DRILLING MACHINES

CC-25 MACHINE FEATURES

SELF ADJUSTING BORING BAR PACKING

High temperature chevron packing is spring-loaded to insure positive, leakproof sealing without packing adjustments. Line pressure does not enter case.

RUGGED CONSTRUCTION

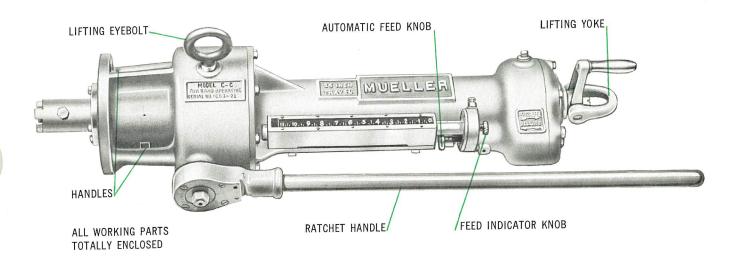
All working parts totally enclosed to permit complete lubrication and to prevent damage from dirt or other foreign material and from rough handling.

HANDLING EASE

Telescopic arrangement of working parts adds strength and rigidity and greatly reduces overall length and weight. Conveniently placed handles, eyebolt and lifting yoke permits easy handling of the machine — manually or with hoisting equipment.

AUTOMATIC FEED

Machines include a positive automatic feed during the cutting operation.



FEED INDICATOR

Easily set feed indicator shows amount remaining to be cut when in automatic feed.

RAPID HAND TRAVEL

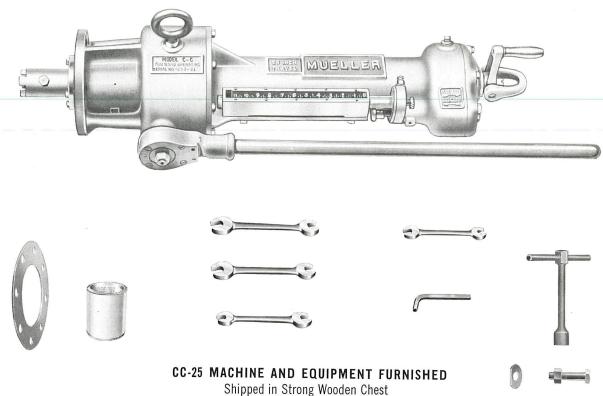
When not cutting, the boring bar may be quickly and easily advanced or retracted by hand. Rapid advancement and retraction of the boring bar reduces time of operation.

TOOLS

Tools are available for making lateral connections using tapping sleeves and valves, gate valves or standard fittings in cast iron pipe, asbestos-cement pipe, cement-lined cast iron pipe, concrete pipe and steel pipe.



FOR DRILLING OPERATIONS 2" TO 12" INCLUSIVE UNDER PRESSURE



Total Shipping Weight: 380 pounds Machine Weight only: 210 pounds

CAPACITY AND USE:

NUMBER

The CC-25 Drilling Machine is hand operated for making cuts from 2" to 12" inclusive in any size of main. This machine has automatic tool feed and is equipped with feed indicator.

Used with MUELLER Tapping Sleeves and Valves, Gate Valves or standard fittings, it will make cuts 2" to 12" inclusive under pressure for lateral connections. (Section 20)

Used with proper MUELLER equipment, it will insert a 4". 6" or 8" special MUELLER Gate Valve into a main of equal size under pressure. (Inserting Valves-Section 22)

WORKING PRESSURE AND TEMPERATURE:

500 p.s.i. Maximum Working Pressure at 100° F. 500° F. Maximum Temperature Rating at 250 p.s.i. The working pressure or temperature rating is reduced accordingly if any attachment, valve or fitting subjected to pressure or temperature during the drilling operation has a maximum working pressure or temperature rating less than that specified above.

LENGTH OF TRAVEL:

25" — This is adequate for all sizes of MUELLER Tapping Sleeves and Valves, and MUELLER Inserting Valves within the capacity of the machine.

EQUIPMENT FURNISHED WITH EACH MACHINE:

Ratchet Handle

Socket Wrench

4 — Double Open End Wrenches

Allen Wrench

 $8-\frac{5}{8}$ " x 3" Bolts and Nuts — Machine to Adapter

 $8-\frac{11}{16}$ " D-Type Washers — Machine to Adapter

1 — Gasket — Machine to Adapter

Cutting Grease

EQUIPMENT TO BE SELECTED:

See page 2-18 and 2-19 for equipment required for use with Tapping Sleeves and Valves to make lateral connections. See Section 22 for equipment for Inserting Valves.





DRILLING MACHINES

CC-25 AND C1-25 MACHINE EQUIPMENT



SHELL CUTTER FOR CAST IRON

SELECT THE FOLLOWING EQUIPMENT FOR MAKING LATERAL CONNECTIONS TO CAST IRON, CEMENT-LINED CAST IRON, ASBESTOS-CEMENT, CONCRETE AND STEEL MAINS BY DRILLING THROUGH TAPPING SLEEVES AND VALVES:

SHELL CUTTER—According to size of tapping valve and type of main to be cut.

CUTTER HUB —According to size of shell cutter.

PILOT DRILL —According to size of shell cutter and type of pipe to be cut.

DRILL —Replaces shell cutter, cutter hub and pilot drill.

ADAPTER —See Page 2-19.



