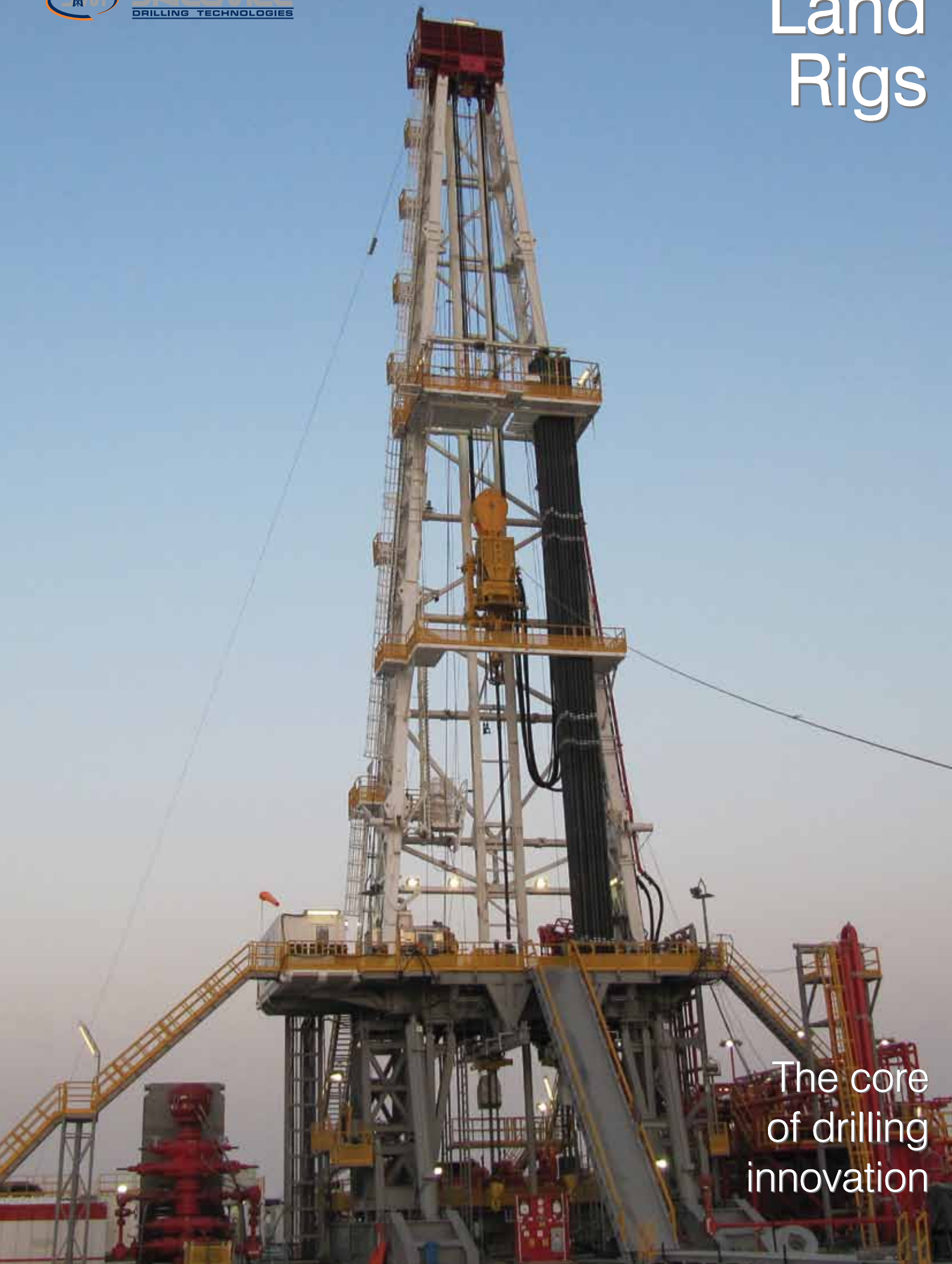


Land Rigs



The core
of drilling
innovation

Land Rigs Series

Drillmec's deep roots in the manufacturing of drilling rigs begin around 1929 and since then the rig designs have been continuously improved by raising the pull-up capacity, enhancing safety, optimizing performance and minimizing environmental impact.

