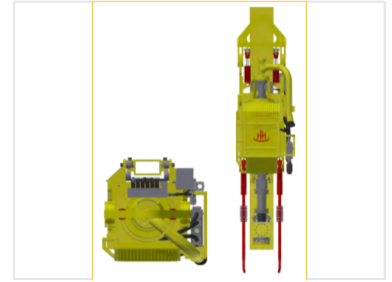
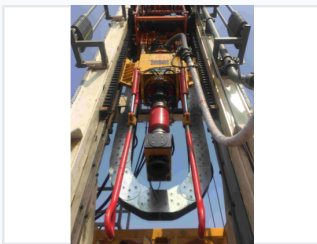


# Hydraulic Top Drive System for Drilling Rigs

This hydraulic top drive system utilizes a hollow axle motor to directly drive the main shaft, enhancing mechanical efficiency. It features stepless speed regulation within the rated speed range and is suitable for diverse drilling applications.



## ADDITIONAL IMAGES



## Overview

### Hydraulic Top Drive System

This hydraulic top drive system utilizes a hollow axle motor for direct main shaft driving, significantly reducing transmission energy loss while improving mechanical efficiency and reliability. Designed for high integration, it features constant power control and high overload capacity to meet demanding drilling requirements. The system is engineered to operate in extreme environments ranging from -40°C to +55°C, ensuring consistent performance in diverse climates.

## Key Features

### Design Advantages

- Hollow axle motor direct drive
- Simplified sealing mechanism without gear lubricating oil
- Integrated cooling filtration system
- Disc brake for reliable reverse torque release
- Flexible HPU power options (diesel or electric)

### System Benefits

High Efficiency, High Reliability, Low Maintenance, Constant Power Control, Stepless Speed Regulation, Wide Torque Range

## Technical Specifications

### Technical Parameters

Model		DQ150Y	DQ250Y
Motor Rated Power	kW	236	283
	HP	317	380
Max. Load (APR BC)	kN	1,350	2,250
	ton	150	250
Speed-rotating Range	rpm	0-180	0-180
Working Torque	N·m	25,000	30,000
	ft·lb	18,439	22,127
Max. Breakout Torque	N·m	40,000	45,000
	ft·lb	29,554	33,191
BCDP Rated Working Pressure	MPa	105	105
	psi	15,000	15,000
Upper BCDP Thread		6 5/8 API Reg Box-6 5/8 API Reg Pin	6 5/8 API Reg Box-6 5/8 API Reg Pin
Lower BCDP Thread		6 5/8 API Reg Box-6 5/8 API Reg Pin	6 5/8 API Reg Box-6 5/8 API Reg Pin
Clamp Range for Back-up Wrench (Standard)	mm	86-217	86-217
	in	3 3/8-8 1/2	3 3/8-8 1/2
Working Pressure for Hydraulic System	MPa	35	35
	psi	5,000	5,000
Quill Rated Working Pressure	MPa	35	35
	psi	5,000	5,000
Quill I.D.	mm	52	62
	in	2.5	2.5
Braking Torque	N·m	25,000	30,000
	ft·lb	18,439	22,127
Weight	kg	7,010	7,510
	lb	15,432	16,536

Detailed technical comparison and performance metrics for available models.

### Model Comparison

Specification	DQ150Y	DQ250Y
Motor Rated Power (kW)	236	283
Max. Load (kN)	1,350	2,250
Speed-rotating Range (rpm)	0-180	0-180
Working Torque (N·m)	25,000	30,000
Max. Breakout Torque (N·m)	40,000	45,000
Weight (kg)	7,010	7,510

## Operational Limits

### Environmental Limits

**-40 °C**

Min Temp

**55 °C**

Max Temp