### **Pipe Preparation Tool Specifications**



The distinguishing feature of the Victaulic grooved mechanical piping system is, as the name implies, a groove where the pipe and fitting engage to form a self-restraining joint. The position, depth and cross-section of this groove combine with the fitting housing in an optimal strength-to-weight relationship. The result is a permanent connection capable of withstanding thrust loads up to the maximum rated operating pressure.

Roll grooving is the method of choice for preparing pipe made of standard or lightwall carbon steel, stainless steel, aluminum, PVC, copper and other materials. Both roll and cut grooving meet the requirements of ANSI/AWWA C-606. Victaulic Company's first recommendation is that the pipe end be square cut. However, beveled end pipe may be used provided the wall thickness is standard or less, and the bevel meets ASME/ANSI B16.25 (37 ½°) or ASTM A-53 (30°). Square cut pipe must be used with FlushSeal® and EndSeal® gaskets.

Victaulic roll grooving tools are all designed to rotate the pipe or orbit the pipe as a male grooving roll is impressed into the pipe. The support roll, in addition to driving the pipe or tool, is the female die inside the pipe. For all but the VE12, VE26, VE46, VE106, and VE226 tools, Victaulic roll groovers use hydraulic pressure to force the grooving roll into the pipe to form the groove. Roll grooving removes no metal; the groove is cold formed into the pipe wall.

All Victaulic cut groovers are designed to be driven around a stationary pipe to machine away material, providing a groove. The design of the tool assures a groove which is concentric with the pipe O.D., even with out-of-round pipe. Cut grooving is basically designed for standard weight or heavier wall thicknesses of pipe. A square cut groove is used for steel and other metallic IPS pipe. This provides maximum coupling gripping efficiency and the fullest pipe movement capabilities.

#### **ROLL GROOVE SET SELECTION**

In order to achieve Victaulic specified product performance, the proper Victaulic roll grooving tool and corresponding Victaulic roll set must be selected. Failure to select the appropriate Victaulic roll set, or to use the correct Victaulic tool, may result in reduced performance or product failure. Tool specifications and capacities are listed with each tool.

The chart below provides an overview of commonly used roll sets. In addition to the roll sets detailed below, numerous specialized roll sets are also available, such as the "RZ" roll set used for grooving pipe used with EndSeal® Style HP-70ES couplings. If your preferred pipe material or size is not referenced in the below chart, please contact Victaulic for more information.

	Pipe	Recommended Roll Set								
Pipe Material	IPS/CTS Wall Thickness	Pipe Sizes ¾ - 8"/20 - 200mm	Pipe Sizes 10 – 12"/250 – 300mm	Pipe Sizes 14 – 24"/350 – 600mm						
Carbon Steel	Schedule 5 through Standard Wall	R9 (Standard Rolls)	R9 (Standard Rolls)	RW (AGS Rolls) or RS (Extra Strong Rolls)						
Stainless Steel*	Schedule 40S through Standard Wall	R9 (Standard Rolls)	R9 (Standard Rolls)	RW (AGS Rolls)						
Light Wall Stainless Steel*	Schedule 5S and 10S	RX (Light Wall Stainless Steel Rolls)	RX (Light Wall Stainless Steel Rolls)	RWX (AGS Light Wall Stainless Rolls)						
Aluminum	Schedule 5 through 40	RP (Plastic and Aluminum Rolls)	RP (Plastic and Aluminum Rolls)							
PVC Plastic	Schedule 40 and 80	RP (Plastic and Aluminum Rolls)								
Copper	K, L, M, DWV	RR (Copper Rolls)								

Additional specialized roll sets are available. If your pipe material or size is not listed here, please call Victaulic Customer Care for more information.

JOB/OWNER	CONTRACTOR	ENGINEER
System No	Submitted By	Spec Sect Para
Location	Date	Approved
		Date



<sup>\*</sup> Stainless Steel is defined as Type 304(L) or 316(L). For Duplex and Superduplex stainless steels, contact Victaulic for more information.

## **Pipe Preparation Tool Specifications**

### Roll Grooving Tools Field Portable



#### **VE12 GROOVE IN-PLACE**

- For manual grooving of Schedule 5, 10 and 40 steel; stainless steel; aluminum and PVC pipe
- Patented enhanced tracking rolls allow bi-directional grooving
- Roll grooves  $\frac{3}{4} \frac{2^{11}}{20} 50 \, \text{mm pipe}^{\dagger}$

Power Requirements: None

Weight: 17 lbs./8 kg VE12 TOOL CAPACITY

		PIPE SIZE/SCHEDULE inches/mm										
Tool Model	Pipe Material	³¼ 20	1 25	1 ¼ 32	1 ½ 40	2 50						
	Steel	5 – 10		5 –	40							
VE12	Stainless			40S	Only							
VEIZ	Aluminum †	5 – 10		5 –	40							
	PVC Plastic			4	0							

† 6061-T4 or 6063-T4 Alloy must be used.



VE26

#### **VE26 GROOVE IN-PLACE**

- Repair and retrofit existing lightwall steel, Schedule 40 steel, stainless steel, PVC, and aluminum
- · Patented enhanced tracking rolls allow bi-directional grooving
- Model VE26C handles copper tubing (CTS) Types K, L, M and DWV plus British, DIN, and Australian Standard copper
- Model VE26SS grooves Schedule 5 and 10 stainless steel
- Optional power drive adapter kit available to alternately groove pipe using a Ridgid\* 300 power drive or VPD752
- Roll grooves 2 6"/50 150 mm pipe†

Power Requirements: None

Weight: 22 lbs./10 kg
VE26 TOOL CAPACITY

				PIPE	SIZE/SCHEI	DULE					
Tool Model	Pipe Material	2 50	2½ 65	3 80	3½ 90	4 100	5 125	6 150			
VE26S	Steel		5 - 40 5 - 10								
VE205	Stainless		40S Only								
VE26C	Copper			Κ,	L, M, & DW\	L, M, & DWV*#					
VE26P	Aluminum †		5 – 40			5 –	- 10				
V E Z O P	PVC Plastic		40								
VE26SS	Lt. Wall SS		5S – 10S								

<sup>† 6061-</sup>T4 or 6063-T4 Alloy must be used.

 $<sup>{\</sup>tt\#\,Alternative\,units\,are\,available\,for\,European\,Standard\,(EN)\,\,1057\,and\,\,Australian\,\,standard\,\,copper.}$ 

<sup>\*</sup> Ridgid is a registered trademark of the Ridge Tool Company.

## **Pipe Preparation Tool Specifications**



#### **VE46 GROOVE IN-PLACE**

- Designed for manually roll grooving Schedule 40 steel, aluminum, stainless steel and PVC pipe and Schedule 80 PVC pipe
- Patented enhanced tracking rolls allow bi-directional grooving and helps to hold the tool on the pipe end during the roll grooving process
- Optional power drive adapter kit available to alternately groove pipe using a Ridgid\* 300 power drive or VPD752
- Roll grooves 3½ 6"/90 150 mm pipe<sup>†</sup>

Power Requirements: None

Weight: 28 lbs./13 kg VE46 TOOL CAPACITY

			PI	PE SIZE/SCHEDU inches/mm	LE	
Tool Model	Pipe Material	3½ 90	4 100	4½ 120	5 125	6 150
VE46	Steel			5 – 40		
VE40	Stainless			40S Only		
VE46P	Aluminum †			5 – 40		
VE40P	PVC Plastic	40		40 -	- 80	

<sup>† 6061-</sup>T4 or 6063-T4 Alloy must be used.

