



J-LAY

COST EFFECTIVE DEEPWATER PIPELAYING

Characteristics

- Fully Integrated System*
- Precise Pipe Placement*
- Dynamic Positioning*
- Lower On-Bottom Pipe Tension*
- Quadruple Pipe Joints*

Overview

J. Ray McDermott's (JRM) proven J-Lay equipment is ideally suited for installation of deep-water pipelines, including steel catenary risers and pipe-in-pipe designs. Mounted on our dynamically positioned Derrick Barge 50, the system allows precise control of all operations in water depths beyond the limits of conventional moored systems.

Laying pipe at near-vertical angles reduces distance to touchdown and allows pipelines to be laid to exacting routes, safely negotiating around sea bottom hazards and through complex in-field lines, even at extreme depths. Lines can also be precisely located over pre-installed crossings.

The J-Lay system minimizes on-bottom tensions, helping reduce pipeline spans in irregular seabottom topography. Smaller spans reduce the potential need for expensive and technically difficult corrective measures. Low bottom tension also permits installation of tighter curves.

Most conventional S-Lay pipelay vessels weld 40 or 80 ft. long pipe joints utilizing multiple welding, NDT and field joint coating stations. The J-Lay system handles nominal 160 ft. quadruple jointed pipe sections, and all automatic welding, NDT and field joint coating



operations are conducted in a single, fully enclosed station located at the base of the J-Lay Tower. The result is less time and money spent offshore.

Semi-cylindrical, bracelet-type sacrificial anodes are pre-installed at selected quadruple joints immediately adjacent to the J-Lay collar. The full encirclement stinger clamp supports easily accommodate their passage. The clamp assemblies are opened in sequence to facilitate passage of the J-Lay collar and anode during pipeline lowering operations, allowing all the benefits of J-Lay without deviation from normal pipelay practices.

The 550 kips capacity J-Lay system was built in 1992. In 1998, it was upgraded to 775 kips capacity.

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J-Lay Projects						
Water Depth	Customer	Project	Field	Inches	Miles	Date
2,860	Shell	Auger	GB 426	12	36	4/93
2,860	Shell	Auger	GB 426	12	4	2/94
2,930	Shell	Mars	MC 807	18	28	5/96
2,930	Shell	Mars	MC 807	14	28	6/96
2,930	Shell	Mars	MC 807	5	2	6/96
3,950	Shell	Ursa	MC 809	18	12	3/99
3,708	Shell	Macaroni *	GB 426	6/10	24	5/99
3,300	British-Borneo	Allegheny	GC 298	4	5	5/99
3,300	British-Borneo	Allegheny	GC 298	12	8	6/99
3,950	Shell	Europa *	MC 807	8/12	36	7/99
3,300	Shell	King	MC 807	5	6	10/99
3,400	Shell	Serrano & Oregano *	GB 559	6/10	14	4/01
4,400	Shell	Crosby *	MC 399	8/12	20	7/01

* Pipe-In-Pipe