

# Mueller Co.

## Operating Instructions for

### **MEGA-LITE® DRILLING MACHINE**

## Mueller Co.

Customer Service — Chattanooga, TN 1-800-423-1323

Canada — Barrie, Ontario 1-705-719-9965

[www.muellercompany.com](http://www.muellercompany.com)

#### **! WARNING**

1. Read and follow instructions carefully. Proper training and periodic review regarding the use of this equipment is essential to prevent possible serious injury and/or property damage.
2. Do not exceed the pressure ratings of any components or equipment. Exceeding the rated pressure may result in serious injury and/or property damage.
3. Safety goggles and other appropriate protective gear should be used. Failure to do so could result in serious injury.
4. Inspect cutting tools and replace damaged or dull tools. Use of damaged or dull tools can have detrimental effects on the pipe or equipment, or cause equipment failure.

**All warranties, expressed or implied, for MUELLER® Drilling Machines are rendered null and void if the machines are used with shell cutters or equipment manufactured by someone other than MUELLER CO.**

# INDEX

## MEGA-LITE® Drilling Machine

	Page
Optional Equipment . . . . .	3
Set Up . . . . .	4 to 6
Parts for MEGA-LITE Drilling Machine . . . . .	7
Travel Charts . . . . .	8 to 13



[www.muellercompany.com](http://www.muellercompany.com)

### **! WARNING**

Before using this equipment, inspect the Machine, Gate Valve, Adapter and the fitting on which the machine will be used to verify that they are serviceable and able to contain the fluid pressure involved with the operation. Assure that all connecting threads and flanges, and all sealing gaskets and O-rings are in good condition, properly installed and are capable of effecting a water tight seal. **DO NOT USE ANY PIECE OF EQUIPMENT IN QUESTIONABLE CONDITION.**

After connecting all pieces of equipment on the fitting, but before subjecting the setup to fluid pressure from the pipe (vessel) being drilled, assure that all threaded or flanged connections are wrench tight and pressure test the setup using water introduced through the test plug on the Mega-Lite Machine Adapter, or on fitting (if present). Repair any leakage found. Repeat this pressure test when any connection in the setup is disturbed. **DO NOT ALLOW FLUID PRESSURE FROM THE PIPE (VESSEL) INTO THE SETUP IF ANY LEAKAGE CANNOT BE STOPPED.**

Failure to comply with this warning could result in the possibility for property damage or serious bodily injury.

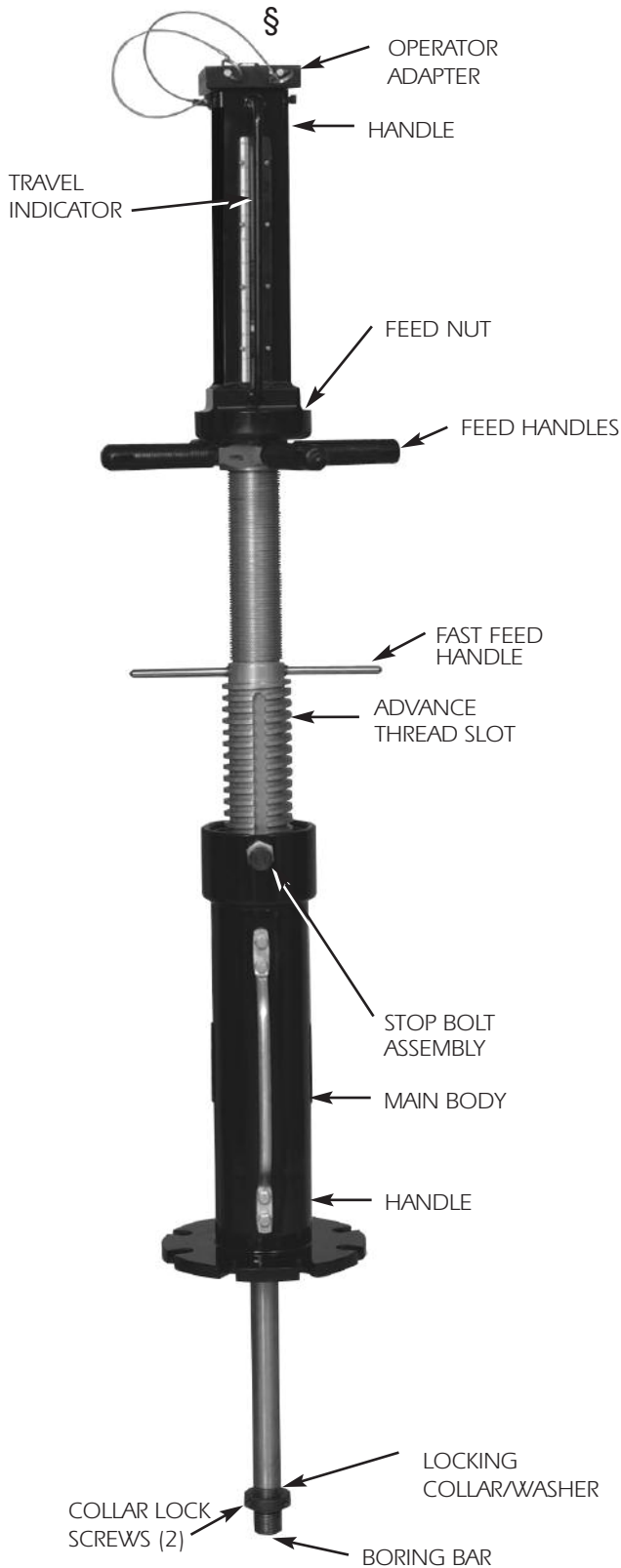
Copyright © 2014 Mueller Co., LLC. All Rights Reserved. The trademarks, logos and service marks displayed in this document are the property of Mueller Co., LLC, its affiliates or other third parties. Any products herein marked with a section symbol (§) are subject to patents or patent applications. For details, visit [www.mwppat.com](http://www.mwppat.com).

These products are intended for use in potable water applications.  
Please contact your Mueller Sales or Customer Service Representative concerning any other application(s).