### VE26/46 Power Drive Kit



The VE26/46 power drive kit is available to allow both tools to be directly mounted to either a Victaulic VPD752 or Ridgid\* 300 Power Drive.

Newer tools with serial numbers ending in "C" are compatible with the Power Drive Kit. Tools which do not contain the "C" suffix will require retrofit to accept the Power Drive Kit. Contact Victaulic for details.

\*Ridgid is a registered trademark of the Ridge Tool Company.

<sup>\*</sup> Ridgid is a registered trademark of the Ridge Tool Company.

## **Pipe Preparation Tool Specifications**

#### Field Portable



#### **VE226 PORTABLE GROOVER**

- Mounts to a Victaulic VPD752 or Ridgid\* 300 power drive
- · Optional alternate bases available
- Tool is operated using a standard 3/8 /9.5 mm square ratchet drive (not included)
- Available in six models for steel (and other IPS) pipe, copper tubing and stainless steel
- Roll grooves  $\frac{3}{4} \frac{6}{20} 150 \,\text{mm}$  pipe

**Drive Requirements:** Fits Victaulic VPD752 or Ridgid\* 300 power drives. Optional bases for Ridgid\* 535, 1224, 1822, and Oster 310 available.

Weight: 37 lbs./17 kg
VE226 TOOL CAPACITIES

	1												
						PIF							
Tool Model	Pipe Material	<sup>3</sup> ⁄ <sub>4</sub> 20	1 25	1 ¼ 32	1½ 40	2 50	2 ½ 65	3 80	3 ½ 90	4 100	4½ 120	5 125	6 150
VE2266	Steel				5 –	40				5 – 10			
VE226S	Stainless				40S	Only							
	Steel		5 -	40									
VE226B	Stainless		40S	Only									
VEZZOD	Aluminum †		5 -	40									
	PVC Plastic	40		40 – 80									
VE226M	Steel							5 – 40				5 – 10	
VEZZOIVI	Stainless						4	10S Onl	у				
VE226C	Copper								K, L, M,	& DWV			
VE226MSS	LT. Wall SS								5S –	105			
VE226P	Aluminum †							5 – 10					
VL220P	PVC Plastic				40 -	- 80				4	0		

<sup>† 6061-</sup>T4 or 6063-T4 Alloy must be used.

NOTE: When ordering tools that require a power drive, you must determine the type of drive to be used. For proper operation, a power drive and pipe stand are required. See page 11 for details.

# Power Drive Kit **VE226**



• Kit for connecting a VE226 roll grooving tool to a Ridgid\* 700 power drive

Capacity: See appropriate tool

Weight: 75 lbs./34 kg

\*Ridgid is a registered trademark of the Ridge Tool Company.

<sup>\*</sup> Ridgid is a registered trademark of the Ridge Tool Company.

# **Pipe Preparation Tool Specifications**

#### Field Fabrication



#### VE106/VE107 GROOVE-N-GO

- Mobile light-duty roll grooving tool with an integral motor/drive unit mounted to portable hand truck
- 3/8"/9.5 mm square ratchet drive for operation (standard)
- Patented enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process.
- Completely self- contained unit with an integral motor, safety foot switch and power plug
- Roll grooves  $1\frac{1}{4} 6\frac{1}{32} 150 \,\text{mm}$  pipe

Power Requirements: VE106 is provided with 110 volt, 15 amp power.

VE107 is provided with 220 volt, 6 amp power.

Weight: 140 lbs./64 kg

Optional Accessories: Additional rolls/shafts are available for copper, lightwall stainless

steel, and EndSeal (ES) grooving.

#### VE106/VE107 TOOL CAPACITIES

		PIPE SIZE/SCHEDULE inches/mm											
Tool Model	Pipe Material	1 ¼ 32	1½ 40	2 50	2 ½ 65	3 80	3 ½ 90	4 100	5 125	6 150			
	Steel				5 -	- 40 Std. R	olls						
VE106	Stainless				4	0S Std. Ro	lls						
(Groove-N-Go)	Lt. Wall SS				5S –	10S RX Rc	olls +						
	Copper					K, L, M, 8	DWV Cop	per Rolls					

<sup>+</sup> RX Rolls – "RX" is the Victaulic part code designator for grooving roll sets specifically designed for roll grooving lightwall stainless steel pipe.

# **Pipe Preparation Tool Specifications**

#### Field Fabrication



#### VE272SFS

- Portable roll groover mounts easily to the Victaulic VPD752 or Ridgid\* 300 power drive
- Hand pump operation with a unique pivot arm design reduces handle effort
- Patented enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Roll grooves  $\frac{3}{4} \frac{12}{20} \frac{300}{12}$  mm pipe (Supplied with  $2 \frac{12}{50} \frac{300}{12}$  mm roll sets)

Power Requirements: Victaulic VPD752 or Ridgid\* 300 power drive

Weight: 184 lbs./84 kg

**Optional Rolls:** Optional rolls are available for copper pipe; Schedule 5S, 10S, and 10 stainless steel pipe;  $\frac{3}{4} - \frac{1}{2}$ "/20 – 40 mm steel pipe, EndSeal (ES) grooving, Aluminum Schedules 5, 10, 20, 40 RP rolls, and PVC Plastic Schedule 40-80 RP rolls.

**Optional Accessories:** An optional pipe stabilizer for 8 - 12"/200 – 300 mm pipe is available and is required for copper.

#### **VE272SFS TOOL CAPACITIES**

							PIPE	SIZE/S		ULE					
Tool Model	Pipe Material	<sup>3</sup> / <sub>4</sub> 20	1 25	1 ¼ 32	1 ½ 40	2 50	2 ½ 65	3 80	3 ½ 90	4 100	5 125	6 150	8 200	10 250	12 300
	Steel		5 – 40 Std. Rolls St											- 20 Rolls	
	Stainless					4	10S Std	I. Rolls							
VE272SFS	LT. Wall SS						5S	- 10S	RX Rol	ls					
VE2/23F3	Aluminum †^							5	– 40 F	P Rolls					- 20 Rolls
	PVC Plastic ^		40 ^~ 40 – 80 RP Rolls 40 ^												
	Copper **		K, L, M, & DWV Copper Rolls												

<sup>^</sup> Use RP Rolls.

<sup>† 6061-</sup>T4 or 6063-T4 must be used. RP Rolls must be used.

 $<sup>\</sup>sim$  A special lower roll exclusively for grooving 2" Sch. 80 PVC is available.

<sup>\*\*</sup> Use Sway Brace to groove 8"/200 mm Copper

<sup>\*</sup> Ridgid is a registered trademark of the Ridge Tool Company.

## **Pipe Preparation Tool Specifications**



VE270FSD/VE271FSD

- Completely self-contained unit with integral gear motor, safety guards, safety foot switch and power cord/plug
- Equipped with a unique pivot arm design, making roll changing quick and easy, without removing shafts
- Patented enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Roll grooves  $\frac{3}{4} \frac{12}{20} \frac{300}{12}$  mm pipe (Supplied with  $2 \frac{12}{50} \frac{300}{12}$  mm roll sets)

**Drive Requirements:** Self-contained

**Power Requirements:** VE270FSD is provided with 110volt, 15amp power. VE271FSD is provided with 220volt, 6amp power.

**Weight:** 340 lbs./154 kg

**Optional Rolls:** Carbon steel Schedules 5, 10, 20, and 40; copper rolls for type K, L, M and DWV, stainless steel Rx rolls for Schedules 5S-10-10S, and  $\frac{3}{4} - 1\frac{1}{2}$ "/20 – 40 mm steel pipe, EndSeal (ES) grooving, Aluminum Schedules 5, 10 20 40 RP rolls, and PVC Plastic Schedule 40-80 RP rolls.

