



*JOINT STOCK COMPANY «DRILLING SYSTEMS» well construction*





# DRILLING SYSTEMS

*JSC, Drilling Systems has been established in the year 2005. As per today company numbers is around 670 employees.*

JSC, Drilling Systems operates in oil&gas well construction field and performs all kinds of drilling activity for all oil&gas companies in Russia.

***Main activity:***

- Construction of exploratory, development, production wells, including horizontal and flat wells;
- Recovery of inactive wells by kickoff and drilling of sideholes method;
- Rendering of service in well construction:
  - IPM
  - supervising
  - backfill servicing
  - drilling mud servicing
  - rig building

The Company is organized in accordance with international standards of management, registered in IADC. It has united the best specialists, that had drilled hundreds of wells in remote areas with different and complex climatic and geological conditions.



# DRILLING SYSTEMS

*Drilling fleet of the Company consists of domestic and foreign API-certified equipment.*

Rig type	Available resources	Maximum hook load capacity, t	Capacity, HP	Depth of drilling, m.	Drive type	Design	Drill pump
БУ TZJ 40	1	225	1300	4000	diesel	block	F-1000\2
БУ ZJ 40	1	225	1300	4000	electric	echelon	F-1300\2
БУ 3000 ЭУК	1	200	700	3000	electric	echelon	УНБ-600\2
БУ TZJ30	4	180	1000	3000	electric	Block, on trailer	F-800\2
БУ TZJ20	2	125	650	2000	diesel	Block, on trailer	F-800\2
БУ 2500/100 ЭУ	2	160	740	3000	electric	block	F-800\2



# DRILLING SYSTEMS

## *Foreign – made rig's advantages:*

- possibility to operate both from industrial networks and off-line ( the rigs are equipped with high power **Caterpillar** generating plants);
- up-to-date electronic control **ABB, Siemens**;
- unit is equipped with top drive **TDS 9SA, TDS 11SA (Varco)**;
- highly reliable disk drawworks with air cooling;
- pumping block includes triplex pumps power 1600 H.P. with AC drive of frequency regulation;
- cleaning system is four staged, **Derrick** production

The drilling rigs are designed both for drilling of single exploratory wells and development wells in a cluster. The operating temperature range for the drilling rigs is from – 40 up to + 50 degrees C. All the foreign-made rigs include the equipment, which allows drilling under API system.



# DRILLING SYSTEMS

## MOBILE DRILLING RIGS TZJ 20, TZJ 30



	TZJ20DBS	TZJ30DBS
Nominal drilling depth, m	2000	3000
Maximum hook load capacity, kN	1250	1800
Total capacity of drilling pump, HP.	2x650	2x650
Drill line diameter, mm	28	32
Rig useful height, m	36	38
Working floor height, m	6	6
Draw work capacity, HP	650	1000
Rotary table diameter, mm	560	560
Swivel	SL 160	SL 225

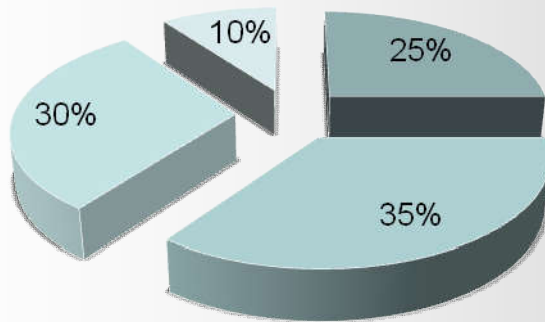




# DRILLING SYSTEMS

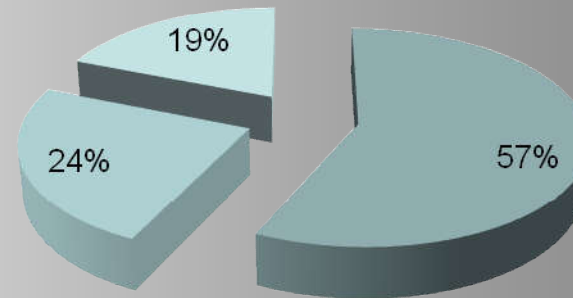
*All the specialists of our company are highly skilled and have an experience in oil&gas industry more than 10 years.*

Under supervision and command of these specialists more than 2000 wells were drilled in remote areas with seasonal constraints in logistics and extreme temperatures. While drilling process the Company applies for all the spectrum of technologies to operate accident-free. Drilling Systems has a wide experience in realizing of complicated projects in permafrost, extreme temperature conditions. Company uses technology of horizontal drilling, well recovery, sidetracking methods.



