

# DSGD-CX425 Drawworks



A simple, modular design that provides the flexibility you need to fit most drill floor configurations.

Our DSGD-CX425 drawworks features a simple, modular design, providing the flexibility you need to fit most drill floor configurations.

This sub-60,000-lb drawworks meets current demands for compact, lightweight, low-cost land drilling solutions. In a 10-line configuration, the DSGD-CX425 drawworks can operate up to 377 ft/min, 40% faster than previous models. Featuring a two-speed, low-inertia gearbox, it features up to 2,000 horsepower and can handle a maximum hook load of 425 tons. High gear enables the drawworks to hoist up to 250 tons at high speeds.

Redundant brake calipers and discs increase operational safety. The 200% capacity offers an industry-leading safety factor, while the included proportional controlled brake valve system ensures drop/snatch free load transfer and bird nest resistant emergency stops when hoisting an empty block.

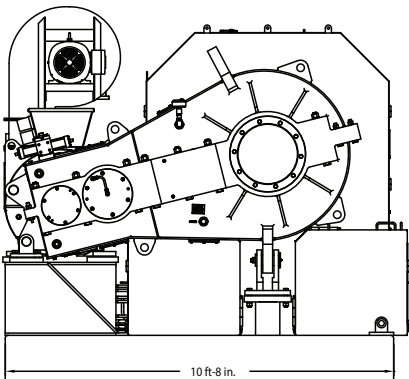
Featuring accessible covers and guards and a braking system with calipers that provide greater misalignment tolerance, DSGD-CX425 drawworks are easy to maintain.



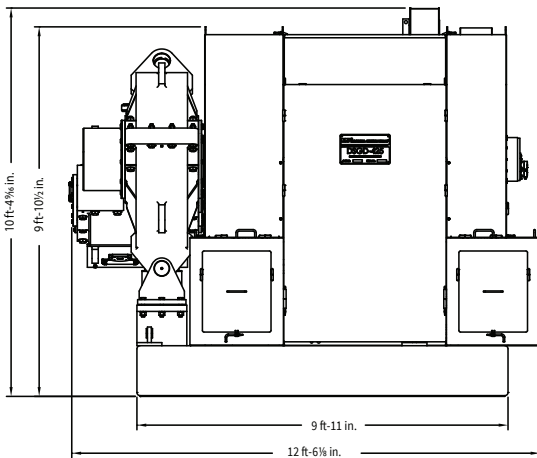
## Features and benefits

- High strength, low inertia, drum assembly
- Low inertia gearbox
- Left-hand or right-hand gearbox flexibility
- Gearbox design eliminates need for lube oil cooler
- High torque, high speed, motor for quicker tripping speeds
- Proven caliper design for increased reliability
- Floating calipers designed for ease of alignment and greater misalignment tolerance
- Redundant brake calipers and discs for increased safety
- Mounting pads can be located by the customer with welding procedure supplied by NOV
- Control panels to be located by the customer to provide flexibility in rig layout
- No air intensifier or receiver required while maintaining drawworks brake integrity
- Covers and guards designed for ease of maintenance

DSGD-CX425 drilling performance		
	Short tons	Metric tons
Maximum load @ 10 lines	425	385
Maximum load @ 12 lines	500	454
Max continuous power	2000 hp	1492 kW
Max. con. torque @ 800 rpm	13130 ft lb	17802 Nm

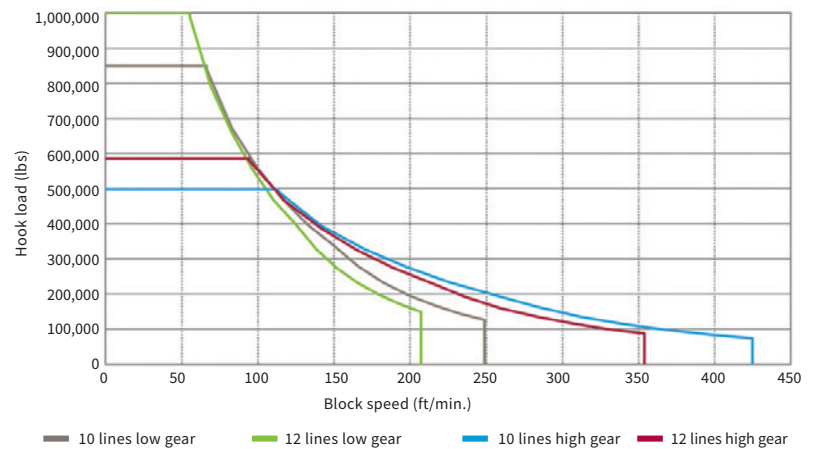


DSGD-CX425 drawworks gearbox driller's side



Mechanical design		
Service	Drilling	
Area classification	Non- hazardous	
Design temperature	+32° to +104° F	0° to +40° C
Drum diameter	34 in.	863.6 mm
Drum length	52 in.	1320.8 mm
Drill line diameter	1 3/8 in.	
Max block travel 10 lines and 4 layers	141 ft	42.9 m
Max block travel 12 lines and 5 layers	153 ft	46.6 m
Gear ratio high gear	1:12	
Gear ratio low gear	1:7	
Main braking system	AC motor	
Park and emergency brake	Disc brakes	
Number of brake discs	2	
Number of brake calipers	3 air operated fail safe calipers	
Brake disc cooling	Air cooling	
Assembled weight without AC motor	50,400 lb	22,868 kg
Gearbox		
Number of gears	2	
Lube oil system	Self-contained splash system	
Gear shift mechanism	Remote air operated	
Lube oil volume requirement	45 US gallons	
Drilling motor		
Output horsepower continuous	2000 hp	1492 kW
Max continues torque @800 rpm	13130 ft. lb	17802 Nm
Voltage	575 - 690 V	
Rated current	1950 amps	
Motor encoder	HTL 1024 ppm	
Temperature measurement	2 ea PT-100 in each winding (1 for spare)	
AC motor heater	Optional	
External utility requirements		
Air requirement	135 SCFM intermittent (10 second duration) 11.3 SCFM average	
Drawing reference		
General Arrangement Drawing (GAD)	17774939-GAD driller's side gear box 17774940-GAD off driller's side gear box	

DSGD-CX425 drawworks | 2000 hp motor



This chart shows the calculated performance of the DSGD-CX425 drawworks. Actual performance may vary.