**Optional Accessories:** An optional pipe stabilizer for  $8 - 12^{\circ}/200 - 300 \, \text{mm}$  pipe is available and is required for copper.

#### VE270FSD/VE271FSD TOOL CAPACITIES

							PIPE	SIZE/		ULE					
Tool Model	Pipe Material	<sup>3</sup> ⁄ <sub>4</sub> 20	1 25	1 ½ 32	1 ½ 40	2 50	2½ 65	3 80	3 ½ 90	4 100	5 125	6 150	8 200	10 250	12 300
	Steel		5 – 40 Std. Rolls 5 -										0 Std. olls		
	Stainless						40S Sto	d. Rolls							
	Lt. Wall SS						59	5 – 10S	RX Ro	lls					
VE270FSD	Aluminum †^							5	5 – 40 l	RP Roll	S				20 RP olls
	PVC Plastic ^		40 ^~ 40 – 80 RP Rolls 40 ^												
	Copper **		K, L, M, & DWV Copper Rolls												

<sup>^</sup> Use RP Rolls.

<sup>† 6061-</sup>T4 or 6063-T4 must be used. RP Rolls must be used.

<sup>~</sup> A special lower roll exclusively for grooving 2" Sch. 80 PVC is available.

<sup>\*\*</sup> Use Sway Brace to groove 8" Copper

# **Pipe Preparation Tool Specifications**

#### Field Fabrication



#### VE/16E9

- For field roll grooving of 2 12"/50 300 mm standard wall pipe, lightwall steel pipe, as well as aluminum, stainless and PVC plastic pipe
- · Groove depth adjuster allows for easy adjustment for initial groove diameter
- $\bullet$  Roll grooves 2 12"/50 300mm pipe (Supplied with 2 12"/50 300mm original rolls)
- Equipped with a pipe stabilizer for 6 12"/50 300 mm pipe sizes to control pipe sway

Power Requirements: Victaulic VPD752 or Ridgid\* 300 power drive

Weight: 240 lbs./109 kg

**Optional Rolls:** Optional rolls are available for Schedule 5S and 10S stainless steel pipe, PVC and aluminum pipe, and type K, L, M and DWV copper tubing.

#### **VE416FS TOOL CAPACITIES**

					PIF	PE SIZE/	SCHEDU s/mm	LE				
Tool Model	Pipe Material	2 50	2 ½ 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300		
	Steel				5 – 40 S	td. Rolls				10 – Std. Wall Original Groove Only		
	Std. Wall Stainless		5 - 40 Std. Wall RW Rolls									
VE416FS	Lt. Wall SS					5S – 10S	RX Rolls					
	Aluminum †^		5S – 10S RX Rolls 5 – 40 RP Rolls									
	PVC Plastic ^		40 – 80 RP Rolls 40 ^									
	Copper		K, L, M, & DWV Copper Rolls									

<sup>^</sup> Use RP Rolls.

<sup>† 6061-</sup>T4 or 6063-T4 must be used. RP Rolls must be used.

<sup>\*</sup> Ridgid is a registered trademark of the Ridge Tool Company.

# **Pipe Preparation Tool Specifications**



VE416FSD/VE417FSD

#### VE416FSD/VE417FSD

- For field roll grooving of 2 12"/50 300mm standard wall pipe, lightwall steel pipe, as well as aluminum, stainless and PVC plastic pipe
- · Groove depth adjuster allows for easy adjustment for initial groove diameter
- Completely self-contained units with integral gear motors, safety foot switch and power cord/plug
- Roll grooves 2 12"/50 300mm pipe
- Equipped with a pipe stabilizer for 6 16"/150 400 mm pipe sizes to control pipe sway

**Power Requirements:** VE416FSD is provided with 110 volt, 15 amp for integral gear motor VE417FSD is provided with 220 volt, 8 amp service

Weight: 340 lbs./154 kg

**Optional Rolls:** Optional rolls are available for Schedule 5S and 10S stainless steel pipe, PVC and aluminum pipe, and type K, L, M and DWV copper tubing.

#### **VE416FSD/VE417FSD TOOL CAPACITIES**

					PII	PE SIZE/S		LE				
Tool Model	Pipe Material	2 50	2 ½ 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300		
	Steel				5 – 40 S	itd. Rolls				10 – Std. Wall Original Groove Only		
	Std. Wall Stainless		5 – 40 Std. Wall RW Rolls									
VE416FSD/	Lt. Wall SS					5S – 10S	RX Rolls					
VE417FSD	Aluminum †^				5 – 40	RP Rolls				5 – Std. Wall ^		
	PVC Plastic ^		40 – 80 RP Rolls 40 ^									
	Copper		K, L, M, & DWV Copper Rolls									

<sup>∧</sup> Use RP Rolls

 $<sup>\</sup>dagger$  6061-T4 or 6063-T4 must be used. RP Rolls must be used.

# **Pipe Preparation Tool Specifications**

### Field Fabrication



#### VE450FSD

- Designed for field roll grooving of 4 24"/100 600 mm pipe
- Tool is supplied with roll sets for grooving 4 12"/100 300 mm original groove and 14 – 24"/350 – 600 mm AGS groove on carbon steel pipe
- Patented enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process, and quick change upper roll design
- Features:
  - Lifting point to move the tool using a crane
  - Frame can accept most fork lifts
  - On board storage for tool accessories

**Power Requirements:** VE450FSD is a self-contained unit with two 220 volt, single phase 50/60 hz, 20 amp integral gear motors to handle heavier loads, safety foot switch and power cord/plug

**Weight:** 825 lbs./374 kg

**Optional Rolls:** Optional rolls are available for lightwall stainless steel original groove;  $14-24/350-600\,\mathrm{mm}$  lightwall stainless steel AGS groove; and  $4-12/100-400\,\mathrm{mm}$  EndSeal (ES) groove.

#### **VE450 FSD TOOL CAPACITIES**

Pipe Material					PIF	PE SIZE/ inche	SCHEDL s/mm	JLE				
VE450FSD	4 100	5 125	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	22 550	24 600
Steel =			5 – 40									
Steel =								Sch.	0 & Std.	Wall RV	V-AGS	
Chainlan		40	S Std. Ro	olls		S	td. Wall,					
Stainless								S	td. Wall,	RWX-AC	SS	
Lt. Wall SS		5	S – 10S	RX Rolls	‡		5S/10	)S/10 RX	Rolls			
AGS Lt. Wall SS									10S RWX	K Rolls @	)	
Aluminum †^		5 –	40 RP R	Rolls								
PVC Plastic ^		40 – 80		40								

- = EndSeal (ES) rolls are available. Contact Victaulic for details.
- ‡ These rolls are not interchangeable with rolls sets from other tool models. Contact Victaulic for ordering information.
- ^ Use RP Rolls.
- † 6061-T4 or 6063-T4 must be used. RP Rolls must be used.
- @ Special RWX rolls for grooving true sch. 10 (0.25 6.4 mm) are available.

