Tough By Reputation Better By Design





Williams LLDH: the big workhorse.

Available in four models for maximum holes to 10' diameter; continuous duty holes to 5' diameter.

Here's the big one. The LLDH Digger. It's the powerhouse of the industry, with all the power and speed you could want in a large construction digger.

The LLDH moves in fast, does its job fast and moves out fast. It'll dig 10-foot diameter holes, 120 feet deep. It crowds 60,000 pounds. Hoists 29,000 pounds. And it has a measured peak kelly torque of 100,000 foot-pounds.

Drill holes for big foundation jobs. Dig big power line holes. Put down mine ventilation shafts. Do just about any job you want. The LLDH will keep working for you, month after month, year after year, because this Williams digger has the stamina it needs as well as the strength. It's the toughest high-performance truck-mounted digger we've ever built or seen.

Here's what makes the LLDH the industry's most dependable, rugged performer:

- Power-assist brake system (comparable to power brakes on your car) that makes braking easier, more sure-footed.
- Turntable brakes with three-piece house lock brake bands which you replace without removing any digger component.
- Five V-belts unitized into a single unit to drive the main power shaft. (This minimizes bearing loads, belt wear.)
- Highway speed in excess of 45 mph.

Check these specs for the full story on LLDH performance and strength. The LLDH Digger. Williams keeps making it better, by design.

LLDH Specifications

POWER SUPPLY: G.M.C. Model 6-71N Diesel Engine; governed rating; 190 bhp @ 1800 rpm.

POWER TRAIN: System provides high inertia characteristics to "smooth out" rough digging and provide "peak power" performance.

ROTARY TABLE: Williams Model RP-9000 single reduction rotary. All gear design with sealed lubrication.

ROTARY DRIVE: Chain driven through dual range friction clutches for instantaneous high and low speeds without shifting gears.

HOIST & CROWD: Chain driven cable drum through dual friction clutches for high speed kelly travel plus hydraulic crowd.

DERRICK: Tubular design with hydraulic cylinders for derrick raising and positive kelly crowd.

KELLY BAR: Telescoping kelly system-7" square hollow outer, 51/4" square hollow inner.

TRANSMISSION: Williams heavy-duty industrial type, for speeds forward, single speed reverse. By utilizing both rotary clutches, eight forward rotary speeds may be obtained. A new pressurized lubrication system is standard.

HYDRAULIC SYSTEM: Triple hydraulic pump and control valves permitting coordinated operation of hydraulic functions.

FRAME: Electrically welded structural members, trussed and cross braced for maximum strength.

TURNTABLE MOUNTING BASE: Williams heavy duty turntable base with 240° rotation and 4' slide stroke at any point in the arc. Includes hydraulic brake, controlled from operator's station.

HYDRAULIC STABILIZERS: Four Model HOJ-6000 6" diameter sliding outrigger jacks.

SERVICE HOIST: Williams Model M-42 two-speed hoist equipped with ½" cable.

Application Specifications

KELLY SPEED (ROTARY): First gear: 12 & 35 rpm Second gear: 19 & 55 rpm Third gear: 23 & 65 rpm Fourth gear: 36 & 104 rpm

The choice of rotary speeds within each gear is the result of Williams exclusive dual range

clutches.

TORQUE AT KELLY: Available peak torque at kelly is 100,000 foot pounds.

HOIST FORCE: 29,000 pounds

CROWD FORCE: 60,000 pounds positive crowd

force.

KELLY TRAVEL SPEED: Maximum 180 fpm out of the hole (up). Free fall (down).

RECOMMENDED CARRIER: The model 1000 8x4 or its equivalent is the minimum size carrier for the LLDH. Call for specs.

Optional Equipment

AIR CLUTCHES: Air actuated clutches available for the LLDH on special order.

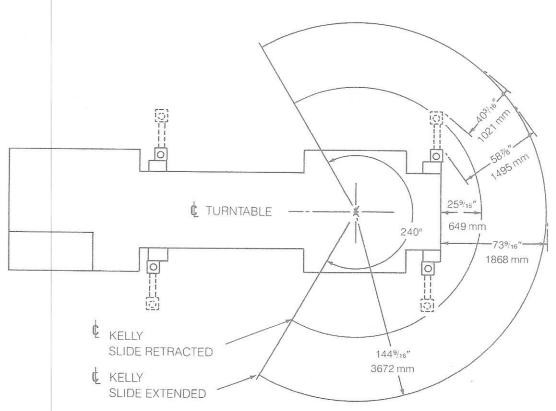
KELLY BAR: 10 7/8" x 7"

DIESEL ENGINE: Cummins model N-855 engine; governed rating: 190 bhp @ 2100 rpm, or Caterpillar Model 3306BT rating 190 bhp @ 1800 rpm.