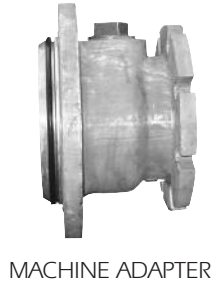
# MEGA-LITE® DRILLING MACHINE

Optional Equipment

**FIGURE 1**



## OPTIONAL EQUIPMENT



## MEGA-LITE SHELL CUTTERS, PILOT DRILLS AND DRILL EXTENSIONS

Nominal Shell Cutter size	3"	4"	6"	8"	10"	12"
Shell Cutter for plastic pipe	—	537022	537053	682574	682575	682576
Plastic pipe Pilot Shell Cutter	—	681919	681919	681919	681919	681919
Pilot Cutter Extension	—	537047	537048	537048	537049	537049
Shell Cutter for ductile iron	537071	537072	537073	537074	537075	537076
Pilot Drill	682573	682573	682573	682573	682573	682573
Pilot Drill Extension	—	—	—	537044	537045	537046

# MEGA-LITE® DRILLING MACHINE

## Set Up

### MACHINE SET UP

1. Attach proper size Tapping Sleeve to pipe to be drilled, using standard procedures.
2. Attach appropriate Tapping Valve to fitting, using standard procedures. Test sleeve and valve assembly.
3. Select correct Shell Cutter and Pilot Drill according to size of Tapping Sleeve, Tapping Valve, and type of pipe. Inspect Shell Cutter and Pilot Drill for cracks, defects and sharpness. If Shell Cutter is dull or has missing or cracked teeth inserts, return to Mueller for rework and sharpening. Dull or damaged Pilot Drill, insert, or plastic pipe Shell Cutter should be replaced.
4. Select the proper Adapter according to size and type of Gate Valve, and bolt it to flange on Main Body of Machine, using Machine Gasket (Part No. 55449). Check to be sure gasket is in good condition and in place.
5. Advance Boring Bar until its end is exposed sufficiently beyond Adapter flange to attach cutting tool. Boring Bar is advanced by disengaging Stop Bolt from Advance Thread Slot, then by turning Fast Feed Handles clockwise. If this does not expose enough Boring Bar: engage Stop Bolt in Advance Thread Slot then turn Feed Handles clockwise.
6. Attach Boring Bar Extension if required – see Figure 2. Thread Extension completely onto Boring Bar end, then back off 1/4 turn. Tighten Locking Collar and Washer against end of extension and tighten two Lock Screws on collar.

**NOTE: This equipment has been tested and verified to provide sufficient travel and clearance when used on Mueller® brand tapping sleeves and valves only.**

**FIGURE 2**

Shell Cutter	Mech. Joint	AquaGrip®	Flanged
4" Plastic pipe	—	—	—
6" Plastic pipe	—	N	N
8" Plastic pipe	—	—	—
10" Plastic pipe	X	X	N
12" Plastic pipe	X	X	X
3" Ductile Iron pipe	—	—	—
4" Ductile Iron pipe	N	—	N
6" Ductile Iron pipe	—	—	N
8" Ductile Iron pipe	—	—	N
10" Ductile Iron pipe	X	X	X
12" Ductile Iron pipe	X	X	X

Data based on Mueller valves, other manufacturer's valves must be checked upon application.

X = Boring Bar Extension must be used  
 N = Boring Bar Extension must not be used  
 — = Boring Bar Extension usage optional

7. Attach drilling tool(s) onto Boring Bar, or to Extension as appropriate. The end of Boring Bar should be flush with the inside surface of Shell Cutter backing plate (hub) – tighten Locking Collar and Washer against Hub and tighten collar Lock Screws. Tighten Pilot Drill securely into threads inside end of Boring Bar.
8. If cutting metallic, HDPE or PVC pipe, apply Mueller Cutting Grease liberally to teeth of Shell Cutter and to cutting edges of Pilot Drill. Only apply Cutting Grease to outside surface of plastic pipe Shell Cutters. DO NOT use Cutting Grease when working on A/C pipe.
9. Retract Boring Bar to its rearmost position by reversing the procedure used in step 5.
10. To verify that tools will clear the valve gate and allow it to close after the drilling operation is complete, make sure Gate Valve is closed at this time, then attach Machine with Adapter and Adapter Gasket to Gate Valve. Check to be sure Adapter Gasket is in good condition. Cutter must not interfere with operation of Gate Valve.
11. Open Tapping Valve.

# MEGA-LITE® DRILLING MACHINE

## Set Up

12. Advance Boring Bar until Pilot Drill contacts main. To advance, disengage Stop Bolt from Advance Thread Slot, then turn Fast Feed Handles **clockwise**. If Pilot Drill does not contact main before running out of Advance Threads, turn Fast Feed Handles **counter-clockwise** until Stop Bolt can be engaged in Advance Thread Slot. Turn Fast Feed Handles **clockwise** until Pilot Drill contacts main.
13. If not already done as part of step 12, engage Stop Bolt in Advance Thread Slot (it may be necessary to turn Fast Feed Handles **counterclockwise** slightly).
14. Retract Pilot Drill slightly off main by turning Feed Handles **counterclockwise** 1/2 turn.

**NOTE: Never start cutting tools in a bind as this could cause tool breakage.**

15. Check available drilling travel using the Travel Indicator.
16. Compare available travel to what is required for size of pipe and Shell Cutter, referring to charts on pages 6-8. Proceed only if there is sufficient travel available.
17. Be sure that control valve on Power Operator is closed, then attach Power Operator to the back of the machine.

### IF USING AIR POWER OPERATOR

- a. Attach lubricator whip hose to Operator.
- b. Attach air supply hose to end of lubricator hose.
- c. Verify lubricator reservoir contains sufficient air tool oil.
- d. Turn on air supply and adjust pressure to 90 psig at the Operator.

Air Power Operator Requirements	
Free Speed	52 RPM
Required Air Pressure	90 psig
Air consumption at max. power	36 scfm
Stall torque	254 ft-lbs
Weight	15 lbs

### IF USING HYDRAULIC POWER OPERATOR

- a. Attach supply and return lines to hydraulic connectors.
- b. Turn on hydraulic supply and adjust flow rate and pressure according to above specifications. Check for proper rotation direction. Tool should be turning **clockwise** when viewed from the operator end of machine.