# **Pipe Preparation Tool Specifications**

### Plant/Shop Fabrication



#### **VE460**

- $\bullet$  Fully-motorized, semi-automatic, hydraulic shop tool is shipped fully assembled with rolls for standard grooving (4 24") 0.500 wall maximum.
- Patented enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- $\bullet$  Tool ships with 4 12" Original Groove System Groove Rolls and 14 24" AGS Groove Rolls and 14 24" AGS Groove Rolls

**Drive Requirements:** Self-contained

**Power Requirements:** 220/440 volt, 3 phase, 60 hertz standard. The tool can also be supplied in various voltages, contact Victaulic for details.

**Weight:** 1500 lbs./680 kg

**Optional Rolls:** Grooving kits available to accommodate grooving 26"/650mm and above. See chart below for details.

AGS roll sets for 14-24"/350-900 mm Schedule 10 through 0.375"/13 mm wall carbon steel pipe are now standard.

Tool M	odel	Roll Sets Included	Railing and Platfrom Kit Quantity/	Support Base (Quantity/Part Number)	Tool Weight/ Shipping Weight Lbs.
VE460		4 – 6"/100 – 150 mm 8 – 12"/200 – 300 mm 14 – 24"/350 – 600 mm	N/A	N/A	1500/1750
		Optional Acces	sories ‡		
26 – 38"/ 650 – 950 mm Grooving Kit		26 – 38"/650 – 950 mm	1	1	N/A
40 – 48"/ 1000 – 1200 mm Grooving Kit		40 – 48"/1000 – 1200 mm	1*	2 **	N/A
50 – 60"/ 1250 – 1500 mm Grooving Kit		50 – 60"/1250 – 1500 mm	1 *	3 **	N/A

Recom Pipe S	mended Stand ^
VAP	S224 DR 51672
VAPS	S236 DR S3036 DR S1672
	51672 1672PS)
	51672 (672PS)

Optional Rolls: Optional rolls are available for Schedule 5S and 10S stainless steel pipe, PVC, and aluminum pipe.

- ‡ Optional Accessory Kits list REQUIRED COMPONENTS to groove up to the specified size. Kit components can be ordered individually or as a kit.
- \* Railing and Platform Kit is required only if preceding kit has not been ordered.
- \*\* Only one (1) Support Base is required if preceding kit has been ordered.
- $\ ^{\wedge}$  For proper operation, a pipe stand is required.

NOTE: Items listed in shaded areas are non-cancellable and non-returnable.

# **Pipe Preparation Tool Specifications**

### Plant/Shop Fabrication

#### VE460 RATINGS - MAXIMUM CAPACITY

Pipe Material											Pij	e Size	/Sched	lule										
VE460	4 100	5 125	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	22 550	24 600	26 650	28 700	30 750	32 800	34 850	36 900	38 950	40 1000	42 1050	48 1200	50 1250	60 1500
Steel		5 -	- 80			Extra ong	10	) – Ext	ra Stro	ng (.50	0) Ø A	GS					Std.	(.375 –	.500) (	Ø AGS				
Stainless		Scl	h. 40 C	nly		.375			RWX	AGS														
Lt. Wall SS		5:	S – 10S	RX Ro	lls			5S/	10S/10	RWX F	Rolls													
Aluminum			5 -	- 40																				
PVC Plastic	4	40 – 80	0	40																				
							Groov	ring Ca	pabilit	es for	Origina	Style	Groove	(OGS)										
Steel																.25	50 – .50	00 Ø						
Stainless									Std.	(.375)														
Lt. Wall SS		5S/10S/10 RX Rolls																						

Ø Maximum ratings are limited to pipe that does not exceed the yield strength of API-5L Grade "B", ASTM Grade "B", 150 Brinell Hardness Number (BHN) maximum.

### **Pipe Preparation Tool Specifications**

### Plant/Shop Fabrication



#### **VE268**

- · Designed for fabrication shop roll grooving
- The fully-motorized, semi-automatic, electrohydraulic tool comes complete with safety guards and safety foot switch
- Equipped with a unique pivot arm design, making roll changes quick and easy, without removing shafts
- Patented enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Roll grooves  $\frac{3}{4} \frac{12}{20} \frac{300}{9}$  mm pipe ( $\frac{3}{4} \frac{1}{2}\frac{1}{20} \frac{32}{9}$  mm rolls are optional)

**Drive Requirements:** Self-contained

**Power Requirements:** The tool can also be supplied in various voltages; contact Victaulic for details.

**Weight:** 735 lbs./333 kg

**Optional Rolls:** Optional rolls are available for carbon steel Schedules 5, 10, and 40; copper rolls for type K, L, M and DWV, stainless steel Rx rolls for Schedules 5S, 10, and 10S, and  $\frac{3}{4} - 1\frac{1}{2}$ "/20 – 40 mm steel pipe, EndSeal (ES) grooving, Aluminum Schedules 5, 10, 20, 40 RP rolls, and PVC Plastic Schedule 40 – 80 RP rolls.

**Optional Accessories:** An optional pipe stabilizer for 8 – 12"/200 – 300 mm pipe is available and is required for grooving 8"/200 mm copper tubing and Lt. Wall SS.

#### **VE268 TOOL CAPACITIES**

							PIPE		SCHED	ULE					
Tool Model	Pipe Material	<sup>3</sup> / <sub>4</sub> 20	1 25	1 ½ 32	1½ 40	2 50	2 ½ 65	3 80	3½ 90	4 100	5 125	6 150	8 200	10 250	12 300
	Steel					5	– 40 S	td. Rol	lls					5 – 2 Ro	0 Std. olls
	Stainless		40S Std. Rolls												
	Lt. Wall SS						59	5 – 10S	RX Ro	lls					
VE268	Aluminum †^							5	5 – 40	RP Roll	S				- 20 Rolls
	PVC Plastic ^					40 ^~		4	0 – 80	RP Rol	ls		40 ^		
	Copper **	K, L, M, & DWV Copper Rolls													

<sup>^</sup> Use RP Rolls.

<sup>† 6061-</sup>T4 or 6063-T4 must be used. RP Rolls must be used.

<sup>~</sup> A special lower roll exclusively for grooving 2" Sch. 80 PVC is available.

<sup>\*\*</sup> Pipe stabilizer is required for grooving 8"/200 mm copper tubing

### **Pipe Preparation Tool Specifications**

### Plant/Shop Fabrication



VE414MC

#### VE/1/1MC

- Designed for fabrication shop roll grooving Schedule 5, 10, and standard wall carbon steel pipe, standard wall stainless steel pipe, Schedule 40, 80 PVC pipe, and standard wall aluminum pipe
- Unique roll design, making roll changing quick and easy, without removing main shafts
- Patented enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- The tool comes equipped with pipe stabilizers to provide smooth grooving operation
- Roll grooves  $2-16"/50-400\,\mathrm{mm}$  pipe (Supplied with  $2-12"/50-300\,\mathrm{mm}$  original rolls and  $14-16"/350-400\,\mathrm{mm}$  AGS rolls)

Drive Requirements: Self-contained

**Power Requirements:** 220 volt, 3 phase, 60 hertz standard. The tool can also be supplied in various voltages, contact Victaulic for details.

**Weight:** 735 lbs./333 kg

**Optional Rolls:** Optional rolls are available for Schedule 10S stainless steel pipe, PVC and aluminum pipe, and type K, L, M and DWV copper tubing.

AGS roll sets for  $14-16"/350-400\,\mathrm{mm}$  Schedule 10 through 0.375"/13 mm wall carbon steel pipe are now standard.

Tool requires modifications to groove AGS profile. Contact Victaulic for pricing and details.