LLDH Digging Geometry

The drawing below illustrates the LLDH's kelly positioning characteristics. Fingertip- touch of turntable hydraulic control swiftly swings the entire digger section in a 240 degree arc around the rear of the carrier vehicle. At any point in the arc, a touch of the hydraulic houselock brake control will hold the digger in a rigid drilling position.

Standard 4' horizontal slide provides 40 ³/₁₆" maximum extension beyond extended rear outrigger jacks. This allows the LLDH to swing large augers up to 86" diameter around the fully extended rear jacks without interference. The maximum extension from rear of carrier to center line of extended kelly is 73 ⁹/₁₆".





MANUFACTURER OF

FOUNDATION DRILLING MACHINES TIE-BACK EQUIPMENT



FOUNDATION DRILLING TOOLS **CONTINUOUS AUGERS**

TEL. 703-754-7114

8 AM-4 PM EST P.O. BOX 10 GAINESVILLE, VIRGINIA 22065 TWX-710-833-0885

Weights and Dimensions

		LLDH 80		LLDH 100		LLDH 110		LLDH 120			
	lbs		kg	lbs	kg	lbs	kg	Ibs	kg		
TOTAL FRONT TANDEM REAR TANDEM DERRICK	84,300 30,700 53,600 18,600		38 238 13 925 24 313 8 437	85,830 35,450 50,380 20,100	38 932 16 080 22 852 9 117	86,550 37,500 49,050 20,800	39 259 17 010 22 249 9 435	87,350 40,180 47,170	39 622 18 226 21 396		
DRAWWORKS W/T. T. & JACKS		36,200 lbs 16 420 kg									
CARRIER (PURCHASED)		24.729 lbs 11 217 kg									
Weights are appr	oximate and will	vary v	with equipme	ent provided.							
	21	LDH 80		LLDH 100		LLDH 110		LLDH 120			
	·	LLDH	30	LLDH	1100	LLDF	1110	LLDH	1120		
DIMENSIONS	ft	LUH	mm so	ft	mm	ft LLDF	1110 mm	LLDF ft			
DIMENSIONS A				1			mm	ft	mm		
	ft		mm	ft	mm	ft	mm 20 990	ft 73′-10%″	mm 22 514		
Α	ft 53'-10% 17'-10"	"	mm 16 418	ft 63'-10%"	mm 19 466	ft 68'-10%"	mm 20 990 10 008	ft 73'-10%" 37'-10"	mm 22 514 11 532		
В	ft 53'-10% 17'-10" -// 61'-51/2"	"	mm 16 418 5 436	ft 63'-10%" 27'-10"	mm 19 466 8 484	ft 68'-10%" 32'-10"	mm 20 990	ft 73′-10%″	mm 22 514		
A B C WIDTH	ft 53'-10% 17'-10" 	"	mm 16 418 5 436	ft 63'-1036" 27'-10" 71'-5½"	mm 19 466 8 484 21 777 8'-2¼"	ft 68'-10%" 32'-10" 76'-5½"	mm 20 990 10 008	ft 73'-10%" 37'-10"	mm 22 514 11 532		

440	DH 80	LLDH 100		LLDH 110		LLDH 120				
in.	mm	in.	mm	in.	mm	in.	mm			
90	2 286	102	2 591	107	2 718		2 884			
CARRIER & DRAWWORKS W/T. T. & JACKS		83 ³ / ₁₆ in. 2 113 mm								
1147/16	2 907	16311/16	4 158	1821/4	4 620	206	F 000			
78¾	2 000	102				123¾	5 232 3 143			
	in. 90	90 2 286 	in. mm in. 90 2 286 102	in. mm in. mm 90 2 286 102 2 591	in. mm in. mm in. 90 2 286 102 2 591 107 83 ³ / ₁₆ in. 2 113 mm 114 ⁷ / ₁₆ 2 907 163 ¹¹ / ₁₆ 4 158 182 ¹ / ₄	in. mm in. mm in. mm 90 2 286 102 2 591 107 2 718 83 ³ /16 in. 2 113 mm 114 ⁷ /16 2 907 163 ¹¹ /16 4 158 182 ¹ / ₄ 4 629	in. mm in. mm in. mm in. mm in. 1139/16 833/16 in. 2 113 mm 1147/16 2 907 16311/16 4 158 1821/4 4 629 206			