***Qualification:***

- 65% of staff have higher and technical secondary education
- 25% of staff have specialized secondary education



***Age structure:***

- 57% are younger than 40 y.o.
- 24% are from 40 to 50 y.o.
- 19% are older than 50



# DRILLING SYSTEMS

*Experience of working: oil wells.*

*1. Exploration drill hole (including abnormally high formation pressure).*

*Depth – 4500 m.*

Well ПО-5 of Nerutinskaya area (Nadym region).

Construction:

426x500 m.

324x1500 m.

245x3675 m.

184x3175–3865 m.

140x4200

Anomaly factor – 1,7

*2. Vertical and directional wells (production, injection, water wells). Depth - 4000 m. Offset –2000 m.*

Well № 1196 Sugmutskoye oilfield (Noyabrsk region)

Depth (of vertical line) – 2900 m.

Depth (of borehole) – 3850 m.

Offset– 1963 m.

*3. Horizontal well.*

*Depth - 4000 m.*

*Lengths of horizontal part – 600 m.*

Well № 2047 Romanovskoye oilfield (Noyabrsk region)

Depth (of vertical line)– 2787 m.

Depth (of borehole) – 3770 m.

Lengths of horizontal part– 560 m.

*4. Sidehole with horizontal completion.*

*Depth – 4000 m.*

*Lengths of horizontal parts - 500 m.*

Well № 112 Vostochno-Tarko-Salinskoye oilfield (Tarko-Salynsk region)

Depth (of vertical line) – 2860 m.

Depth (of borehole) – 3538 m.

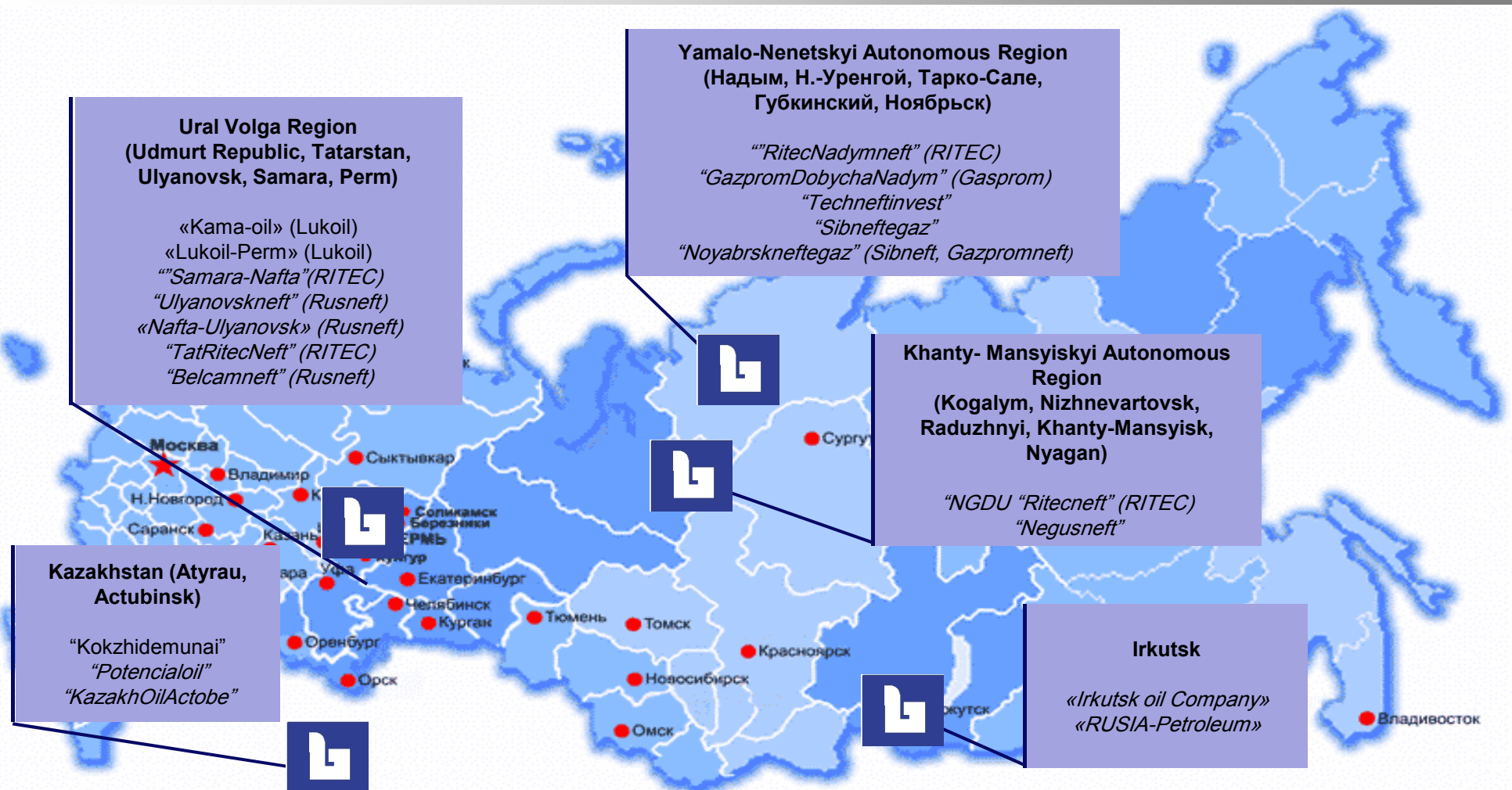
Lengths of horizontal part – 250 m.