#### **VE414MC TOOL CAPACITIES**

							IZE/SCH nches/m					
Tool Model	Pipe Material	2 50	2½ 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350	16 400
	Steel		10 – 5 – 40 Std. Rolls Std. Wall									
	Std. Wall Stainless											0 & Std. RW-AGS
	Lt. Wall SS				5S –	10S RX	Rolls				10S RV	WX-AGS
VE414MC	AGS Lt Wall SS										10S RW	X Rolls @
	Aluminum †^				5 – 40 l	RP Rolls				5 – Std. Wall ^		
	PVC Plastic ^			40 – 80	RP Rolls			40 ^				
	Copper	K, L, M, & DWV Copper Rolls										

<sup>^</sup> Use RP Rolls.

 $<sup>\</sup>dagger$  6061-T4 or 6063-T4 must be used. RP Rolls must be used.

<sup>@</sup> Special RWX rolls for grooving true Sch. 10 (0.25 – 6 mm) are available.

# **Pipe Preparation Tool Specifications**

VE436MC Quick Change Slide Conversion KIt



The VE436MC Quick Change Slide Conversion Kit includes an upper shaft and slide held in place by a detent pin for improved efficiency. The kit also includes 4 – 12"/100 – 300 mm standard groove upper rolls, 14 – 24"/350 – 600 mm AGS groove upper rolls, pipe size, pipe rotation, guard setting labels, and guard setting pads (standard and AGS).

**NOTE:** Upper rolls only are included with the kit. Lower rolls can be purchased separately. Retain original slide, shaft, set screws and roll grooving assembly for future use.

## **Pipe Preparation Tool Specifications**

### Cut Grooving Tools Field Manual



#### VG28GD VIC-ADJUSTABLE™

• Designed for cut grooving various pipe materials.

· A modified version (MRL) is available to groove and machine for rubber lining

• Cut grooves 2-8"/50 - 200 mm pipe

**Drive Requirements:** External drive, minimum 1½ hp

Drive Speed: 38 rpm max.

Shipped Set For: Standard groove 4 – 6"/100 – 150 mm steel pipe. Contact Victaulic for

ductile iron, MRL, and double groove requirements.

Weight: 37 lbs./17 kg

#### **VG28GD TOOL CAPACITIES**

						SCHEDULE s/mm				
Tool Model	Pipe Material	2 50	2½ 65	3 80	3½ 90	4 100	5 125	6 150	8 200	
	Steel				40 -	- 80				
VG28GD	Stainless				40 -	- 80				
Adjustable Groover	Aluminum		40 – 80							
	Ductile Iron					Class 53				



#### VG824 VIC-ADJUSTABLE™

Designed for cut grooving various pipe materials

• The tool must be driven through its own integral gear box by an external power source at a maximum speed of 38 rpm

• Ideal for job site, fab shop or production cut grooving

• Cut grooves 8 – 24"/200 – 600 mm pipe **Drive Requirements:** External drive, min. 1½ hp

Drive Speed: 38 rpm max.

Shipped Set For: Standard groove, 8 – 12"/200 – 300 mm steel pipe

Weight: 82 lbs./37.2 kg

Options: Contact Victaulic for ductile iron, MRL, and double groove requirements.

#### **VG824 TOOL CAPACITIES**

						SIZE/SCHE inches/mm				
Tool Model	Pipe Material	8 200	10 250	12 300	14 350	16 400	18 450	20 500	22 550	24 600
	Steel		40 -	- 80			30	) – Std. Wa	all	
VG824 Adjustable	Stainless		30	0 – Std. W	all					
Groover	Aluminum	30	) – Std. Wa	all						
	Ductile Iron					Class 53				

### **Pipe Preparation Tool Specifications**

#### Field Motorized



۷G

#### **VG VIC-GROOVER**

- Designed for manual or power cut grooving of a single size on steel, ductile, stainless steel, aluminum and PVC pipe
- Tools are supplied with a ratchet handle for manual operation
- Tools 2"/50 mm and larger are supplied with a power yoke
- Cut grooves  $\frac{3}{4} \frac{8}{20} 200 \, \text{mm}$  pipe

Drive Requirements: Manual or external drive, min. ½ hp./0.37 kw

**Drive Speed:** 40 rpm max.

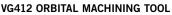
Shipped Set For: Standard groove, IPS of size indicated or rigid\*/flexible for ductile/

cast pipe

Weight: 28lbs./13kg

#### VIC-GROOVER TOOL CAPACITIES

						PIF		SCHEDU s/mm	JLE				
Tool Model	Pipe Material	<sup>3</sup> / <sub>4</sub> 20	1 25	1 ½ 32	1½ 40	2 50	2 ½ 65	3 80	3 ½ 90	4 100	5 125	6 150	8 200
	Steel						40 -	- 80					
Vic-Groover	Stainless						40 -	- 80					
Individual	Aluminum						40 -	- 80					
	PVC						40 -	- 80					
	Steel										40 – 80		
Vic-Groover Adjustable	Stainless										40 – 80		
Adjustuble	Aluminum										40 – 80		
Vic-Groover	Ductile Iron							Class 53		Class 53			ass 3



- Complete modular pipe end preparation system providing quick, accurate cutting and grooving of ductile iron pipe to meet AWWA and other industry specifications for mechanical couplings
- External mounting and drive action is particularly suited to cement lined ductile iron pipe grooving
- The hinged frame design allows cutting at any point along the pipeline
- Blade setting and replacement is fast and easy
- Cut grooves 4 12"/100 300 mm pipe
- Safety foot switch

**Drive Requirements:** 120 volt/11.5 amp

Shipped Set For: Ridgid\* groove profile,  $4 - 12"/100 - 300\,\text{mm}$  ductile iron pipe

**Weight:** 151 lbs./69 kg

**Options:** Capable of grooving 4 – 12"/100-300 mm IPS steel for closure piece grooving

only

NOTE: Specifically designed for field closure pieces. Not suitable for production grooving.

#### **VG412 TOOL CAPACITIES**

				PIPE	SIZE/SCHED inches/mm	ULE		
Tool Model	Pipe Material	4 100	4½ 120	5 125	6 150	8 200	10 250	12 300
	Ductile Iron				Class 53			

<sup>\*</sup> Ridgid is a registered trademark of the Ridge Tool Company.



VG412



### **Pipe Preparation Tool Specifications**

#### Plastic Groovers



VPG26



VPG824

#### VPG26 AND VPG824

- PVC plastic pipe requires a radius groove to reduce any point of stress concentration in this notch sensitive material
- Tools feature a high speed, router-type tool bit which cuts a radiused groove, to full depth, in one manual rotation of the tool around the pipe

#### VPG26

• Grooves 2 - 6"/50 - 150 mm pipe

Power Requirements: 110 volt, 1 phase, 60 Hz, 7 amps

Rotation Drive: Manual (clockwise)

Weight: 41 lbs./19 kg

**Shipped Set For:** VPG26 for  $2 - 3\frac{1}{2}$ "/50 - 90 mm

#### **VPG824**

• Grooves 8 – 16"/200 – 400 mm pipe

Power Requirements: 110 volt, 1 phase, 60 Hz, 7 amps

Rotation Drive: Manual (Clockwise)

Weight: 47 lbs./21 kg

**Shipped Set For:** VPG824 for 8 – 12"/200 – 300 mm

### Aquamine Grooving Tools



APG

#### APG

The APG is a manually operated tool used for producing a cut spline groove and beveled end on 4 - 12"/ 100 - 300 mm Aquamine pipe to prepare the pipe to receive an Aquamine coupling. It is an orbital tool which is rotated around a stationary secured pipe. The tool may be operated on pipe held in a pipe vise or on supported in place piping that is depressurized and drained.