Drillmec starting from Massarenti and Branham's designs produces a full range of land rig packages to satisfy almost any need with successful achievements all over the world.

Drillmec understands that the objectives and conditions of drilling contractors are constantly changing, requiring different solutions in order to help them achieve good results.

Drillmec rigs are available in a wide range of specifications in order to fit custom configurations and capabilities; together with the conventional land rigs illustrated in this catalog, Drillmec produces the *Advanced HH Series* and the *AHEAD Series*, the new frontier of hydraulic drilling rigs for unconventional drilling.

DM SERIES

(Raising Lines)

Swing Lift masts and substructures with hook load capacity from 454 to 907 metric tons (1,000,000 - 2,000,000 lbs)

HSL SERIES

(Hydraulic Raising)

Swing Lift masts and substructures with hook load capacity from 340 to 454 metric tons (750,000 - 1,000,000 lbs)



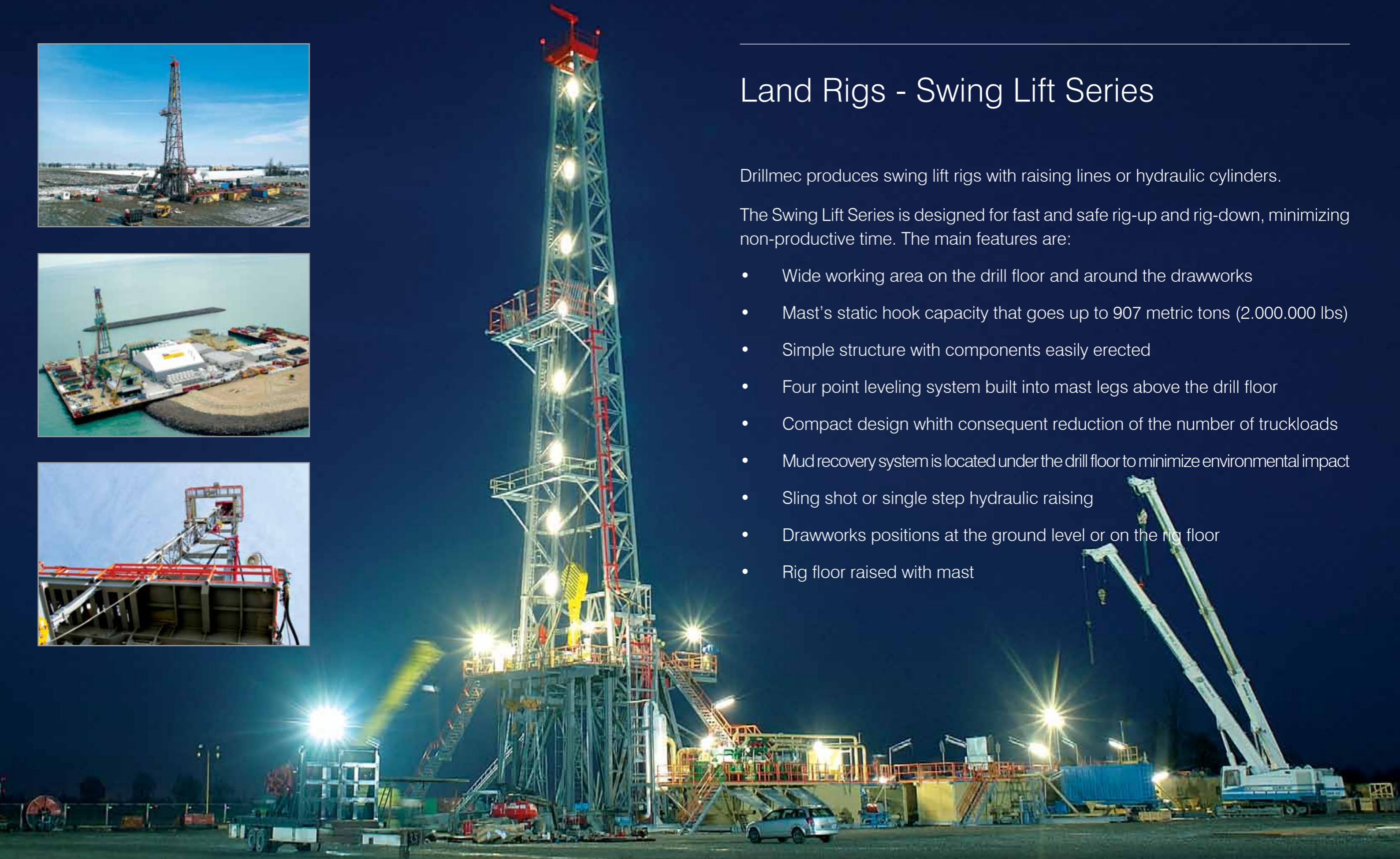


Land Rigs - Swing Lift Series

Drillmec produces swing lift rigs with raising lines or hydraulic cylinders.

The Swing Lift Series is designed for fast and safe rig-up and rig-down, minimizing non-productive time. The main features are:

- Wide working area on the drill floor and around the drawworks
- Mast's static hook capacity that goes up to 907 metric tons (2.000.000 lbs)
- Simple structure with components easily erected
- Four point leveling system built into mast legs above the drill floor
- Compact design whith consequent reduction of the number of truckloads
- Mud recovery system is located under the drill floor to minimize environmental impact
- Sling shot or single step hydraulic raising
- Drawworks positions at the ground level or on the rig floor
- Rig floor raised with mast



Swing Lift - Raising Lines (DM Series)

Model	Hook Load		Lines	Setback Capacity		Drawworks Input Power		Mast Height		Mast Base		Substructure Height	
	mt	lbs		mt	lbs	kW	hp	m	ft	m	ft	m	ft
DM 1000	454	1,000,000	12	272	600,000	1,490	2,000	46	152	9	30	11	35
DM 1300	590	1,300,000	14	360	800,000	1,490	2,000	48	156	11	35	11	35
DM 1500	680	1,500,000	14	360	800,000	2,240	3,000	46	152	9	30	11	35
DM 2000	907	2,000,000	16	454	1,000,000	2,240	3,000	49	160	12	40	14	45

Swing Lift - Hydraulic Raising (HSL Series)

Model	Hook Load		Lines	Setback Capacity		Drawworks Input Power		Mast Height		Mast Base		Substructure Height	