Hydraulic Power Operator Requirements	
Flow Range	3-5 GPM
Free speed @ 4 GPM	51 RPM
Max. continuous operating pressure	850 psig
Max. intermittent pressure	1950 psig
Weight	30 lbs

18. Open Operator control valve, which starts rotation of Boring Bar. Feed cutting tools at a slow steady rate using firm pressure on Feed Handles, turning in **clockwise direction**. Proper feed rate can be determined by feel as Feed Handles are turned. Too fast - pressure on Feed Handles will be heavy with the impression cutting tool is being forced or "pushed." Too slow - pressure on Feed Handles will be slight with little resistance felt. Correct feed rate should remove any slack in Feed Handles without any sounds of straining from the Machine or Power Operator.
19. Complete cut in pipe.
20. When Boring Bar has traveled distance determined in step 15, stop Power Operator by closing feed valve.

**NOTE: Operator sound and speed will change and Feed Handles will turn easily once cut is complete. Check to be sure cut is complete by turning Feed Handles to advance Boring Bar slightly. If Boring Bar advances easily, cut is complete.**

21. Remove Power Operator from Machine.
22. Retract cutting tools from pipe by using Feed Handles to rotate Feed Nut in **counter-clockwise** direction. Disengage Stop Bolt and continue turning Fast Feed Handles **counterclockwise** until Boring Bar is in rear most position.
23. Close Tapping Valve.

# MEGA-LITE® DRILLING MACHINE

## Set Up

24. Remove Machine and Adapter from Tapping Valve.
25. With Machine removed from Tapping Valve, advance Boring Bar until Locking Collar behind Shell Cutter is accessible. To advance, disengage Stop Bolt from Advance Thread Slot, then turn Feed Handles **clockwise**. If additional Boring Bar movement is needed, turn Feed Handles **counterclockwise** until Stop Bolt can be engaged in Advance Thread Slot, and turn Feed Handles **clockwise** until Locking Collar is accessible.
26. Loosen two Lock Screws and back collar away from Shell Cutter.
27. Remove Shell Cutter and remove coupon from inside.
28. Remove Pilot Drill from end of Boring Bar.
29. Remove Adapter.
30. After use, dirt and excess cutting grease should be cleaned from Machine. To prevent rust on Boring Bar, it should be given a light coat of oil while fully extended.
31. Retract Boring Bar until approximately 1/2 remains extended and store Machine in its protective box. (Oiled Boring Bar will pull lubricant into seals and guides as it is retracted.)
32. Dress cutting edges of tools to remove debris, if necessary.

### Mega-Lite Machine Parts §

Item	QTY	PART No.	PART DESCRIPTION
1	1	537000	BORING BAR
2	1	537001	OPERATOR ADAPTER PLATE
3	1	682570	SQUARE FEED CONNECTOR SUB ASY
4	1	537367	WASHER
5	1	537369	LOWER THRUST WASHER
6	1	537006	INNER SQUARE
7	1	537007	SQUARE PLASTIC BEARING
8	1	537092	FEEDING NUT
9	4	537009	FEEDING NUT HANDLE
10	4	537010	GRIP
11	1	537011	MACHINE BODY
12	1	537013	THREADED INSERT RETAINING RING
13	1	537093	THREADED INSERT
14	1	537015	BODY BOTTOM BEARING
15	2	537016	BODY BEARING RETAINING RING
16	1	537018	FLANGED CYLINDER
17	1	537020	PRESSURE BEARING
18	2	312862	BEARING WASHER
19	2	537022	O-RING (030)
20	1	682639	STOP BOLT
21	1	537024	FEED NUT RETAINING RING
22	1	537025	FEED NUT LOWER BEARING WASHER
23	1	537026	FEED NUT UPPER BEARING WASHER
24	1	537027	BODY TOP BEARING RET. RING
25	1	312692	BEARING
26	1	537029	BODY TOP BEARING
27	4	301123	HEX SOCKET HEAD CAP SCREW
28	1	537032	SQUARE BEARING RETAINING RING
29	2	312689	RETAINING RING
30	2	537034	COLLAR
31	2	537035	WASHER
32	1	537036	TRAVEL INDICATOR
33	1	537043	BORING BAR EXTENSION
34	1	55449	MACHINE GASKET
35	1	537084	PLEXIGLAS COVER
36	2	537083	FAST FEED HANDLE
37	2	537085	LOCK PIN
38	2	537086	LANYARD ASSEMBLY
39	1	537087	BODY HANDLE
40	1	312690	ADAPTER PLATE BUSHING
41	1	537368	UPPER THRUST WASHER
42	1	307365	O-RING