### **Pipe Preparation Tool Specifications**

### Hole Cutting Tools



#### HCTGOS

- One-piece hole cutting tool designed to cut holes up to 4½/120 mm in carbon and stainless steel pipe with OD up to 8"
- Allows for use of Mechanical-T, Vic-Let, and Vic-O-Well outlets

Capacity:  $1-4\frac{1}{2}/25-120$  mm holes for  $\frac{1}{2}-4^{\circ}/15-100$  mm Mechanical-T, and Vic-Let connections

Power Requirements: 110 volt, 1 phase, 60 Hz, 7.0 amp

Weight: 23 lbs./10 kg



#### **VHCT900**

- Three-piece hole cutting tool designed to cut holes up to 3½"/90 mm in diameter for Mechanical-T, Vic-Let, and Vic-O-Well outlets
- Base unit clamps quickly onto the pipe in vertical, horizontal or overhead positions
- Heavy-duty drill mounts to the alignment guides and a manual feed assembly provides uniform pressure on the saw for maximum cutting efficiency

Capacity:  $1-3\,\frac{1}{2}/25-90\,\mathrm{mm}$  holes for  $\frac{1}{2}-3^{\circ}\!/15-80\,\mathrm{mm}$  Mechanical-T, Vic-Let connections

**Power Requirements:** grounded 120 volt, 1 phase, 60 Hz, 10 amp electrical supply. (220 volt, 1 phase, 60 Hz, 5 amp available on request)

Weight: 36 lbs./16 kg

Accessories: Extended chain for  $10 - 24^{\circ}/250 - 600 \,\mathrm{mm}$  pipe



VIC-TAP II

#### VIC-TAP II

• Hole cutting tool designed for use with Style 931 Vic-Tap II Mechanical-T unit for tapping into steel pipe systems under pressures up to 500 psi/3450 kPa

**Capacity:** Vic-Tap II 4-8"/ $100-200\,\text{mm}$  Run  $\times~2\frac{1}{2}$ "/ $65\,\text{mm}$  (IPS) Outlet

Power Requirements: 115 volt, 1 phase, 60 Hz, 7.5 amp

#### Weight:

- (A) Drill guide base 15 lbs./6.8 kg
- (B) Drill motor and feed assembly, total wgt. 16 lbs./7.3 kg
- (C) Style 931/Valve unit, 12 lb./5.4 kg 15 lb./6.8 kg, depending upon size (4, 5, 6 and 8"/100, 125, 150 200 mm available)

**Hole Size:** 2%"/60.5 mm

### **Pipe Preparation Tool Specifications**

### Pressfit Tools



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#### DETEN

- The Pressfit System requires a Pressfit tool designed for securing Pressfit products onto pipe
- Jaws are available separately for rental (with rental tool) or purchase
- · Pressfit tool is designed for industrial and trade use only

Capacity: ½ – 2"/15 – 50 mm IPS Schedule 5 steel and stainless steel pipe

Power Requirements: 110 volt, 60 cycle, 6.5 amp

**Accessories:** Pressing jaws in  $\frac{1}{2}$ "/15 mm,  $\frac{3}{4}$ "/20 mm,  $\frac{1}{2}$  mm,  $\frac{1}{2}$ "/40 mm and

2"/50 mm size

Note: PFT505 and PFT509 components are not interchangeable



**PFT509** 

- The Pressfit System requires a Pressfit tool designed for securing Pressfit products onto pipe
- Tool packages include the actual pressing tool, two (2) batteries and a charger, carrying case, and  $\frac{1}{2}$ ,  $\frac{3}{4}$ ,  $\frac{1}{4}$ , and  $\frac{1}{2}$ " press jaws
- Jaws are available separately for purchase
- · Pressfit tool is designed for industrial and trade use only
- Pressfit tool is battery powered and requires a 12V battery charger

**Capacity:**  $\frac{1}{2} - 1$ " and  $\frac{1}{2}$ "/15 – 25 mm and 40 mm IPS Schedule 5 steel and stainless steel pipe

Power Requirements: 110 volt/60 cycle/6.5 amp

Note: PFT505 and PFT509 components are not interchangeable

### Vic-Press Tool



PFT510

#### PFT510

- The Vic-Press Schedule 10S System requires a Vic-Press Schedule 10S tool designed for securing Vic-Press Schedule 10S products onto IPS Schedule 10S stainless steel pipe.
- Tool package include one (1) Vic-Press PFT510 tool, two (2) 18V Lithium Ion batteries, one (1) battery charger, one (1) corded adapter, one (1) tool carrying case, one (1) jaw carrying case, one (1) ½"/15mm jaw, one (1) ¾"/20mm jaw, one (1) 1½"/40mm hinged jaw, 2"/50mm hinged jaw, and one (1) adapter jaw.
- Jaws are included with every tool purchase.
- Vic-Press PFT510 is designed for industrial and trade use only

**Capacity:**  $\frac{1}{2}$ "/15mm,  $\frac{3}{4}$ "/20mm,  $\frac{1}{2}$ mm,  $\frac{1}{2}$ "/40mm,  $\frac{2}{5}$ 0mm Sch10S stainless steel pipe

Power Requirements: 110 volt/60 cycle/6.5 amp

Optional: 220 volt

**Note:** The Vic-Press Schedule 10S System is not compatible with PFT505 and/or PFT509 tools/components. The Vic-Press Schedule 10S System requires the use of a Vic-Press PFT510 tool package.





# **Pipe Preparation Tool Specifications**

### Pipe Cutting Tools





VCT2

#### VCT1 MANUAL

 Lightweight and portable pipe cut-off tool handles 4 – 24"/100 – 600 mm pipe, up to 0.500/12.7 mm thick

 Worm gear drive crank handle provides smooth, manual travel, easy control and accurate cutting

**Capacity:** 4 - 24"/100 - 600 mm

**Wall Thickness:** 0.065 - 0.500"/1.65 - 12.7 mm (with tips supplied)

**Tips:** Acetylene – 1 ea. #00, #0, #1

Weight: 22 lbs./10 kg

#### VCT2 AUTOMATIC

• Rotation is powered by a small 120 VAC motor with SCR remote control

• Unique distributor design has stainless steel insert which extends tip life, eases cleaning and reduces backfire

**Capacity:**  $6 - 24^{\circ}/150 - 600 \,\text{mm}$ 

**Wall Thickness:** 0.065 – 0.500"/1.65 – 12.7 mm (with tips supplied)

**Tips:** Acetylene – 1 ea. #00, #0, #1

Speed Control: SCR

Power Required: 120 volt, 1 phase, 60 Hz, 15 amp

Motor Rating: 15W 10,000 rpm

Weight: 33 lbs./15 kg

Accessories: Guide rail is sold separately. Recommended for pipe 12"/300 mm and above.

Order Guide Rail D-600 for up to 24"/600 mm pipe (others available).