At the moment as a part of JSC Drilling Systems there are completed drilling crews, which having experience on the equipment of Uralmash, DRILLING RIG 6500/450, and experience of construction of wells depth to 5500m (Yurkharovskay field, Russian Federation).



# DRILLING SYSTEMS

## Company's geography:







# DRILLING SYSTEMS

*Sustainable development for the Company means harmonizing the interests of economic growth and careful attitude to environment.*

Oil and gas drilling is inevitably followed with man-caused effect on environment. Degree of pollution depends on application of technology, level of equipment and qualification of personnel. Specialists of Drilling Systems, JSC try to minimize negative effect on environment using advanced drilling technologies, new equipment and cleaning facilities.

-low toxic substances of the 4<sup>th</sup> danger class are used as mud chemicals;

-used drilling mud is used again for drilling new wells. In this case 4-stage cleaning with shale shakers, desanders and desilters are used;

-under high requirements for environment safety, closed cycle system is used – drilling without mud pits when used drilling mud is cleaned with technology of coagulation and flocculation and passing through centrifuge as well.

**Conceptual issues of ecological policy of the company:**

- preservation and rational use of natural resources;
- maintenance of ecological safety on all industrial objects of the company
- decrease in emergency situations



# DRILLING SYSTEMS

*So far “Drilling Systems” has had no one administrative claim and punishment from control authorities for breach of environment protection laws all over Russia!*

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## **OCCUPATIONAL HEALTH AND INDUSTRIAL SAFETY**

- Safety in all lines of operational activity is the main target of the enterprise (company). Maximum risk mitigation, prevention of personal injuries and accidents at drilling rigs, close environmental control – are the main activities the management follows to deliver on these targets.
- Industrial Safety and Occupational Health activities are in accordance with the requirements of the Federal Law “On Industrial safety of hazardous production facilities» (Federal Law # 116 of 21 July 1997 , RF Labor Code adopted on 21 December 2001) and other regulatory documents, including API Standards .
- The company has all the required licenses for all lines of activities to be performed
- According to the requirements of these documents all the specialists of DRILLING SYSTEMS have been trained and evaluated in Industrial Safety, the managers have been evaluated by the RF FSETAN Central Commission
- We operate the equipment and facilities certified by quality, insured and registered.