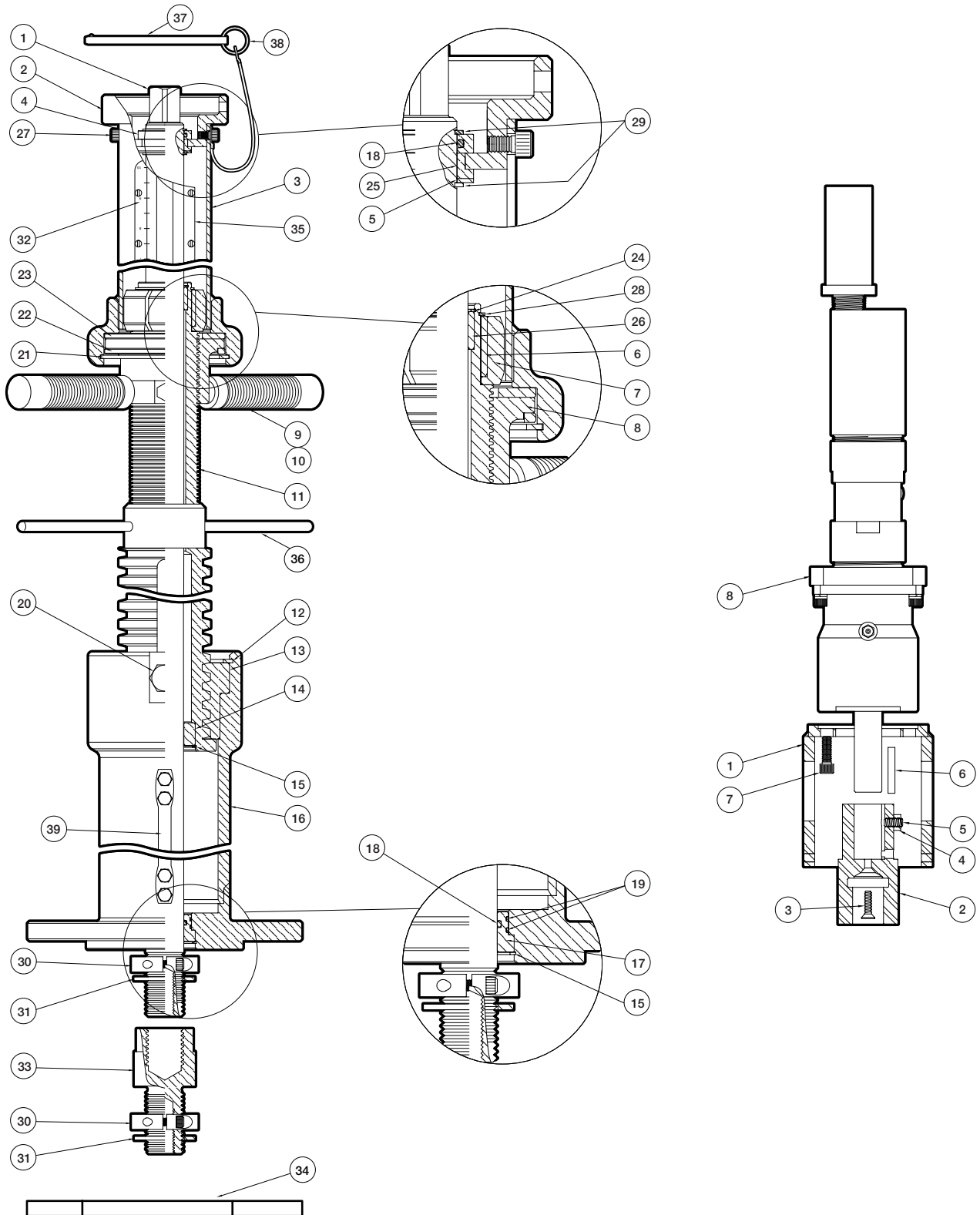
### Air Operator Parts

ITEM	QTY	PART No.	PART DESCRIPTION
1	1	537037	OPERATOR ADAPTER
2	1	537039	POWER OPERATOR COUPLING
3	1	537042	FLAT HEAD SOCKET SCREW
4	1	508317	HEX NUT
5	1	501303	SET SCREW
6	1	79492	KEY
7	6	92741	HEX SOCKET HEAD CAP SCREW
8	1	537067	AIR OPERATOR

TO ORDER: SPECIFY QUANTITY, PART NUMBER AND PART NAME (include catalog number and model number of machine).

# MEGA-LITE® DRILLING MACHINE

Parts for MEGA-LITE Drilling Machine - Model 1A §



Hydraulic Operator Not Shown: Individual repair parts not available.  
Contact Mueller Customer Service for information.

**NOTE: These illustrations are for parts identification only. DO NOT use these illustrations for assembly or disassembly of machine. Mueller Co. offers a machine repair service. Contact Mueller Customer Service Center for details.**

# MEGA-LITE® DRILLING MACHINE

Travel Charts - Dimensions in Inches

DUCTILE IRON								
CLASS		50	51	52	53	54	55	56
PIPE SIZE	CUTTER OD							
4	2.50		2 1/8	2 1/8	2 1/8	2 1/4	2 1/4	2 1/4
	3.50		2 5/8	2 5/8	2 3/4	2 3/4	2 7/8	2 7/8
6	2.50	2	2	2	2	2 1/8	2 1/8	2 1/8
	3.50	2 1/4	2 1/4	2 1/4	2 1/4	2 3/8	2 3/8	2 3/8
	5.50	3 1/4	3 1/4	3 3/8	3 3/8	3 1/2	3 5/8	3 5/8
8	2.50	1 7/8	1 7/8	2	2	2	2	2 1/8
	3.50	2 1/8	2 1/8	2 1/8	2 1/8	2 1/4	2 1/4	2 1/4
	5.50	2 3/4	2 3/4	2 3/4	2 7/8	2 7/8	2 7/8	3
	7.50	4 5/8	4 5/8	4 3/4	4 3/4	4 7/8	5	5
10	2.50	1 7/8	1 7/8	2	2	2	2	2
	3.50	2	2	2 1/8	2 1/8	2 1/8	2 1/8	2 1/4
	5.50	2 1/2	2 1/2	2 5/8	2 5/8	2 5/8	2 5/8	2 3/4
	7.50	3 7/8	4	4	4	4 1/8	4 1/8	4 1/8
	9.50	5	5	5 1/8	5 1/4	5 1/4	5 3/8	5 3/8
12	2.50	1 7/8	1 7/8	1 7/8	2	2	2	2
	3.50	2	2	2	2 1/8	2 1/8	2 1/8	2 1/8
	5.50	2 3/8	2 3/8	2 1/2	2 1/2	2 1/2	2 1/2	2 5/8
	7.50	3 5/8	3 5/8	3 3/4	3 3/4	3 3/4	3 3/4	3 7/8
	9.50	4 1/8	4 1/4	4 1/4	4 1/4	4 3/8	4 3/8	4 1/2
	11.50	5 3/4	5 3/4	5 7/8	6	6	6 1/8	6 1/4
14	2.50	1 7/8	1 7/8	1 7/8	2	2	2	2
	3.50	2	2	2	2 1/8	2 1/8	2 1/8	2 1/8
	5.50	2 1/4	2 3/8	2 3/8	2 3/8	2 3/8	2 1/2	2 1/2
	7.50	3 3/8	3 1/2	3 1/2	3 1/2	3 1/2	3 5/8	3 5/8
	9.50	3 3/4	3 3/4	3 7/8	3 7/8	3 7/8	4	4
	11.50	4 3/4	4 7/8	4 7/8	5	5	5	5 1/8
16	2.50	1 7/8	1 7/8	1 7/8	2	2	2	2
	3.50	2	2	2	2	2 1/8	2 1/8	2 1/8
	5.50	2 1/4	2 1/4	2 1/4	2 3/8	2 3/8	2 3/8	2 3/8
	7.50	3 1/4	3 3/8	3 3/8	3 3/8	3 3/8	3 1/2	3 1/2
	9.50	3 1/2	3 1/2	3 5/8	3 5/8	3 5/8	3 3/4	3 3/4
	11.50	4 3/8	4 3/8	4 3/8	4 1/2	4 1/2	4 1/2	4 5/8
18	2.50	1 7/8	1 7/8	1 7/8	2	2	2	2
	3.50	2	2	2	2	2 1/8	2 1/8	2 1/8
	5.50	2 1/4	2 1/4	2 1/4	2 1/4	2 3/8	2 3/8	2 3/8
	7.50	3 1/4	3 1/4	3 1/4	3 1/4	3 3/8	3 3/8	3 3/8
	9.50	3 3/8	3 3/8	3 3/8	3 3/8	3 1/2	3 1/2	3 1/2
	11.50	4	4	4 1/8	4 1/8	4 1/8	4 1/4	4 1/4
20	2.50	1 7/8	1 7/8	1 7/8	2	2	2	2
	3.50	2	2	2	2	2	2 1/8	2 1/8
	5.50	2 1/8	2 1/4	2 1/4	2 1/4	2 1/4	2 3/8	2 3/8
	7.50	3 1/8	3 1/8	3 1/8	3 1/4	3 1/4	3 1/4	3 1/4
	9.50	3 1/4	3 1/4	3 1/4	3 1/4	3 3/8	3 3/8	3 3/8
	11.50	3 3/4	3 3/4	3 7/8	3 7/8	3 7/8	4	4
24	2.50	1 7/8	1 7/8	2	2	2	2	2
	3.50	2	2	2	2	2	2 1/8	2 1/8
	5.50	2 1/8	2 1/8	2 1/8	2 1/4	2 1/4	2 1/4	2 1/4
	7.50	3	3	3 1/8	3 1/8	3 1/8	3 1/8	3 1/4
	9.50	3	3	3	3 1/8	3 1/8	3 1/8	3 1/4
	11.50	3 1/2	3 1/2	3 1/2	3 1/2	3 5/8	3 5/8	3 5/8
30	2.50	1 7/8	1 7/8	2	2	2	2 1/8	2 1/8
	3.50	1 7/8	2	2	2	2 1/8	2 1/8	2 1/8
	5.50	2 1/8	2 1/8	2 1/8	2 1/4	2 1/4	2 1/4	2 1/4
	7.50	2 7/8	3	3	3	3 1/8	3 1/8	3 1/8
	9.50	2 7/8	2 7/8	2 7/8	3	3	3	3 1/8
	11.50	3 1/8	3 1/4	3 1/4	3 1/4	3 3/8	3 3/8	3 3/8
36	2.50	1 7/8	2	2	2	2 1/8	2 1/8	2 1/4
	3.50	2	2	2	2 1/8	2 1/8	2 1/4	2 1/4
	5.50	2 1/8	2 1/8	2 1/8	2 1/4	2 1/4	2 3/8	2 3/8
	7.50	2 7/8	2 7/8	3	3	3 1/8	3 1/8	3 1/8
	9.50	2 3/4	2 3/4	2 7/8	2 7/8	2 7/8	3	3
	11.50	3	3 1/8	3 1/8	3 1/8	3 1/4	3 1/4	3 3/8