### **Pipe Preparation Tool Specifications**

#### Accessories

#### Power Drive





#### **VPD752**

- Can be used as the power drive unit for the VE226, VE26, VE46, VE416FS and VE272SFS roll grooving tools, provided the tool is equipped with the correct base plate and the VG1, VG28GD, and VG824 cut grooving tools with universal drive shaft
- · Operated with a safety foot switch

Capacity: See appropriate tool

Power Requirements: 115 volts, 15 amp, 50/60 Hz (220 volt, 6 amp, 50/60 cycle optional)

**Weight:** 140 lbs./634 kg **Optional:** Universal drive shaft

#### Power Mule



#### **MULE II**

- Ideal drive for Victaulic individual Vic-Groover tools, VG28GD and VG824
- Heavy-duty, two-wheeled unit drives Victaulic cut grooving tools at the speed and power necessary for accurate grooving
- Rotating head for horizontal and vertical applications
- Power Mule is equipped with a Forward-Off-Reverse control and integral foot switch

Capacity: Victaulic individual Vic-Groover tools, VG28GD, VG26GD/MRL, VG824, VG824/

MRL

Power Requirements: 115 volts, 15 amp 50/60 cycle

**Full Load Speed:** 35 rpm **Weight:** 190 lbs./86 kg

# Adjustable Pipe Stand



#### VAPS112

- Designed for supporting pipe to be roll grooved
- Four adjustable legged portable self-standing unit
- Turnstile design allows pipe to be spun around for grooving of both pipe ends without dismounting pipe from stand
- Unique trough design allows for rotational and forward/traverse movement

Capacity: 34 - 12"/20 - 300 mm IPS pipe

Load Rating: 1075 lbs./490 kg

Vertical Stroke: 14½"/368 mm for adjusting rod, 8½"/216 mm leg adjustment, 23"/584 mm

Minimum Pipe Height from Floor: 23"/584 mm on 12"/300 mm pipe 21"/533 mm on 1"/25 mm pipe

Weight: 190 lbs./86 kg

Handle Effort Required to Raise 1075 lbs./490 kg Load: 50 lbs./23 kg maximum

#### www.victaulic.com



### **Pipe Preparation Tool Specifications**

# Adjustable Pipe Stand **VAPS224**



#### VAPS224

- Designed specifically for supporting pipe to be roll grooved
- Self-standing heavy-duty unit permits free pipe rotation and traversing on ball transfers
- Ball transfers are mounted in a manner permitting use of pipe slings
- Turnstile design allows pipe to be spun around for grooving of both pipe ends without dismounting pipe from stand

**Capacity:** 2 – 24"/50 – 600 mm IPS pipe

Load Rating: 1800 lbs./816 kg Vertical Stroke: 23"/584 mm

Minimum Pipe Height from Floor: 13"/325 mm on 24"/600 mm IPS pipe Maximum Pipe Height from Floor: 38"/965 mm on 2"/50 mm IPS pipe

Weight: 260 lbs./118 kg

Handle Effort Required to Raise 1800 lbs./817 kg Load: 50 lbs./23 kg maximum

### Adjustable Pipe Stand





Vic-Easy Adjustable Pipe Stands are portable and self-standing units that permit free pipe rotation and traversing on ball transfers. They are designed for direct use with Vic-Easy roll grooving tools: VE436MC and VE460.

Capacities: 16 – 72" pipe Load Rating: 10000 lbs Vertical Stroke: 17"

Min. Pipe Height from Floor: 16" on 72" pipe Max. Pipe Height from Floor: 28" on 16" pipe

## **Pipe Preparation Tool Specifications**

# Pipe Diameter Tape





#### **PT100A**

- Go/No-Go pocket-sized steel tapes are available for taking circumferential measurements on pipe sizes <sup>3</sup>/<sub>4</sub> - 24".
- Tape contains Go/No-Go markings on one side for use with ¾ 24" pipe in ANSI B36.19 and many ISO-4200 sizes and is marked in 1/100th of an inch increments on the other side.
- The Go/No-Go side can be used to check cut or roll grooved pipe conformance to Victaulic original and Machined for Rubber Lining (MRL) (¾ – 12") and Advanced Groove System (AGS) (14 – 24") groove diameter specifications.
- Tapes are notched on the lead end to allow proper overlap within the groove for more accurate measurement.
- The Go/No-Go side of the tape is not intended for use on sizes 76.1; 139.7; 165.1; 165.2; 216.3; 267.4; and 318.5 mm steel or stainless steel pipe sizes. For cast or ductile iron pipe sizes (up to 20"), copper tube sizes, and the steel and stainless steel pipe sizes listed above, use the side of the tape marked in 0.01" increments.
- The Go/No-Go pipe tape is a quick reference guide only. To ensure proper grooving dimensions, always refer to the I-100 Victaulic Field Installation Handbook or to the latest groove specifications publications located on www.victaulic.com.
- Metric version, PT101, is also available for 20 600 mm pipe sizes.

#### PT102





#### PT102

- Go/No-Go pocket-sized steel tapes are available for taking circumferential measurements on pipe sizes 8 - 72"/200 - 1800 mm.
- Tape contains Go/No-Go markings on one side for use with Original Groove System sizes 8 - 12"/200 - 300 mm pipe and Advanced Groove System sizes 14 - 72"/300 - 1800 mm pipe in ANSI B36.10/B36.19 and many ISO-4200 sizes. In addition, the PT102 contains markings in 0.02"/0.5 mm increments on the opposite side.
- The opposite side of the diameter tape can be used to check Victaulic original groove specifications in 14 42"/200 1050 mm pipe sized, including China pipe sizes and JIS specifications 8 12"/200 300 mm pipe sizes.
- The Go/No-Go pipe tape is a quick reference guide only, it is not a replacement for a calibrated diameter measuring instrument. To ensure proper grooving dimensions, always refer to the I-PT102 Victaulic Go/No-Go Pipe Diameter Tape Instructions Manual or to the latest groove specifications publications located on www.victaulic.com.

# **Pipe Preparation Tool Specifications**

### **Grooving Times**

Time for pipe preparation obviously depends on widely varied factors including productivity, location, type, hardness, and wall thickness of pipe. As a gauge for typical grooving times, the following chart was prepared to include grooving time with pipe in position and tool properly set for the size and depth of groove. Times will be extended when going from one size to another for roll changes, depth stop setting, trial grooving and other minor adjustments incidental to changing pipe sizes or initial set-up time prior to the first production groove.