	mt	lbs		mt	lbs	kW	hp	m	ft	m	ft	m	ft
HSL 750	340	750,000	12	204	450,000	1,120	1,500	43	142	3.7	12	9	30
HSL 1000	454	1,000,000	12	360	800,000	1,490	2,000	48	157	11	35	11	35



Cluster/Pad Drilling System

Drillmec designs and manufactures different types of moving systems for its land rigs from 1500 hp to 3000 hp for cluster/pad drilling including skidding systems, dollies, walker system. These systems are designed according to the site's climate and conditions that can be arid, high temperature, high humidity, desert, tropical or arctic. In each condition, the system is designed to operate according to the environment's conditions. In the Russian and cold Siberian areas for example, Drillmec design and entire package using the most common system in area called *Echelon*. It can be single or double type. In the first option one single rail accommodates the drilling package. In case of a double system, power generation and mud system are separate. One deck or double deck options are available to best match customer's needs. The three main components of this kind of rig to be identified are rails, modules and pulling system. Drillmec designs are created to reduce weight and improve time efficiency. All of the modules are equipped with hydraulics for fast rig up. Hydraulic levelling can adjust the mast verticality. Hydraulic pulling jacks are used to move the Echelon system from well to well. Usually the motion is performed on wheels. Drillmec has introduced a new type of rig with rollers. Steel plates or concrete can be prepared under the rails to avoid the leveling of the mast. Other designs are done for other environments such as clusters in the desert where different aspects are considered.

Cluster / Pad Drilling System products

RIGS ON WHEELS

SKIDDING SYSTEMS

WALKING SYSTEMS



Drawworks

Drillmec's GDS Series is the new generation of Compact Gear Driven Single speed drawworks built to improve safety and performance. The compact design makes this product line state of the art in the oil industry for onshore application. It is also excellent for offshore applications in case of new installations, refurbishments and upgrade of existing equipment. Complete with a modern automatic drilling system PLC based software. The AC motor's frequency drive is capable of holding full load at zero speed indefinitely along with a high safety emerging disc brake system with negative calipers.

