



## Dimensions and Part Numbers

Boring Bar Travel	24" (610 mm)
Tank Taps*	2" to 4" (100 DN)
Pipe Taps*	2" to 6" (150 DN)
THREAD-O-RING™ Plug Setting	2" (50 DN) and 3" (80 DN)
LOCK-O-RING® and LOCK-O-RING Plus Plug Setting	4" (100 DN) and 6" (150 DN)
Maximum Operating Pressure	1,480 psi (100 bar) at 100°F (38°C)
Maximum Operating Temperature	700°F (371°C) at 700 psi (48 bar)**
Power	Manual, Air Motor or Hydraulic
Feed Rate	0.005" (0.127 mm) per revolution
"Lower-In" Crank	

# 360 Tapping Machine

## Adapters

Nominal Tap Size		ASME Class 150 RF Flange			ASME Class 300 RF Flange			ASME Class 600 RF Flange			600# SANDWICH & Ball Valves		
Inches	DN	Part Number	Lb.	Kg.	Part Number	Lb.	Kg.	Part Number	Lb.	Kg.	Part Number	Lb.	Kg.
1	25	06-0027-0001	18	8	06-0028-0001	17	8	06-0030-0001	20	9	--	--	--
1-1/4	32	06-0027-0002	19	9	06-0028-0002	20	9	06-0030-0002	22	10	--	--	--
1-1/2	40	06-0027-0003	19	9	06-0028-0003	22	10	06-0030-0003	23	10	--	--	--
2	50	06-0027-0004	16	7	06-0028-0004	18	8	06-0030-0004	20	9	--	--	--
3	80	06-0027-0005	21	10	06-0028-0005	24	11	06-0030-0005	27	12	--	--	--
4	100	06-6098-0004*	32	15	06-6099-0004	42	19	06-6101-0004**	35	16	06-6097-0004-01***	53	24
6	150	06-6098-0006*	45	20	06-6099-0006	62	28	06-6101-0006**	100	45	06-6097-0006-01***	110	50

\* Will also work on SHORTCUTT® Valves

\*\* See special adapters for SANDWICH® & Ball valves.

\*\*\* Compatible with LOCK-O-RING® and LOCK-O-RING® Plus Plugs

## Cutter Holders & Holders

Size		Cutter Holder			Plug Holders		
Inches	DN	Lb.	Kg.	Part Number	Lb.	Kg.	Part Number
2	50	--	--	--	1/2	0.2	05-0061-0001
3	80	2	9	05-0053-0003	1-1/4	0.6	05-0073-0001
4	100	2	9	05-0053-0003	--	--	--
6	150	6-1/2	3	05-0053-0002*	--	--	--

\* Cutter holder extension (P/N 05-0071-0000) required for 6 in. (150 DN) ASME Class 600 taps

**T.D. Williamson**

# 360 Tapping Machine

## Tapping Size-On-Size (Recommended Options)

Cutter Size			
2"	3"	4"	6"
A	A	A	A
B	B	B	B
C	C	C	
D	D	D	
E	E	E	E
F	F	F	

### Notes:

- The following letters represent:  
 A = Carbon steel pipe SMYS (Specified Minimum Yield Strength) 30,000 to 50,000 psi maximum, tensile strength of 70,000 psi.  
 B = Carbon steel pipe SMYS 50,000 to 70,000 psi maximum, tensile strength of 90,000 psi.  
 C = Cast iron pipe. Cutting characteristics vary widely; hard to predict.  
 D = Chrome-moly, high temperature, steel pipe.  
 E = 300 series stainless steel pipe.  
 F = Flat-plate cuts using special cutters on the materials listed above (refer to Notes 3 and 4). Pilot drill must be through before cutter tooth engages material.
- The table for selecting power options (above) is based on the latest TDW designs and past experience. The data should be used as a guideline. There have been, and will be, conditions which will not strictly follow the guidelines.
- Special cutters are available for flat plates, stainless steel pipe, cast iron pipe and other special conditions.
- When tapping a larger pipe or tank, the cutter will sometimes go through the flat-plate condition. For example, all teeth are cutting at the same time. This is the most power-consuming condition possible and special cutters may be required. Considering cutter size, diameter of cylinder, wall thickness, feed rates, different materials of construction, etc., there are many possibilities. The following table gives some examples of flat-plate conditions. Any pipe or tank with wall thicknesses greater than those shown will also be considered flat-plate.

Cutter Size	Nom. Pipe x Wall	Nom. Pipe x Wall	Nom. Pipe x Wall
3"	4" x .359"	6" x .232"	8" x .176"
4"	6" x .481"	8" x .357"	10" x .282"
6"	10" x .748"	12" x .616"	14" x .556"

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**Dimensions and Part Numbers**