

# Arctic Petroleum Prospecting Rig

This arctic rig is designed for petroleum prospecting engineering in harsh, cold climates. It features a multi-tiered tower with integrated housing, support structures, and essential equipment for drilling and extraction operations.



## ADDITIONAL IMAGES



## Overview

### High-Performance Arctic Drilling Solution

The HH Arctic AC VFD rig is specifically engineered for petroleum prospecting in extreme environments such as Siberia and polar regions. Designed to operate in temperatures ranging from  $-45^{\circ}\text{C}$  to  $45^{\circ}\text{C}$ , and capable of withstanding polar ambient temperatures as low as  $-60^{\circ}\text{C}$ , this rig features a comprehensive winterization system and low-temperature resistant materials. Its versatile power options and hydraulic skidding capabilities make it an ideal choice for cluster well operations in challenging terrains like swamps and frozen plains.

## Environmental Specifications

### Operating Temperature Range

**$-45^{\circ}\text{C}$**

Standard Low

**$45^{\circ}\text{C}$**

Standard High

**$-60^{\circ}\text{C}$**

Extreme Polar Limit

## Technical Design

### Winterization & Heating

- Steam heating system
- Hot air heating system
- Automatic temperature control electric heating
- Low temperature resistant structural materials
- Specialized arctic lubrication and sealing

### Heated Lubricating Oil Tanks

- Drawworks tanks
- Rotary table transmission device
- Mud pump tanks

### Drive and Control System

AC VFD (Variable Frequency Drive)

### Low-Temp Resistant Components

Derrick, Substructure, Crown Block, Drawworks

## Mobility & Operation

### Skidding & Movement

- Railway skidding system for all components
- Hydraulic cylinder driven skidding
- Low specific ground pressure for swamp areas
- Optional Y-direction longitudinal skidding

## Power Supply

### Available Power Sources

Diesel Genset • Industrial Power Grid

## Global Deployment

### Primary Operating Regions

Russia, Kazakhstan, Canada, Uzbekistan