Drillmec's GDM Series Gear Driven drawworks is the result of years of experience complimented with decades of innovative continuous improvement. Drillmec produces a wide range of drawworks engineered for today's tough challenges that can be fitted to all land rigs with power ranging from 1,500 to 3,000 hp with a nominal depth range from 3,500 to 10,000 meters (11,000 ft to 32,000 ft).

Compact Gear Driven Drawworks

Model	Power Rating		Max Hoisting		Lines	Transmission	Wire Rope		Motor Assembly	
	hp	kW	lbs	mtons			in	mm	hp	kW
GDS 1000	1,000	745	500,000	227	10	Gear Driven	1 1/4	31.8	1 x 1,500	1 x 1,120
GDS 2000	2,000	1,491	1,300,000	589	14	Gear Driven	1 1/2	38.1	2 x 1,609	2 x 1,200
GDS 3000	3,000	2,237	1,700,000	771	16	Gear Driven	1 3/4	44.5	3 x 1,609	3 x 1,200

Modular Multi-Speed Gear Driven with Gear-Box Drawworks

Model	Power Rating		Max Hoisting		Lines	Transmission	Wire Rope		Motor Assembly	
	hp	kW	lbs	mtons			in	mm	hp	kW
GDM 1500	1,500	1,118	750,000	340	12	Gear Driven with Gear Box	1 3/8	35	2 x 1,150	2 x 857
GDM 2000	2,000	1,491	1,300,000	589	14	Gear Driven with Gear Box	1 1/2	38.1	2 x 1,150	2 x 857
GDM 3000	3,000	2,237	1,700,000	771	16	Gear Driven with Gear Box	1 3/4	44.5	2 x 1,609	2 x 1,200



Drill Floor Equipment

Drillmec manufactures a complete range of drilling equipment including top drives, iron roughnecks, rotary tables and control cabins. Each item is customizable according to requirements and specifications.

Drillmec produces two unique top drive designs: a transportable unit and a permanent unit for deep drilling rigs with different mast and derrick configurations. Drillmec top drives are powered by AC motors and monitored by a permanent computer based system.

A rig equipped with Drillmec's iron roughneck significantly increases overall performance: speed in screwing and unscrewing the pipes, efficiency by reducing the risk of errors and breakages and safety by reducing crew injuries.

Drillmec's rotary tables "R Type" are designed to be interchangeable with the most popular rotary table brands and for drilling depths up to 30,000 ft and beyond.

Drillmec's driller's control cabins are specifically designed for each individual drill floor. Our cabins can be equipped with pneumatic, hydraulic or electronic controls (cyber chair). The cabin can integrate all of the rig's components supplied by any party.

Drill Floor Equipment products

ELECTRIC TOP DRIVE

IRON ROUGHNECK

PIPE SPINNER

ROTARY TABLE

CONTROL CABIN

Electronic Control (Cyber Chair)





Power Generation

The generator sets supply electric power to the drawworks, top drive, mud pumps and camp loads. These multiple diesel - electric generator sets have to run in parallel producing up to 5 MW of power needed at the drill site, including the power required for camp loads such as lighting, heating and air conditioning.

Drillmec's power control room includes all the power and electronic controls to run the drilling process. The PCRs can be customized in dimensions and designed for a secure application in drilling and oilfield systems. Both VFD or SCR versions are available.

Drillmec is experienced in handling and operating with different brands and standards.

Power Generation products

POWER CONTROL ROOM (PCR)

GENERATORS

Belt and Chain Transmission Triplex Mud Pumps

Model	Liner Range Size		Stroke		Max Pressure		Rated	
	in	mm	in	mm	psi	bar	hp	kW
9T1000	4 1/2 - 7	114 - 178	9	228	5000	345	1,150	858
12T1600	4 1/2 - 7 1/4	114 - 184	12	305	5000 / 7500	345 / 517	1,600	1,150
14T2200	5 - 9	127 - 229	14	355.5	7500	517	2,200	1,640

Gear Driven Triplex Mud Pumps

Model	Liner Range Size		Stroke		Max Pressure		Rated	
	in	mm	in	mm	psi	bar	hp	kW
10T1300GD	4 1/2 - 7	114 - 178	10	254	5000	345	1,300	970
12T1600GD	4 1/2 - 7 1/4	114 - 184	12	305	7500	517	1,600	1,150
14T2400GD	5 - 9	127 - 229	14	355.5	7500	517	2,400	1,789

Mud System

Drillmec designs solids control solutions to enhance drilling rates and reduce costs through the efficient removal of drilled solids, remarkably minimizing the environmental impact.

