

Direct Drive Drawworks System

This direct drive drawworks system is designed for efficient drilling operations. It features dual motors that directly drive the drum, reducing maintenance and improving control.



ADDITIONAL IMAGES



Overview

Advanced Direct Drive Drawworks

The Direct Drive Drawworks System features double motors that directly drive the drum, eliminating the need for reduction gears, couplings, and complex lubrication systems. This innovative design results in a unit that is 40% smaller and 25% lighter than traditional models, while reducing maintenance requirements by up to 80%. Equipped with AC VFD drives and integrated automatic driller's control software, it provides precise control over ROP, WOB, and torque for demanding petroleum prospecting applications.

Key Advantages

Efficiency & Design Benefits

40 %

Size Reduction

25 %

Weight Reduction

80 %

Maintenance Reduction

Technical Parameters

Technical Parameters

Model		JC40DBZ	JC50DBZ	JC70DBZ
Continuous Power	kW	1,000	1,200	1,500
	HP	1,340	1,600	2,000
Intermittent Power	kW	1,500	1,800	2,378
	HP	2,010	2,400	3,190
Drilling Line Diameter	mm	32	35	38
	in	1 1/4	1 3/8	1 1/2
Hook Speed	8 travelling line	m/s	2.0	2.0
		f/s	382	382
	10 travelling line	m/s	1.6	1.92
	f/s	315	378	
	m/s	1.6	1.6	
	f/s	315	315	
Max Lifting Capacity	8 travelling line	kN	1,870	2,490
		lb	420,000	560,000
	10 travelling line	kN	2,250	2,950
	lb	506,000	665,000	
	kN	3,400	4,500	
	lb	765,000	1,011,000	
Motor	kW	2x500	2x600	2x750
	HP	670	800	1,000
Drum Size	mm	640x898	685x1404	770x1439
	in	25x35	27x55	30x57
Brake Diameter	mm	241,000	241,000	241,700
	in	9.5	9.5	9.5
Footprint Dimensions	mm	4,800x2,350x2,382	4,800x2,350x2,715	5,200x2,350x2,755
	in	189x93x93	189x93x107	205x93x108
Weight	kg	19,000	27,000	32,000
	lb	41,900	59,500	70,500

Comprehensive technical specifications including power ratings, lifting capacities, and dimensions for the JC series.

Model Specifications Comparison

Parameter	JC40DBZ	JC50DBZ	JC70DBZ
Continuous Power	1000 kW (1340 HP)	1200 kW (1600 HP)	1500 kW (2000 HP)
Intermittent Power	1500 kW (2010 HP)	1800 kW (2400 HP)	2378 kW (3190 HP)
Drilling Line Diameter	32 mm (1 1/4 in)	35 mm (1 3/8 in)	38 mm (1 1/2 in)
Motor Configuration	2x500 kW	2x600 kW	2x750 kW
Max Lifting (10 Lines)	2250 kN	2950 kN	4500 kN
Weight	19,000 kg	27,000 kg	32,000 kg

Drum Sizes (mm)

640x898, 685x1404, 770x1439

Safety & Control

Control & Safety Systems

- AC VFD drive with fast line safety protection
- Automatic position control
- Upper & lower travel protection for travelling block
- Wire line protection system (WPS)
- Direct acting and floating hydraulic disc brake
- Integrated automatic driller's control software (ROP, WOB, DeltaP, Torque)

Mechanical Components

Drive Type

Direct Drive • Gearless • AC VFD

Braking System

Hydraulic disc brake with quick response and automatic clearance adjustment.