

#### IPS CARBON STEEL PIPE HOLE CUT PRODUCTS

# **Hole Cut Piping System**

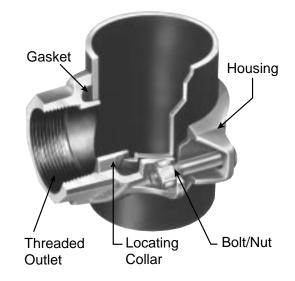
# **PRODUCT DESCRIPTION**

The bolted mechanical branch connection concept was developed by Victaulic to provide a fast, easy mid-pipe outlet without welding. A hole is first cut or drilled in the pipe to receive the outlet. Positioning in the hole is enhanced with either a locating collar (Styles 920, 921 and 929) or a toe and heel (Styles 923 and 924) and provides a smooth outlet area for maximum flow characteristics.

The gasket is molded to conform to the pipe O.D. and is of pressure - responsive design. Gasket seal is further enhanced by pressure or vacuum in the line.

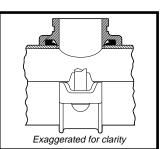
Styles 920, 921 and 929 are ideal for a variety of branch connections. Styles 923 and 924 provide a weldless connection for a variety of gauges, drains and thermometers.

Victaulic hole cut products must be installed on the true centerline of the pipe. Vic Hole Cutting Tools are recommended for preparing pipe to receive all Victaulic hole cut products.

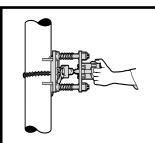




Provides a bolted branch connection



Locating collar assures permanent positioning



Fast, easy preparation

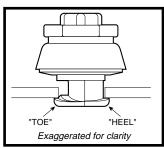


Combines for crosstype connection

### Vic-Let<sup>™</sup> Style 923 and Vic-O-Well<sup>™</sup> Style 924



Weldless connection for gauges, drains, thermometers



Toe and heel engage inside of pipe



Easy one nut assembly

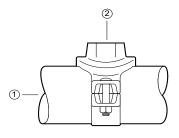


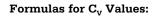
No welding – no special assembly tools

## **FLOW DATA**

 $C_{v}$  values for flow of water at +60°F (+16°C) are shown in the table at right.

Flow test data has shown that the total head loss between point 1 and 2 for the Style 920, 921 and 929 Mechanical-T® fittings can best be expressed in terms of the pressure difference across the inlet and branch. The pressure difference can be obtained from the relationship at right.





$$\Delta P = \frac{Q^2}{C_V^2}$$
$$Q = C_V \times \sqrt{\Delta P}$$

Q = Flow (GPM)

Where:

 $\Delta P = Pressure Drop (PSI)$ 

 $C_v =$  Flow Coefficient

Nominal Outlet Size Inches/mm	C <sub>v</sub> Values	Equiv. Feet/meters of Pipe		Nominal		Equiv. Feet/meters of Pipe	
		Grooved	Female Threaded	Outlet Size Inches/mm	C <sub>v</sub> Values	Grooved	Female Threaded
1⁄2 15	17		2.0 0.6	2 50	100	9.0 2.7	10.5 <u>3.2</u>
<sup>3</sup> ⁄ <sub>4</sub> 20	21		4.0 1.2	21/2 65	135	11.0 <u>3.4</u>	12.5 3.8
1 25	25		5.0 1.5	3 80	200	13.5 4.1	15.5 4.7
11⁄4 32	45	5.5 1.7	6.0 1.8	4 100	400	20.0 6.1	22.0 6.7
11⁄2 40	60	7.0 2.1	8.0 2.4				

#### Styles 920 & 921 Mechanical-T<sup>®</sup> Bolted Branch Outlet

The bolted mechanical

branch connection con-

mid-pipe outlet without

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with either a locating collar

(Styles 920, 921 and 929) or

a toe and heel (Styles 923





Style 920 Cross

and 924) and provides a smooth outlet area for maximum flow characteristics.

The gasket is molded to conform to the pipe O.D. and is of pressure - responsive design. Gasket seal is further enhanced by pressure or vaccum in the line.

Styles 920, 921 and 929 are ideal for a variety of branch

Style 920 Threaded Outlet

connections. Styles 923 and 924 provide a weldless connection for a variety of gauges, drains and thermometers.

Victaulic hole cut products must be installed on the true centerline of the pipe. Vic Hole Cutting Tools are recommended for preparing pipe to receive all Victaulic hole cut products.

This product shall be manufactured by Victaulic Company. All products shall 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.