SHELL CUTTER
TUNGSTEN CARBIDE TIPPED



CUTTER HUB



PILOT DRILL

			SIZE (OF TAP	PING \	/ALVE		
FOR CAST IRON PIPE	2"	21/4"	3"	4"	6"	8"	10"	12"
Shell Cutter			55693	50816	55266	52754	80547	80549
Cutter Hub			88101	54526	54501	54653	54661	54491
Pilot Drill			33976	59844	59845	64245	54489	54489
Drill	88342	88342						
FOR CEMENT-LINED CAST IRON PIPE & ASBESTOS-CEMENT PIPE: Shell Cutter Cutter Hub Pilot Drill *	83077	83077		83114 54526 52158	80545 54501 74869	80546 54653 74870	80547 54661 74871	80549 54491 74871
FOR CONCRETE PIPE & ASBESTOS-CEMENT PIPE:				83203	83134	83135	83140	83141
Shell Cutter * *				83202				33107
Cutter Hub Pilot Drill * *				83201			83137	83139
FOR STEEL PIPE:			63730	63790	63795	64207		83118
Shell Cutter Cutter Hub			88101			54653		54491
Pilot Drill			33976					36338



PILOT DRILL
TUNGSTEN CARBIDE TIPPED



*These tools, marked CEM-RES, are for use with cement-lined cast iron pipe. They may also be used for asbestos-cement pipe.

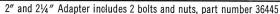
**The Shell Cutters and Pilot Drills are Tungsten Carbide Tipped to provide a strong sharp cutting edge which will resist abrasive action encountered when cutting concrete pipe. When cutting concrete pipe these tools must be power operated. We also recommend these tools for cutting asbestos-cement pipe, cement-lined cast iron pipe and cast iron pipe, because they will make a greater number of cuts before sharpening. For asbestos-cement pipe, tools may be hand operated; however, they should be power operated when cutting cement-lined cast iron pipe and cast iron pipe. The outside diameter of the Shell Cutters is ½" less than the nominal size of the tapping valve. This undersize design greatly reduces the wear on the outside edge of the Shell Cutters when making a lateral connection the same size as the main being cut and reduces travel required to complete cut.



MUELLER CO. DECATUR, ILL. SELECT THE FOLLOWING TAPPING VALVE ADAPTERS FOR USE WITH THE DRILLING EQUIPMENT SHOWN ON THE OPPOSITE PAGE (2-18)

ADAPTER — According to the size and type of tapping valve to be used.

FOR H-640, H-642, H-643, H-660, H-662 & H-663 RING-TITE & HUB END			SIZE	OF TAF	PING	VALVE	(MATERIAL MATERIAL M	·
TAPPING VALVE:	2"	21/4"	3"	4"	6"	8"	10"	12"
Adapter Complete (including gasket, bolts, nuts and washers)	83360		83361	83362	83363	83364	83365	83366
Adapter Only	54631		54560	54527	54515	54537	54658	54548
Adapter Gasket Only	59771		59772	59773	59774	59775	54677	54686
Bolts & Nuts Only Number Required	54806 6		56682 6	56682 6	54162 6	54162 6	94407 8	94407 10
Washers Only Number Required	54597 12		58321 12	58321 12	92576 12	92576 12	98919 16	98919 20
FOR H-665, H-667 & H-668 MECHANICAL JOINT TAPPING VALVE:				/			/	
Adapter Complete (including gasket)	83432	83464	83367	83368	83369	83370	83371	83372
Adapter Only	52161	52494	46269	46268	46267	46266	46265	46264
"O" Ring Adapter Gasket Only	52162	43922	46387	46388	79020	46389	46390	46391
Bolts, Nuts & Washers	2 ea. 2 ea. Furnished with each Mechanical 36445 36445 Joint Tapping Valve							







HUB END ADAPTER GASKET

HUB END ADAPTER





NUT AND BOLT





"O" RING ADAPTER GASKET

MECHANICAL JOINT **ADAPTER**

SELECT THE FOLLOWING EQUIPMENT FOR MAKING LATERAL CONNECTIONS TO STEEL MAINS BY DRILLING THROUGH GATE VALVES OR STANDARD FITTINGS:

 $\begin{array}{lll} {\rm SHELL} \ \ {\rm CUTTER} \ - \ {\rm According} \ \ {\rm to} \ \ {\rm size} \ \ {\rm of} \ \ {\rm valve} \ \ {\rm or} \ \ {\rm fitting} \ \ {\rm to} \ \ {\rm be} \ \ {\rm used}. \\ {\rm CUTTER} \ \ {\rm HUB} \ \ - \ \ {\rm According} \ \ {\rm to} \ \ {\rm size} \ \ {\rm of} \ \ {\rm shell} \ \ {\rm cutter}. \end{array}$

According to size of shell cutter.

PILOT DRILL DRILL

- Replaces shell cutter, cutter hub and pilot drill.

ADAPTER

According to size and type of valve or fitting to be used.

Size of Gate Valve or Fitting	2"	3″	4"	6"	8"	10"	12"
Size of Shell Cutter or Drill	1½"	2½"	3½"	5½″	7½"	9½"	1013/16"
Shell Cutter		33518	33519	36004	33999	33244	33243
Cutter Hub		88338	88340	63978	33996	33250	33107
Pilot Drill		33976	33976	36005	64244	36338	36338
Drill	88341						

ting	
10"	12"
67 78972	78977
_	

*This is the maximum working pressure of the adapter at 100° F. This working pressure must be reduced accordingly if any attachment, valve, fitting or machine, subjected to pressure during the use of this adapter, has a maximum working pressure less than that specified above.

NOTE: When using these adapters with standard gate valves, check to be sure there is sufficient travel to complete the cut if special fittings are used to attach the gate valve to main being cut.



SHELL CUTTER

CUTTER HUB

PILOT DRILL





STEEL ADAPTER

