

ADR[®] 1500S

Automated Drill Rig

MORE POWER IN MOTION

The next generation
in full-sized walking rigs

ADR[®] 1500S

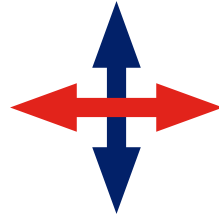
Automated Drill Rig

ENSIGN[®] | drilling

**Our customers
asked for a more
powerful rig to drill
long lateral sections
in horizontal wells.**

**And a more agile
rig to move from
pad to pad quickly.**

**We delivered both -
AND MORE.**



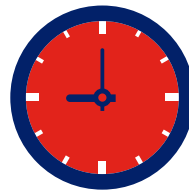
WALK WITH ACCURACY. The ADR[®]1500S walks on both X + Y axes, for the best mobility and flexibility of any rig on the market. With the ADR1500S, you'll spend less time walking, more time drilling. Its advanced motion control lets you shift between the X + Y axes in minutes, walking directly to your next well. The ADR 1500S walks with a full setback and a transfer tank. On a multi-well site, that can save you hours of walking time.



SAFETY FROM GROUND TO MAST. The ADR1500S is designed and built by Ensign Energy Services, a worldwide leader in oilfield safety. We pioneered rig technology that protects workers and reduces industrial accidents. The ADR1500S continues this legacy. From its automated controls, to the ergonomics of its architecture, to the quality of its BOP handling system, to its rig-up without cranes, the ADR1500S is designed to keep every worker safe, every day.



**WATCH OUR COMMITMENT
TO A PERFECT HSE RECORD**



MOVE IN LESS TIME. The ADR1500S transports faster than other full-sized rigs. When you're ready to move, so is the ADR1500S. It's a fully modular system, engineered to dismantle, load and re-assemble with the speed of a military operation. Other full-sized rigs can take up to 10 days to move. With the ADR1500S you'll be on your new site in a fraction of the time; ready to spud, saving you time and money.

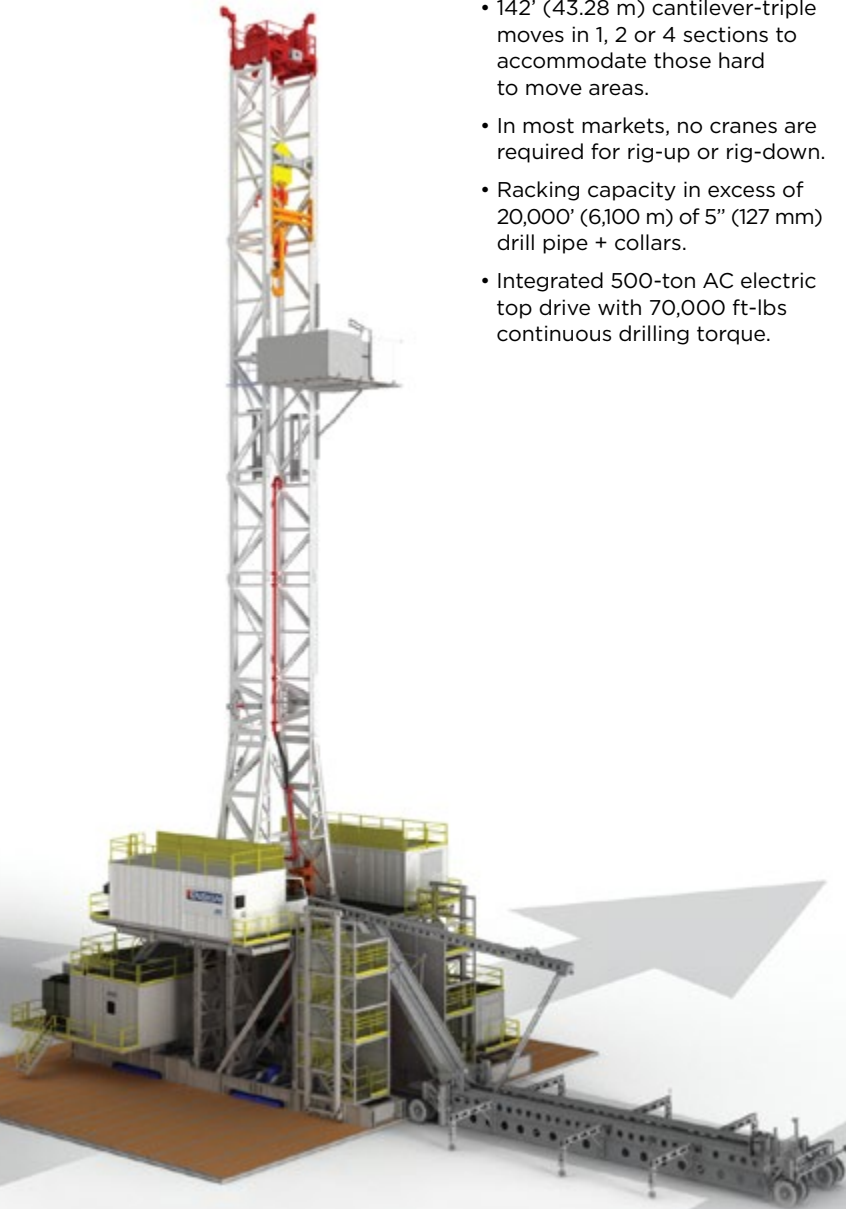


DRILL EFFICIENTLY. The ADR1500S lets you build stands offline, while you drill. Start drilling stands rather than joints. The ADR1500S has a rotating mousehole and an oversized platform, so your crew can build double or triple stands while the rig is in full operation. You'll stay on bottom - drilling longer and saving time on non-productive tripping and directional re-orienting tasks.