#### APPROXIMATE GROOVING TIME IN MINUTES - STEEL PIPE∞

Nominal			D.II C		D				01.0		
Size			Roll G	roovers –	Powered			Vic-G	roover	roovers Vic-Adj	ustable
Inches	VE226	VE272SFS	VE270FSD	VE268	VE416FSD	VE414MC	VE460	Power	Hand	VG28GD	VG824 Power
3/4	0.5 a		0.2	0.2	_	_	12100	0.5	1.5		_
1	0.6 a	_	0.2	0.2	_	_		0.5	1.5	_	
1 1/4	0.7 a,b	_	0.2	0.2	_	_		0.7	2.0	_	
11/2	0.8 a,b	_	0.2	0.2	_	_		0.7	2.5	_	
2	1.0 b,c	0.3	0.3	0.3	0.3	0.2		1.0	3.0	1.0	
2½	1.3 b,c	0.3	0.3	0.3	0.3	0.2		1.2	3.8	1.3	
3	1.4 b,c	0.4	0.4	0.4	0.4	0.2		1.4	4.5	1.5	
31/2	1.4 b,c	0.4	0.4	0.4	0.4	0.2		1.7	5.5	2.0	_
4	1.5 b,c	0.5	0.4	0.5	0.5	0.2	<1	1.9	7.0	2.5	
4 1/2	1.5 b,c	0.8	0.6	0.6	0.6	0.2	<1	2.3	8.0	2.8	
5	1.6 b,c	1.0	0.8	0.8	0.8	0.2	<1	2.5	9.0	3.5	_
6	1.8 b,c	1.5	1.2	0.8	1.0	0.3	<1	3.0	10.0	4.5	_
8	_	1.7	1.5	0.9	1.7	0.4	<1	4.0	15.0	5.0	5.0
10	_	2.0	1.8	1.5	2.5	0.6	1.1	_	_	_	8.0
12	_	2.5	2.3	1.8	3.5	0.7	1.4	_	_	_	10.0
14	_	_	_	_	7.4 ††	3.6 ††	2.7	_	_	_	12.0
16	_	_	_	_	8.0 ††	4.0 ††	3	_	_	_	16.0
18	_	_	_	_	_	_	3.5	_	_	_	20.0
20	_	_	_	_	_	_	3.8	_	_	_	23.0
22	_	_	_	_	_	_	4	_	_	_	27.0
24	_	_	_	_	_	_	4.2	_	_	_	30.0
26	_	_	_	_	_	_	3.2``	_	_	_	_
28	_	_	_	_	_	_	3.2``	_	_	_	_
30	_	_	_	_	_	_	3.4``	_	_		_
32	_	_	_	_	_	_	3.6``	_	_		_
36	_	_	_	_	_	_	4.0``	_	_	_	_
38	_	_	_	_	_	_	4.2``	_	_		_
42	_	_	_	_	_	_	4.5``	_	_		_
46	_	_	_	_	_	_	4.8``	_	_	-	_
48	_	_	_	_	_	_	5.0``	_	_	_	_
54	_	_	_	_	_	_	5.5``	_	_	_	_
56	_	_	_	_	_	_	5.8``	_	_	_	_
60	_		_	_		_	6.5``	_			

a VE226B b VE226S c VE226M

 $<sup>\</sup>infty$  For roll groovers the times apply to the thickest pipe wall for which the tool is rated. See tool capacities. For cut groovers, the times apply to standard wall steel pipe. For other materials and thicknesses contact Victaulic for details.

tt For AGS roll grooves

<sup>&</sup>quot;Based on %"/10 mm wall thickness. For ½"/13 mm wall thickness add 10% to grooving times.

# **Pipe Preparation Tool Specifications**

# Standard Pipe Wall Thickness

(ANSI B 36.10 & B 36.19 for Stainless Steel Pipe)

c				Direct Col		Th: -1	l l /	III and a second		
Si Nominal	Actual Outside			Pipe Sci	nedule/Wall	Thickness	- Inches/mi	llimeters		
Size Inches/mm	Diameter Inches/mm	58	5	108	10	20	30	40	STD.	80
<sup>3</sup> / <sub>4</sub> 20	1.050 26.9	0.065 1.65	0.065 1.65	0.083 2.11	_	_	_	0.113 2.87	0.113 2.87	0.154 3.91
1 25	1.315 33.7	0.065 1.65	0.065 1.65	0.109 2.77	_	_	_	0.133 3.38	0.133 3.38	0.179 4.55
1 ¼ 32	1.660 42.4	0.065 1.65	0.065 1.65	0.109 2.77	_	_	_	0.140 3.56	0.140 3.56	0.191 4.85
11/2	1.900	0.065 1.65	0.065	0.109 2.77	_	_	_	0.145 3.68	0.145 3.68	0.200 5.08
2 50	2.375	0.065 1.65	0.065	0.109 2.77	_	_	_	0.154 3.91	0.154 3.91	0.218 5.54
2½ 65	2.875 73.0	0.083	0.083	0.120 3.05	_	_	_	0.203	0.203 5.16	0.276 7.01
3 80	3.500 88.9	0.083 2.11	0.083	0.120 3.05	_		_	0.216 5.49	0.216 5.49	0.300
3 1/2	4.000	0.083	0.083	0.120	_	_	_	0.226	0.226	7.62 0.318
90	101.6 4.500	0.083	0.083	3.05 0.120	_	_	_	0.237	5.74 0.237	0.337
100	114.3 5.563	0.109	0.109	3.05 0.134	_	_	_	0.258	6.02 0.258	8.56 0.375
125 6	141.3 6.625	2.77 0.109	2.77 0.109	3.40 0.134	_	_	_	6.55 0.280	6.55 0.280	9.53 0.432
150 8	168.3 8.625	2.77 0.109	2.77 0.109	3.40 0.148		0.250	0.277	7.11 0.322	7.11 0.322	10.97 0.500
200 10	219.1 10.750	2.77 0.134	2.77 0.134	3.76 0.165		6.35 0.250	7.04 0.307	8.18 0.365	8.18 0.365	12.70 0.594
250 12	273.0 12.750	3.40 0.156	3.40 0.156	4.19 0.180	_	6.35 0.250	7.80 0.330	9.27 0.406	9.27 0.375	15.09 0.688
300 14	323.8 14.000	3.96 0.156	3.96	4.57 0.188	0.250	6.35 0.312	8.38 0.375	10.31 0.438	9.53 0.375	17.48 0.750
350 16	355.6 16.000	3.96 0.165	_	4.78 0.188	6.35 0.250	7.92 0.312	9.53 0.375	11.13 0.500	9.53 0.375	19.05 0.844
400 18	406.4 18.000	4.19 0.165		4.78 0.188	6.35 0.250	7.92 0.312	9.53 0.438	12.70 0.562	9.53 0.375	21.44 0.938
450 20	457.0 20.000	4.19 0.188	_	4.78 0.218	6.35 0.250	7.92 0.375	11.13	14.27	9.53 0.375	23.83
500	508.0	4.78 0.218	_	5.54	6.35	9.53 0.375	12.70	15.09	9.53 0.375	26.19
600	610.0	5.54		6.35	6.35 0.312	9.53 0.500	14.27	17.48	9.53 0.375	30.96
650	660.4	_	_	_	7.92 0.312	12.70	0.625	_	9.53 0.375	_
700	711.0	-	_	- 0.212	7.92	12.70	15.88	_	9.53	_
750	762.0	0.250 6.35		0.312 7.92	0.312 7.92	0.500	15.88	_	0.375 9.53	_
32 800	32.000 813.0	_	_	_	0.312 7.92	0.500 12.70	0.625 15.88	0.688 17.48	0.375 9.53	_
36 900	36.000 914.0	_	_	_	0.312 7.92	0.500 12.70	0.625 15.88	0.750 19.05	0.375 9.53	_
36	36.000 914.4	_	_	_	_	_	_	+	_	+
38	38.000 965.2	_	_	_	_	_	_	+	_	+
42	42.000 1066.8	_	_	_	_	_	_	+	_	+
46	46.000 1168.4	_	_	_	_	_	_	+	0.375 9.52	0.5 12.70
48	48.000 1219.2	_	_	_	_	_	_	+	0.375 9.52	0.5 12.70
54	54.000 1371.6	_	_	_	_	_	_	+	_	+
56	56.000 1422.4	_	_	_	_	_	_	+	_	+
60	60.000 1524.0	_	_	_	_	_	_	+	_	+
72	72.000 1828.8	_	_	_	_	_	_	+	_	+

<sup>+</sup> For these sizes Victaulic can be used on 3/8"/10 mm and 1/2"/13mm wall.



24.01 PIPE PREPARATION TOOLS

# **Pipe Preparation Tool Specifications**

WARRANTY	Refer to the Warranty section of the current Price List or contact Victaulic for details.
NOTE	This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