# MEGA-LITE® DRILLING MACHINE

Travel Charts - Dimensions in Inches

DUCTILE IRON						
CLASS		150	200	250	300	350
PIPE SIZE	CUTTER OD					
4	2.50	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8
	3.50	2 5/8	2 5/8	2 5/8	2 5/8	2 5/8
6	2.50	2	2	2	2	2
	3.50	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4
	5.50	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4
8	2.50	1 7/8	1 7/8	1 7/8	1 7/8	1 7/8
	3.50	2	2	2	2	2
	5.50	2 3/4	2 3/4	2 3/4	2 3/4	2 3/4
	7.50	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2
10	2.50	1 7/8	1 7/8	1 7/8	1 7/8	1 7/8
	3.50	2	2	2	2	2
	5.50	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
	7.50	3 7/8	3 7/8	3 7/8	3 7/8	3 7/8
	9.50	4 7/8	4 7/8	4 7/8	4 7/8	4 7/8
12	2.50	1 3/4	1 3/4	1 3/4	1 3/4	1 7/8
	3.50	1 7/8	1 7/8	1 7/8	1 7/8	2
	5.50	2 1/4	2 1/4	2 1/4	2 1/4	2 3/8
	7.50	3 1/2	3 1/2	3 1/2	3 1/2	3 5/8
	9.50	4 1/8	4 1/8	4 1/8	4 1/8	4 1/8
14	11.50	5 5/8	5 5/8	5 5/8	5 5/8	5 5/8
	2.50	1 3/4	1 3/4	1 7/8	1 7/8	1 7/8
	3.50	1 7/8	1 7/8	1 7/8	2	2
	5.50	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4
	7.50	3 3/8	3 3/8	3 3/8	3 3/8	3 3/8
16	9.50	3 5/8	3 5/8	3 3/4	3 3/4	3 3/4
	11.50	4 5/8	4 5/8	4 3/4	4 3/4	4 3/4
	2.50	1 3/4	1 3/4	1 7/8	1 7/8	1 7/8
	3.50	1 7/8	1 7/8	1 7/8	2	2
	5.50	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4
18	7.50	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4
	9.50	3 3/8	3 3/8	3 1/2	3 1/2	3 1/2
	11.50	4 1/4	4 1/4	4 1/4	4 1/4	4 3/8
	2.50	1 3/4	1 3/4	1 7/8	1 7/8	1 7/8
	3.50	1 7/8	1 7/8	1 7/8	2	2
20	5.50	2 1/8	2 1/8	2 1/4	2 1/4	2 1/4
	7.50	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4
	9.50	3 3/8	3 3/8	3 1/2	3 1/2	3 1/2
	11.50	4 1/4	4 1/4	4 1/4	4 1/4	4 3/8
	2.50	1 3/4	1 3/4	1 7/8	1 7/8	1 7/8
24	3.50	1 7/8	1 7/8	1 7/8	2	2
	5.50	2	2	2 1/8	2 1/8	2 1/8
	7.50	3	3	3 1/8	3 1/8	3 1/8
	9.50	3	3	3 1/8	3 1/4	3 1/4
	11.50	3 5/8	3 5/8	3 3/4	3 3/4	3 3/4
30	2.50	1 3/4	1 7/8	1 7/8	1 7/8	1 7/8
	3.50	1 3/4	1 7/8	1 7/8	2	2
	5.50	2	2	2 1/8	2 1/8	2 1/8
	7.50	2 7/8	3	3	3	3
	9.50	2 7/8	3	3	3	3
36	11.50	3 1/4	3 3/8	3 1/2	3 1/2	3 1/2
	2.50	1 7/8	1 7/8	1 7/8	2	2
	3.50	1 7/8	1 7/8	2	2	2
	5.50	2	2	2 1/8	2 1/8	2 1/8
	7.50	2 7/8	2 7/8	3	3	3
	9.50	2 3/4	2 3/4	2 7/8	2 7/8	2 7/8
	11.50	3 1/8	3 1/8	3 1/4	3 1/4	3 1/4
	2.50	1 7/8	1 7/8	2	2	2
	3.50	1 7/8	2	2	2	2 1/8
	5.50	2	2	2 1/8	2 1/8	2 1/4
	7.50	2 7/8	2 7/8	2 7/8	3	3
	9.50	2 5/8	2 3/4	2 3/4	2 3/4	2 7/8
	11.50	3	3	3	3 1/8	3 1/8

