

ARCTIC RIGS

Stationary arctic rigs with superior and safe drilling performance. Withstand extreme environmental conditions.

STATIONARY ARCTIC RIGS GENERAL FEATURES

- Climate: Arctic -45°C to +40°C
 - Drawworks capacities: 1 250 hp–2 000 hp
 - Hook load capacities: 550 000 lbs–1 000 000 lbs / 250 t–450 t
 - Drilling depth capacities: Up to 19 700 ft / 6 000 m
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- GOST certified
 - HAZOP risk assessment
 - CE equipment
 - Testing & commissioning



STATIONARY ARCTIC RIG SR 5000

Rating 1 500 hp / 1 100 kW
Hook load 706 000 lbs @ 12 lines 320 t
Drilling depth 16 400 ft / 5 000 m

UNIQUE FEATURES

- Cantilever mast
- Swing-up substructure
- Full winterization package
(driller's cabin, drill floor, setback area, drilling support modules)
- Less NPT with Bentec TOP DRIVE
- Field-approved equipment

TECHNICAL DATA

ARCTIC RIGS – STATIONARY ARCTIC RIG SR 5000

The Bentec STATIONARY ARCTIC RIG SR 5000 is designed for superior and safe drilling performance and can withstand extreme environmental conditions.

The rig design incorporates modern and high performing items while also focusing in particular on creating a safe and well protected working area. Components that require a certain level of maintenance are easily accessible and well illuminated.

Bentec's swing-up substructure and open face self-elevating mast is designed for operating temperatures ranging from -45°C to +40°C. The entire mud tank system and all equipment are certified to operate onshore at temperature ranges of -25°C to +40°C.

The rig is equipped with a winterization system where hot air from the generator sets cooling system is rooted into the substructure, the mud pump tent and the mud system area.

All of the equipment fitted to the rig is suitable for performance drilling. The Bentec TOP DRIVE is specially designed for rough conditions and less rig downtime.

The Bentec rig is built in compliance with the rules and regulations of the Russian mining authorities. On top of that, the rig is GOST certified and can be operated following initial commissioning without any delays due to additional licensing requirements.

Due to its modular design, this rig type can be tailored to customers' requirements.

TECHNICAL DATA

MAST

Manufacturer:	Bentec
System:	Open face, self-elevating cantilever mast, erected with drawworks and raising line
Mast free height:	152 ft (46.33 m)
Mast base:	30 ft (9.1 m)
Hook load capacity @ 12 lines:	706 000 lbs (320 t)
Racking capacity:	Approx. 16 400 ft (5 000 m)

SUBSTRUCTURE

Manufacturer:	Bentec
System:	Swing-up substructure, erected with drawworks and raising line
Height of drill floor:	30 ft (9.14 m)
Height underneath rotary table:	25 ft (7.6 m)
Rotary capacity max.:	706 000 lbs (320 t)
Setback load max.:	500 000 lbs (227 t)

DRAWWORKS

Manufacturer:	Bentec
Type:	E-350-AC-SG
Power rating:	1 500 hp (1 100kW)
Drill line diameter:	1 3/8" (35 mm)
Max. line pull:	71 210 lbs (35.8 t)
Drawworks:	Automatic Drawworks Control System (ADCS) Automatic Driller System (FOCS)

IRON ROUGHNECK

Manufacturer:	Original Equipment Manufacturer Controls by Bentec
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TOP DRIVE

Manufacturer:	Bentec
Type:	TD-500-HT
Load capacity:	500 ton / 454 t
Electric motor:	1 030 hp (758 kW)
Output torque:	46 500 ft-lbs (63 000 Nm)

POWER GENERATION

Manufacturer:	Bentec
Engine type:	4 x Cummins KTA50-DR1750 (or equivalent)
Generator type:	4 x Leroy-Somer 4P8.1-3000 (or equivalent)
Emergency generator set:	1 x Cummins C550D5

POWER CONTROL ROOM

Manufacturer:	Bentec
Type:	Variable frequency drive 690 V, 50 Hz

MUD PUMPS

Manufacturer:	Original Equipment Manufacturer
Type:	2 x T-1600-AC
Electric motor:	1 600 hp (1 200 kW) AC
Max. pressure:	5 000 PSI (350 bar) 7 500 PSI (500 bar) on request

MUD TANK SYSTEM

Manufacturer:	Bentec
Type:	Rectangular tanks
Active mud volume:	As per customer specification
Reserve mud volume:	As per customer specification

SOLIDS REMOVAL SYSTEM

Manufacturer:	Original Equipment Manufacturer
Shale shaker:	1 x quadro unit
Desander:	3 x 10" cones
Desilter:	20 x 4" cones
Drilling mud degasser:	Bentec type DMD 1-250 (or equivalent)
Mud gas separator:	Bentec 48" vertical type MGS V 48