Drillmec offers a complete range of triplex mud pumps from 1000 hp to 2400 hp diesel or electric AC – DC powered both rated 5000 and 7500 psi.

Drillmec's GD Series is the new generation of Gear Driven triplex mud pumps in the ranging from 1300 to 2400 hp and it is equipped with the P-Quip fast release system for valve cover, rod and liner.

Drillmec manufactures customized mud solid control systems to satisfy any drilling necessity, meeting the customer's specifications in terms of volume, flow capacity and rating.

The fast moving mud system is trailerized to save moving time.

Drillmec's manifold system reaches up to 7,500 psi.



Mud Solid Control System products

MUD TANKS

TANKS ON TRAILERS

MANIFOLDS

HIGH PRESSURE SYSTEMS

BRINE SYSTEMS

FUEL & WATER SYSTEMS

Quality System



Policy

Drillmec has always viewed continuous improvement of company processes and complete satisfaction of customer's needs as essential factors for standing out on the highly complex, competitive oil and gas market. Drillmec's Quality System and HSE System are essential tools for achieving its business goals.

In accordance with its general aims and strategies for growth, Management promotes:

- The central role of the customer
- Full involvement of all personnel to ensure complete awareness of the significance and importance of their work and how they can contribute to achieving quality goals, environment, health and safety protection
- Continuous improvement of the quality of products and services, especially through a strong drive toward technological innovation
- Continuous improvement of process performance
- Safeguarding of the environment and protection of workers' health and safety. Such commitment is widespread not only to our workers, but even to our subcontractors and suppliers.

Drillmec has been successfully delivering land rigs packages for generations in all major oilfields around the world.

Certifications

Drillmec SpA quality management systems is certified by API (American Petroleum Institute), DNV - GL (DNV Business Assurance), RTN (Rostekhnadzor) and CU-TR (Russian approval) and can also work under Norsok, ABS and RMRS, if required by the client.

Drillmec INC is certified by API 4F-0058.

API Product Licenses Numbers	CU-TR Licenses Numbers
API 4F-0062	CU-TR 0529642
API 6A-0492	CU-TR 0982253
API 7-1-0305	CU-TR 0529643
API 7K-0045	CU-TR 0529646
API 8C-0041	CU-TR 0529647
API 16A-0112	
API ISO-0076	
API Q1-0527	
	RTN License Number
	PPC 00-047448

ISO Licenses Numbers
 ISO 9001:2008
 ISO 14001:2004
 OHSAS 18001:2007



COMPANY WITH MANAGEMENT SYSTEM CERTIFIED BY DNV GL
 = ISO 9001 =
 = ISO 14001 =
 = OHSAS 18001 =



- | | |
|------------------------|------------------------|
| 01 Crown Block | 13 Water Tanks |
| 02 Mast | 14 Mud Lab |
| 03 Racking Platform | 15 Shale Shakers |
| 04 Stand Pipe | 16 Trip Tank |
| 05 Dog House | 17 Mixing Unit |
| 06 Traveling Block | 18 Mud Tanks |
| 07 Drill Floor | 19 Mud Pumps |
| 08 Stand Pipe Manifold | 20 Cable Tray |
| 09 Ground Manifold | 21 Power Control Room |
| 10 Poor Boy | 22 Diesel Generator |
| 11 Substructure | 23 Emergency Generator |
| 12 Drawworks | 24 Air Unit |

For further information...

If you would like further information about our company, products or services, please don't hesitate to get in touch with us. You can do this in a number of ways...

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BRANCHES



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- SEISMOTEKHNKA - BELARUS
- I.D.T. - U.A.E.
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