

# LF-70T (Track Driven) Core Drill Specifications

*Note: The maximum depth capacity of this core rig depends on several factors, primarily the mechanical limits of the drill string, including the pipe grade, connection strength, and safety factors.*

The Alaska Drilling and Completions (ADC) LF-70 Track-Mounted Diamond Core Drill Rig combines the proven performance of the LF-70 with the enhanced mobility and stability of a rugged tracked carrier, making it ideal for challenging terrain where helicopter or skid access is limited. Designed for remote mineral exploration, this configuration allows for efficient overland movement without the need for extensive trail building or support equipment. The LF-70 is capable of drilling NQ and HQ core sizes to depths exceeding 3,000 feet and features a reliable hydraulic system, precision feed control, and optional rod handling assist for improved safety and productivity. With its compact footprint, quick setup time, and ability to traverse steep or soft ground, the track-mounted LF-70 is a versatile solution for high-performance coring in remote and demanding environments.

Depth Capacity	
Drill Rod / Core Barrel	Fluid Filled
BQ	3,407 Feet / 1,039 Meters
NQ	2,619 Feet / 798 Meters
HQ	1,778 Feet / 542 Meters

Hydraulic System (Factory Setting)		
Primary Pump	Axial piston, variable displacement load sensing, pressure compensated with low pressure standby	
Max Flow	43 gpm	163 L/m
Max Pressure	3,500 psi	24 MPa
Secondary Pump	Axial piston, variable displacement load sensing, pressure compensated with low pressure standby	
Max Flow	11 gpm	42 L/m
Max Pressure	2,000 psi	14 MPa
Auxiliary Pump	Axial piston, variable displacement load sensing, pressure compensated with low pressure standby	
Max Flow	10 gpm	38 L/m
Max Pressure	2,000 psi	14 MPa
Hydraulic Tank Capacity	38 Gal	144 L

Feed System / Drill Mast	
Feed Stroke	6 Feet / 2 Meters
Pull Capacity @ 2,000 psi	14,137 lbf / 6,414 kg
Thrust Capacity @ 2,000 psi	9,326 lbf / 4,231 kg
Rod Pull	10 or 20 Feet / 3 or 6 Meters
Drilling Angle	45° off horizontal to 90° vertical down
Foot Clamp	HWT

Accessories	
HQ Chuck/Rotation Unit	
Mast raising cylinders	
Wireline cable	
Mud tank	

Power Unit	
Engine	Cummins QSB 4.5 L, 4 cylinder, turbo charged, after cooled diesel engine
Size	4.5 L / 275 Cubic Inch
Horse Power (HP)	171 HP @ 2,200 RPM
Cooling	Water Cooled

HQ Drill Head			
Type	Hollow Spindle		
Size	H, Accepts up to 4 in or 95 mm		
Chuck	Hydraulic		
Rotation Motor	Rexroth hydraulic motor - variable/reversible		
Transmission	Funk 4 Speed / Mechanical		
Transmission Gear Ratio	1st Gear	6.27:1	
	2nd Gear	3.12:1	
	3rd Gear	1.75:1	
	4th Gear	1.00:1	
RPM / Torque	Gear	RPM	Torque / lbft
PU @ 2,200 RPM (No Load)	1st	122 - 199	3,878 - 2,027
	2nd	246 - 400	1,929 - 1,008
	3rd	439 - 714	1,084 - 567
	4th	769 - 1,250	658 - 344

Hoists		
Main Line Max Pull	12,000 lbs	5,450 kg
Speed / Bare Drum	3 ft/sec	1 m/sec
Wireline / Bare Drum	2,190 lb	988.2 kg
Speed/ Bare Drum	337 ft/min	100 m/min
Capacity (.250 cable)	4,200 feet	1,280 meters

Weight	
Max "Wet" Weight	Around 16,000 lbs
Note: This rig is not set up to tear down.	

ADC's LF-70T Diamond Core Rig with Track Driven Base on Location