# MEGA-LITE® DRILLING MACHINE

Travel Charts - Dimensions in Inches

PVC (CI)							
CLASS		100	125	150	165	200	235
4 - 12 DR		25		18		14	
14 - 36 DR		41	32.5		25	21	18
PIPE SIZE	CUTTER OD*						
4	3.38	2 1/8		2 1/4		2 3/8	
6	3.38	1 7/8		2		2 1/8	
	5.00	2 5/8		2 3/4		3	
8	3.38	1 7/8		2		2 1/8	
	5.00	2 1/4		2 1/2		2 3/4	
	6.63	3 1/8		3 3/8		3 3/4	
10	3.38	1 7/8		2		2 1/4	
	5.00	2 1/4		2 1/2		2 5/8	
	6.63	2 3/4		3		3 3/8	
	8.38	3 3/4		4 1/8		4 1/2	
12	3.38	1 7/8		2 1/8		2 3/8	
	5.00	2 1/4		2 1/2		2 3/4	
	6.63	2 5/8		2 7/8		3 1/4	
	8.38	3 3/8		3 5/8		4	
	10.00	4 3/8		4 3/4		5 1/4	
14	3.38	1 5/8	1 3/4		2		2 1/4
	5.00	1 7/8	2		2 1/4		2 1/2
	6.63	2 1/4	2 3/8		2 5/8		2 7/8
	8.38	2 7/8	3		3 1/8		3 1/2
	10.00	3 1/2	3 5/8		3 7/8		4 1/4
16	3.38	1 3/4	1 7/8		2		2 3/8
	5.00	1 7/8	2		2 1/4		2 1/2
	6.63	2 1/4	2 3/8		2 5/8		2 7/8
	8.38	2 3/4	2 7/8		3		3 3/8
	10.00	3 1/4	3 3/8		3 5/8		4
18	3.38	1 3/4	1 7/8		2 1/8	2 1/4	2 3/8
	5.00	2	2 1/8		2 1/4	2 1/2	2 5/8
	6.25	2 1/4	2 3/8		2 5/8	2 3/4	3
	8.38	2 5/8	2 3/4		3	3 1/8	3 3/8
	10.00	3 1/8	3 1/4		3 1/2	3 5/8	3 7/8
20	3.38	1 3/4	2		2 1/8	2 3/8	2 1/2
	5.00	2	2 1/8		2 3/8	2 1/2	2 3/4
	6.63	2 1/4	2 3/8		2 5/8	2 3/4	3
	8.38	2 1/2	2 3/4		3	3 1/8	3 3/8
	10.00	3	3 1/8		3 3/8	3 5/8	3 7/8
24	3.38	1 7/8	2 1/8		2 3/8	2 1/2	2 3/4
	5.00	2	2 1/4		2 1/2	2 3/4	3
	6.63	2 1/4	2 3/8		2 3/4	2 7/8	3 1/8
	8.38	2 1/2	2 3/4		3	3 1/4	3 1/2
	10.00	2 7/8	3		3 3/8	3 5/8	3 7/8
30	3.38	2	2 1/4		2 5/8	2 7/8	
	5.00	2 1/8	2 3/8		2 3/4	3	
	6.63	2 3/8	2 1/2		2 7/8	3 1/8	
	8.38	2 1/2	2 3/4		3 1/8	3 3/8	
	10.00	2 3/4	3		3 3/8	3 5/8	
36	3.38	2 1/4	2 1/2		2 7/8	3 1/4	
	5.00	2 1/4	2 1/2		3	3 1/4	
	6.63	2 3/8	2 3/4		3 1/8	3 3/8	
	8.38	2 5/8	2 7/8		3 1/4	3 5/8	
	10.00	2 7/8	3 1/8		3 1/2	3 7/8	

