the region.

Paul Douglas has joined the back deck specialist with more than 20 years of experience in global sales and business development roles, including VP at Aquatic Engineering & Construction and business development manager at Subsea 7.

From his base in Perth, Australia he will focus on supporting the company’s existing clients in the APAC area, as well as building the MDL brand in the region.

The appointment comes as the next step in the company’s Global Business Development strategy, looking to make MDL’s cost-saving innovation readily available to wider markets.

“I have known of MDL almost since they started in the oil and gas business and have been watching their progress from the sidelines. They have always impressed me with their fresh approach to the challenges of portable flex-lay equipment, and it seems like the market needs their innovation now more than ever,” Paul said.

“The company’s portable portfolio carries huge savings for vessel owners and operators around the globe, so I am very excited to now become part of this team and drive its global development efforts.”

Derek Smith, CEO of MDL said: “I’m glad that Paul has joined our team – he is a great fit for MDL to build a solid foothold for the company in Asia Pacific.

“Having spent most of his life in the marine industry, he has a thorough understanding of the challenges faced in this sector, and how smart equipment like ours can mitigate or eliminate associated risks and decrease operational costs.

“On top of that, he brings on board invaluable experience of working in different regions around the world in various business development roles – all of which will help accelerate the company’s global growth.”

To date, MDL equipment and personnel have been deployed on a number of offshore and onshore projects in the region, including Malaysia and Australia.