

# ARCTIC RIG

**Withstanding extreme environmental conditions. Superior and safe drilling performance.**

## GENERAL FEATURES

- Hook load capacity: 770,000 lbs / 350 t.
- Drawwork capacity: 1,500 hp
- Drilling depth capacities: up to 16,400 ft / up to 5,000 m
- Climate: -45°C to +45°C
- VFD
  
- Testing & commissioning
- Certification

# HR5000

**Rating: 1,500 hp / 350 t**

**Static hook load: 770,000 lbs / 350 t**

**Design drilling depth: 16,400 ft / 5,000 m**

## UNIQUE FEATURES

- Vertical lifting mast (using a cylinder)
- “Box on box” substructure
- High rig-up / rig-down capacity and mobility
- Adapted for work in the Arctic condition
- Full winterization package (driller’s cabin, drill floor, setback area, drilling support modules)
- Various train design (single train or double train)
- Field proved equipment
- Designed for both drilling single wells and cluster drilling
- AC powered drive systems



# TECHNICAL DATA

## DRILLING RIG - «ARCTIC RIG HR5000»

The KENERA ARCTIC RIG is a 1,500 hp DRILLING RIG drilling system for operating in harsh deep temperature environments such as those found in Siberia. The system is designed to operate on cluster locations, with a full winterization package incorporated into the design. Below are the technical specifications for standard set of the rig. The configuration and design of the drilling rig can be adapted to meet the specific technical requirements of the customer.

### MAST

Manufacturer: KENERA LLC  
System: vertical lifting mast (using cylinder)  
Mast free height: 142 ft / 43.3 m  
Hook load capacity: 770,000 lbs / 350 t

### SUBSTRUCTURE

Manufacturer: KENERA LLC  
System: "Box on box"  
Height of drill floor: 30 ft / 9.14 m  
Height underneath rotary table: 25 ft / 7.6 m  
Setback load max.: 770,000 lbs / 350 t

### DRAWWORK

Manufacturer: HONGHUA  
Type: JC70DB  
Power rating: 2,720 hp / 2,000 kW.  
Drill line diameter: 1 1/2" (38 mm)

### TOP DRIVE SYSTEM

Manufacturer: KENERA LLC  
Type: TD-500-XT  
Load capacity: 500 short t / 454 metric t  
Electric motor: 1,156 hp / 850 kW  
Output torque: 52,057 ft-lbs / 70,580 Nm

### MUD PUMPS

Manufacturer: BOMCO/RONGSHENG/HONGHUA  
Type: F1600  
Electric motors: 2 x 979 hp (2 x 720 kW)  
Max. pressure: 5,000 Psi (7,500 Psi on request)

### ROTARY TABLE

Manufacturer: KERUI  
Type: ZP275  
Bore diameter: 27 1/2" (698.5 mm)  
Static load max.: 500 t  
Drive type: electric

### IRON ROUGHNECK

Manufacturer: KENERA LLC  
Type: IR100  
Drive: hydraulic  
Design: on rotating base, retractable

### MUD TANK SYSTEM

Supplied according to customer specifications.  
Tanks type: rectangular