\*SHELL CUTTER FOR PLASTIC PIPE

# MEGA-LITE® DRILLING MACHINE

Travel Charts - Dimensions in Inches

		PVC (IP)				
CLASS (DR)		100 (41)	125 (32.5)	160 (26)	200 (21)	250 (17)
PIPE SIZE	CUTTER OD*					
4	3.38	2	2 1/8	2 1/8	2 1/4	2 3/8
6	3.38	1 3/4	1 3/4	1 7/8	2	2
	5.00	2 1/2	2 5/8	2 5/8	2 3/4	3
8	3.38	1 5/8	1 3/4	1 3/4	1 7/8	2
	5.00	2 1/8	2 1/4	2 3/8	2 1/2	2 5/8
	6.63	3	3 1/8	3 1/4	3 3/8	3 5/8
10	3.38	1 5/8	1 3/4	1 7/8	2	2 1/8
	5.00	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4
	6.63	2 5/8	2 5/8	2 3/4	3	3 1/8
	8.38	3 1/2	3 3/4	3 7/8	4 1/8	4 3/8
12	3.38	1 5/8	1 3/4	1 7/8	2	2 1/8
	5.00	2	2	2 1/8	2 3/8	2 1/2
	6.63	2 3/8	2 1/2	2 5/8	2 3/4	3
	8.38	3 1/8	3 1/4	3 3/8	3 5/8	3 7/8
	10.00	4 1/8	4 1/4	4 1/2	4 3/4	5
14	1.61	1 5/8	1 3/4	1 7/8	2	2 1/4
	5.00	2	2	2 1/8	2 3/8	2 1/2
	6.63	2 3/8	2 1/2	2 5/8	2 3/4	3
	8.38	3	3 1/8	3 1/4	3 3/8	3 5/8
	10.00	3 3/4	3 7/8	4 1/8	4 1/4	4 5/8
16	3.38	1 3/4	1 3/4	2	2 1/8	2 3/8
	5.00	1 7/8	2	2 1/4	2 3/8	2 5/8
	6.63	2 1/4	2 3/8	2 1/2	2 3/4	3
	8.38	2 3/4	2 7/8	3 1/8	3 1/4	3 1/2
	10.00	3 3/8	3 1/2	3 3/4	4	4 1/4
18	3.38	1 3/4	1 7/8	2	2 1/4	2 3/8
	5.00	2	2	2 1/4	2 3/8	2 5/8
	6.63	2 1/4	2 3/8	2 1/2	2 3/4	3
	8.38	2 5/8	2 3/4	3	3 1/4	3 1/2
	10.00	3 1/4	3 3/8	3 1/2	3 3/4	4
20	3.38	1 3/4	1 7/8	2 1/8	2 1/4	2 1/2
	5.00	2	2 1/8	2 1/4	2 1/2	2 3/4
	6.63	2 1/4	2 3/8	2 1/2	2 3/4	3
	8.38	2 5/8	2 3/4	3	3 1/8	3 1/2
	10.00	3	3 1/4	3 3/8	3 5/8	4
24	3.38	1 7/8	2	2 1/4	2 1/2	2 3/4
	5.00	2	2 1/8	2 3/8	2 5/8	3
	6.63	2 1/4	2 3/8	2 5/8	2 7/8	3 1/8
	8.38	2 1/2	2 3/4	2 7/8	3 1/4	3 1/2
	10.00	2 7/8	3 1/8	3 1/4	3 5/8	3 7/8
30	3.38	2	2 1/4	2 1/2	2 3/4	3 1/8
	5.00	2 1/8	2 3/8	2 5/8	2 7/8	3 1/4
	6.63	2 1/4	2 1/2	2 3/4	3 1/8	3 1/2
	8.38	2 1/2	2 3/4	3	3 3/8	3 3/4
	10.00	2 3/4	3	3 1/4	3 5/8	4
36	3.38	2 1/8	2 3/8	2 3/4	3 1/8	3 1/2
	5.00	2 1/4	2 1/2	2 3/4	3 1/8	3 5/8
	6.63	2 3/8	2 5/8	3	3 3/8	3 3/4
	8.38	2 5/8	2 7/8	3 1/8	3 1/2	4
	10.00	2 3/4	3	3 3/8	3 3/4	4 1/4

\*SHELL CUTTER FOR PLASTIC PIPE

# MEGA-LITE® DRILLING MACHINE

Travel Charts - Dimensions in Inches

CLASS (DR)		HD PE (IP)					
PIPE SIZE	CUTTER OD*	DR21	DR17	DR15.5	DR13.5	DR11	DR9
4	3.38	2 1/8	2 1/4	2 1/4	2 3/8	2 5/8	2 7/8
6	3.38	1 7/8	2	2	2 1/8	2 1/4	2 3/8
	5.00	2 3/4	2 7/8	2 7/8	3	3 3/8	3 3/4
8	3.38	1 7/8	2	2	2 1/8	2 1/4	2 1/2
	5.00	2 3/8	2 1/2	2 5/8	2 5/8	2 7/8	3 1/8
	6.63	3 1/4	3 1/2	3 5/8	3 3/4	4 1/8	4 7/8
10	3.38	1 7/8	2	2 1/8	2 1/8	2 3/8	2 5/8
	5.00	2 1/4	2 3/8	2 1/2	2 5/8	2 7/8	3 1/8
	6.63	2 7/8	3	3 1/8	3 1/4	3 1/2	3 7/8
	8.38	4	4 1/4	4 3/8	4 5/8	5 1/8	
12	3.38	1 7/8	2 1/8	2 1/8	2 1/4	2 1/2	2 3/4
	5.00	2 1/4	2 3/8	2 1/2	2 5/8	2 7/8	3 1/8
	6.63	2 3/4	2 7/8	3	3 1/8	3 3/8	3 3/4
	8.38	3 1/2	3 5/8	3 3/4	4	4 3/8	4 3/4
	10.00	4 1/2	4 7/8	5	5 1/4	6	
14	3.38	2	2 5/8	2 1/4	2 3/8	2 5/8	3
	5.00	2 1/4	2 3/8	2 1/2	2 5/8	2 7/8	3 1/4
	6.63	2 5/8	2 7/8	3	3 1/8	3 3/8	3 3/4
	8.38	3 1/4	3 1/2	3 5/8	3 3/4	4 1/8	4 5/8
	10.00	4 1/8	4 3/8	4 5/8	4 3/4	5 1/4	5 1/8
16	3.38	1 1/2	2 1/4	2 1/4	2 1/2	2 3/4	3 1/8
	5.00	2 1/4	2 1/2	2 1/2	2 3/4	3	3 3/8
	6.63	2 5/8	2 7/8	2 7/8	3 1/8	3 3/8	3 7/8
	8.38	3 1/8	3 1/4	3 3/8	3 5/8	4	4 1/2
	10.00	3 5/8	3 7/8	4	4 1/4	4 5/8	5 1/8
18	3.38	2 1/8	2 1/4	2 3/8	2 5/8	2 7/8	3 1/4
	5.00	2 1/4	2 1/2	2 5/8	2 3/4	3 1/8	3 1/2
	6.63	2 5/8	2 7/8	3	3 1/8	2 1/2	3 7/8
	8.38	3 1/8	3 1/4	3 3/8	3 5/8	4	4 1/2
	10.00	3 5/8	3 7/8	4	4 1/4	4 5/8	5 1/8
20	3.38	2 1/8	2 3/8	2 1/2	2 3/4	3	3 1/2
	5.00	2 3/8	2 5/8	2 3/4	2 7/8	3 1/4	3 3/4
	6.63	2 5/8	2 7/8	3	3 1/4	3 5/8	4
	8.38	3	3 1/4	3 3/8	3 5/8	4	4 1/2
	10.00	3 1/2	3 3/4	3 7/8	4 1/8	4 5/8	5 1/8
24	3.38	2 3/8	2 5/8	2 3/4	3	3 3/8	3 7/8
	5.00	2 1/2	2 3/4	2 7/8	3 1/8	3 5/8	4 1/8
	6.63	2 3/4	3	3 1/8	3 3/8	3 7/8	4 3/8
	8.38	3	3 3/8	3 1/2	3 3/4	4 1/8	4 3/4
	10.00	3 3/8	3 3/4	3 7/8	4 1/8	4 5/8	5 1/8
30	3.38	2 5/8	2 7/8	3 1/8	3 3/8	4	4 1/2
	5.00	2 3/4	3	3 1/4	3 1/2	4	4 5/8
	6.63	2 7/8	3 1/4	3 3/8	3 3/4	4 1/4	4 7/8
	8.38	3 1/8	3 1/2	3 5/8	4	4 1/2	5 1/8
	10.00	3 1/2	3 3/4	4	4 1/4	4 7/8	5 1/2
36	3.38	2 7/8	3 1/4	3 1/2	3 7/8	4 3/8	5 1/8
	5.00	3	3 3/8	3 5/8	3 7/8	4 1/2	5 1/4
	6.63	3 1/8	3 1/2	3 3/4	4 1/8	4 3/4	5 1/2
	8.38	3 3/8	3 3/4	4	4 1/4	5	5 3/4
	10.00	3 1/2	4	4 1/4	4 5/8	5 1/4	6