## **HSE POLICY**

JSC “Drilling systems” considers the development of industrial safety system, ensuring healthy and safe work conditions of the personnel as well as mitigation of environmental impact to be one of the priority lines of its activity. It is possible to achieve the set goals under sustainable development of the company, which in many respects can be ensured by the balanced salvation of social and economic problems, environmental protection and natural resources preservation.

In this respect the company’s policy is inseparably linked with the current regulatory structure of the Russian Federation in the field of industrial and environmental safety, as well as with the recommendations of the ISO 14000 and OHSAS 18000 international standards

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**БУРОВЫЕ  
СИСТЕМЫ**  
СТРОИТЕЛЬСТВО СКВАЖИН

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**OUR VALUES:**

- We believe that the team spirit, unity – are the basis of our individual and corporate actions. Just well-coordinated and organized work, common goals, life values, which unite us, lead to the development of the company we are proud of.*
- We believe in performance of operations without accidents and incidents*
- HSE issues are of great importance to us*
- We design and carry out high quality operations*
- We understand the demands of our Customers*



# DRILLING SYSTEMS

## CERTIFICATION

**Certificate of Authority to use the Official API Monogram**  
License Number: 7K-0063 ORIGINAL

The American Petroleum Institute hereby grants to  
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QMS Exclusions: No Exclusions Identified as Applicable

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*John M. Nadeau*  
Director of Certification Programs

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Director of Certification Programs

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QMS Exclusions: No Exclusions Identified as Applicable

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СТРОИТЕЛЬСТВО СКВАЖИН

## Лицензии





# DRILLING SYSTEMS

## *LABORATORY*

Drilling Systems, JSC has own drilling mud laboratory (according with API standards) and backfill laboratory (according to RF State standards).





# DRILLING SYSTEMS

## MUD CLEANING EQUIPMENT

shaking sieve

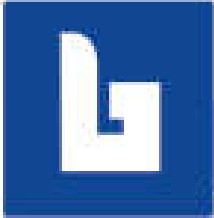


Drilling mud  
cleaner

centrifuge  
(450x1000)



centrifuge  
(355x1257)



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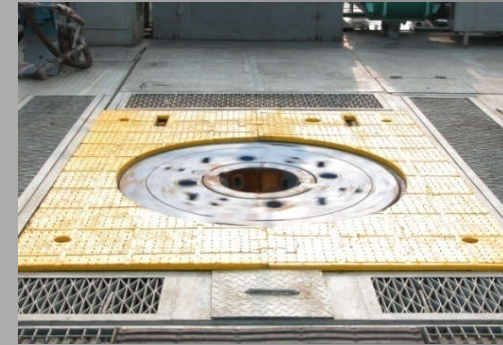
*Addition: technical characteristics of drilling rigs*





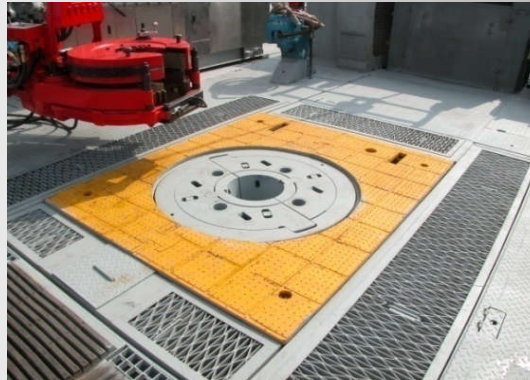


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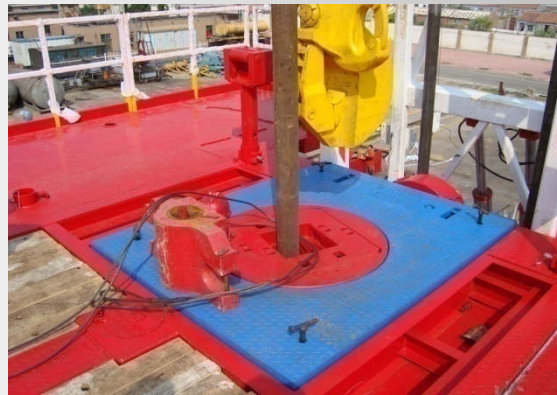


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