LEARN MORE
ABOUT THE ADR®

ADR® 1500S – The rig with more.



01. MAST - EXCEPTIONAL RACKING CAPACITY AND INTEGRATED TOP DRIVE

- 142' (43.28 m) cantilever-triple moves in 1, 2 or 4 sections to accommodate those hard to move areas.
- In most markets, no cranes are required for rig-up or rig-down.
- Racking capacity in excess of 20,000' (6,100 m) of 5" (127 mm) drill pipe + collars.
- Integrated 500-ton AC electric top drive with 70,000 ft-lbs continuous drilling torque.

02. INNOVATIVE CONTROL CABIN

- Rig personnel have the advantage of PLC control for rig operations and rig monitoring system access.
- Control Cabin has large 'Learning Centre' and 'slide-out' area for driller's console that utilizes Ensign's TDM™ (top drive management system).

03. FLEXIBLE HYDRAULIC POWER UNIT

- Hydraulic power unit has both electric and diesel power - allowing you to move with or without generator set power.

04. ADVANCED RIG FLOOR DESIGN

- Mast design provides 80% larger floor area allowing you to build BHA and stands offline.
- 1500 hp AC electric drawworks.
- 37 ½" hydraulic-driven rotary table.
- Powered mousehole and dedicated winch for offline stand building.

05. BOP HANDLING SYSTEM AND INTEGRATED STUMP

- 80,000 lbs BOP handling system (with optional 150,000 lbs system) allows for pad drilling and offline testing with integrated BOP test stump.

06. SUBSTRUCTURE - INTEGRATED SELF-MOVING SYSTEM MOVES IN ANY DIRECTION WITH FULL SETBACK

- Integrated X + Y walking system, transfer tank and umbilical system provide you with optimal flexibility on a multi-well pad.
- 28' (8.52 m) floor height to accommodate large BOP Stacks.
- Rig can walk up to 1' per minute with full 600,000 lbs (266,890 daN) setback.
- 36" (0.91 m) clearance for walking over existing wellheads through entire substructure and catwalk.

07. AGILE WHEELED PIPE HANDLER

- Wheeled pipe handler has opening to clear wellheads and can be moved with a standard rig-loader.

08. HIGHER PERFORMANCE MODULAR DESIGN

- Custom dolly provided for each mast section when moved in 2 sections.
- Substructure moves in as few as 8 loads. Total centre section moves in as few as 19 loads.

We built the ADR® 1500S to exceed expectations.



Ensign ADR® 1500S Specifications

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	Imperial	Metric
Hook load	800,000 lbs	355,840 daN
Setback capacity	600,000 lbs	266,890 daN
Rotary table load	800,000 lbs	355,840 daN
Walking capability	Yes	Yes
Walking with full setback capability	Yes	Yes
Turning with setback capability	Yes	Yes
Racking capacity -4" DP	27,612'+BHA	8,419 m +BHA
Racking capacity -4 1/2" DP	22,320'+BHA	6,804 m +BHA
Racking capacity -5" DP	22,320'+BHA	6,804 m +BHA
Racking capacity -5 1/2" DP	18,228'+BHA	5,555 m +BHA
Offline stand building	Yes	Yes
BOP trolley capacity	80,000 lbs **	35,584 daN**
Floor surface area	840 ft ²	78 m ²
Table opening	37 1/2"	952 mm
Substructure floor height	28'	8.53 m
Clear working height	23'- 6"	7.16 m
Top drive (fully integrated)	Tesco 500 ESI 1350	Tesco 500 ESI 1350
Top drive load capacity	1,000,000 lbs	444,800 daN
Top drive drilling torque	70,000 ft-lb @ 100 rpm	9,490 daN-M
Drawworks	Pacific Rim 1500 AC	Pacific Rim 1500 AC
Drawworks single line pull	98,633 lbs	43,872 daN
Drill line size	1 3/8"	34.9 mm
Iron roughneck	B&V-FH-100	B&V-FH-100
Iron roughneck torque (make/break)	80,000 ft-lb/100,000 ft-lb	10,847 daN-M/13,560 daN-M
Generator power total	4,423 hp (electric)	3,300 kw
Mud pumps	1,600 hp (x2)	1,600 hp (x2)
Active mud volume	1,163 US bbl	185 m ³
Centre section loads*	Approx. 19	Approx. 19
Complex loads*	Approx. 21	Approx. 21

* Number of loads does not include boiler(s), matting, pipe tubs or racks, tubulars, camp shacks or miscellaneous items.

** Optional 150,000 lbs (66,720 daN) system



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