\*SHELL CUTTER FOR PLASTIC PIPE

# MEGA-LITE® DRILLING MACHINE

Travel Charts - Dimensions in Inches

		HD PE (DI)					
CLASS (DR)		DR21	DR17	DR15.5	DR13.5	DR11	DR9
PIPE SIZE	CUTTER OD*						
4	3.38	2 1/8	2 1/8	2 1/4	2 1/4	2 1/2	2 5/8
6	3.38	1 7/8	2	2	2 1/8	2 1/4	2 1/2
	5.00	2 5/8	2 3/4	2 7/8	3	3 1/4	3 5/8
8	3.38	1 7/8	2	2	2 1/8	2 1/4	2 1/2
	5.00	2 3/8	2 1/2	2 1/2	2 5/8	2 7/8	3 1/8
	6.63	3 1/8	3 3/8	3 1/2	3 5/8	3 7/8	4 3/8
10	3.38	1 7/8	2	2 1/8	2 1/4	2 3/8	2 5/8
	5.00	2 1/4	2 3/8	2 1/2	2 5/8	2 7/8	3 1/8
	6.63	2 7/8	3	3 1/8	3 1/4	3 1/2	3 7/8
	8.38	3 7/8	4 1/8	4 1/4	4 3/8	4 7/8	5 1/2
12	3.38	1 7/8	2 1/8	2 1/8	2 1/4	2 1/2	2 3/4
	5.00	2 1/4	2 3/8	2 1/2	2 5/8	2 7/8	3 1/8
	6.63	2 3/4	2 7/8	3	3 1/8	3 3/8	3 3/4
	8.38	3 3/8	3 5/8	3 3/4	3 7/8	4 1/4	4 3/4
	10.00	4 3/8	4 5/8	4 7/8	5 1/8	5 5/8	6 1/2
14	3.38	2	2 1/8	2 1/4	2 3/8	2 5/8	3
	5.00	2 1/4	2 1/2	2 1/2	2 3/4	3	3 1/4
	6.63	2 5/8	2 7/8	2 7/8	3 1/8	3 3/8	3 3/4
	8.38	3 1/4	3 3/8	3 1/2	3 3/4	4	4 1/2
	10.00	3 7/8	4 1/8	4 1/4	4 1/2	5	5 1/2
16	3.38	2 1/8	2 1/4	3	2 1/2	2 7/8	3 1/4
	5.00	2 1/4	2 1/2	2 5/8	2 3/4	3 1/8	3 1/2
	6.63	2 5/8	2 7/8	3	3 1/8	3 1/2	3 7/8
	8.38	3 1/8	3 3/8	3 1/2	3 5/8	4	4 1/2
	10.00	3 5/8	4	4 1/8	4 1/4	4 3/4	5 1/4
18	3.38	2 1/8	2 3/8	2 1/2	2 5/8	3	3 3/8
	5.00	2 3/8	2 5/8	2 3/4	2 7/8	3 1/4	3 5/8
	6.25	2 5/8	2 7/8	3	3 1/4	3 1/2	4
	8.38	3	3 1/4	3 3/8	3 5/8	4	4 1/2
	10.00	3 1/2	3 3/4	4	4 1/8	4 5/8	5 1/8
20	3.38	2 1/4	2 1/2	2 5/8	2 7/8	3 1/4	3 5/8
	5.00	2 3/8	2 5/8	2 3/4	3	3 3/8	3 7/8
	6.63	2 5/8	2 7/8	3	3 1/4	3 5/8	4 1/8
	8.38	3	3 1/4	3 1/2	3 5/8	4 1/8	4 5/8
	10.00	3 1/2	3 3/4	3 7/8	4 1/8	4 5/8	5 1/8
24	3.38	2 3/8	2 3/4	2 7/8	3 1/8	3 1/2	4 1/8
	5.00	2 1/2	2 7/8	3	3 1/4	3 3/4	4 1/4
	6.63	2 3/4	3 1/8	3 1/4	3 1/2	4	4 1/2
	8.38	3	3 3/8	3 1/2	3 3/4	4 1/4	4 7/8
	10.00	3 3/8	3 3/4	3 7/8	4 1/8	4 5/8	5 1/4
30	3.38	2 5/8	3	3 1/4	3 1/2	4 1/8	4 3/4
	5.00	2 3/4	3 1/8	3 3/8	3 5/8	4 1/4	4 7/8
	6.63	3	3 3/8	3 1/2	3 7/8	4 3/8	5
	8.38	3 1/4	3 5/8	3 3/4	4 1/8	4 5/8	5 3/8
	10.00	3 1/2	3 7/8	4	4 3/8	5	5 5/8
36	3.38	3	3 3/8	3 5/8	4	4 5/8	5 3/8
	5.00	3 1/8	3 1/2	3 3/4	4 1/8	4 3/4	5 1/2
	6.63	3 1/4	3 5/8	3 7/8	4 1/4	4 7/8	5 3/4
	8.38	3 3/8	3 7/8	4 1/8	4 1/2	5 1/8	5 7/8
	10.00	3 5/8	4 1/8	4 1/4	4 5/8	5 3/8	6 1/8

\*SHELL CUTTER FOR PLASTIC PIPE

# MEGA-LITE® DRILLING MACHINE

Notes

---

# MEGA-LITE® DRILLING MACHINE

Notes

---

# MEGA-LITE® DRILLING MACHINE

Notes

---