

The 1-5/8" milling bit: The pivotal component in maintaining pipe integrity; Saving time and money (one cutter for all sizes)



precision, convenience, speed, and reliable performance

The EZ₂ valve design maintains pipeline integrity by only milling out a $1-\frac{5}{8}$ " slot, 120° across the top of the pipe allowing our resilient wedge design to make a solid seal even in tuberculated pipe.

1%" Slot

3 Easy Steps . . . Plus Your Choice

1

2

3

Plus



Place and secure the precision machined valve body to the pipe.



Mill the 1-5%" slot by rotating valve assembly and cutter 120° across the top of the pipe (no coupon, all milling chips removed).



The integral isolation valve allows for removal of the cutter and the installation of the valve bonnet, all under full line pressure.



Remove bonnet and install cover plate (under pressure) after use as a line stop.

All steps are performed quickly, under pressure, in one excavation, and without interruption of service. And You decide – "Take it or Leave it" – The Valve Bonnet stays for a permanent valve insertion or it leaves for reuse after temporary line stop.

(16" installation shown above)

The EZ2™ Process

The EZ₂™ system was developed to provide important performance and installation benefits to professionals working under difficult conditions and with critical needs.

Advanced Valve Technologies delivers

- High quality components meeting industry standards (AWWA material spec C-509-09)
- Rapid installation procedures (reduced field-work hours)
- Single excavation performance
- Standardized operation (normal turns to actuate valve)
- Compact design (lower weights; simpler lifting equipment)
- Pipe-line integrity maintenance (no sectional or circumferential pipe intrusion, only a milled slot with no coupon drop)
- Lightweight and compact installation equipment
- No service interruption (process is completed under pressure)
- Sizes available for 4 inch through 16 inch systems

Plus --

- Integral isolation valve and
- "Take It or Leave It" Valve bonnet design lets you choose to retain the insertion valve operation or temporarily create a line stop; the bonnet may be used for multiple projects.









The EZ2™ System

EM Machine (End Mill) Temporarily mounts in place of valve bonnet and features field-replaceable cutting blades available in pneumatic, hydraulic or electric drives

Actuator *Standard number of turns to open and close valve*

Removable Valve Bonnet Resilient wedge and actuation mechanism are contained for easy installation or removal

Double Seal Gaskets Maintain system pressure while allowing rotation of casting assembly during slot-milling

Fasteners Stainless steel components secure casting assembly and provide final positioning on pipe

Pipeline Compatibility The EZ_2^{TM} design works with all common and many uncommon pipe materials. Consult AVT for details.

Resilient Wedge A wedge valve over a ductile iron component that effectively seals even tuberculated host pipe

Integral Isolation Valve *Provides* "under pressure" installation or removal of valve bonnets or blind flanges

Insertion Slot 1-5% inch slot that covers a 120° path maintains pipe integrity and creates wedge valve access

Castings Ductile iron castings are precision machined to fit project specifications and pipe material

Sacrificial Anode *for cathodic protection*

Rapid and Reliable Installation Process



Prepare insertion site by lubricating the gasket contact areas



Lubricate gasket sets and gasket channels in casting bodies



Assemble ductile iron castings with stainless steel fasteners to accept 250 psi and temporarily permit rotational travel for milling



Close integral isolation valve (horizontal wedge); attach milling tool and rotational control assembly; open isolation valve; pressure test before cutting



Installation

Fast and Convenient

Performance

Meets Industry Standards

Quality

Precision Engineered

Design

Unique Concept

Versatility

One System, Two Functions

Environment

Single Excavation and Low Profile

Both the final EZ₂ assembly and the installation equipment kit have been developed to be lighter and more compact than alternative methods. The result: quick and sure installations in record times. It's faster and easier, with fewer steps than older methods such as shutdowns and line stops.

The ductile iron castings, corrosion resistant coatings, and stainless steel fasteners incorporated in the EZ₂ system have been carefully chosen and tested to deliver reliable and trouble-free service. EZ₂ materials meet AWWA C-509-09 standards.

EZ₂ components are manufactured and matched to deliver repeatable and dependable service. A complete insertion valve assembly can be created to meet your non-standard application or non-typical pipe material. Consult AVT for special projects.

An EZ₂ assembly maintains pipe integrity while providing an easy-to-install, easy-to-use and easy-to-adapt solution. The full encirclement ductile iron casting design, narrow access resilient wedge valve, integral isolation valve and removable bonnet deliver field-elective operating options.

The "Take It or Leave It" SM valve bonnet feature provides the flexibility to either insert a permanent, high quality valve or temporarily use EZ₂ for an economical and single excavation line stop.

EZ₂ installs <u>under pressure</u> and <u>in one excavation</u> eliminating expensive multiple excavations. Faster installation times save man-hours while avoiding residential and business disruption to your system.

In comparison to traditional line stop equipment, EZ₂'s low-profile design usually permits plating over to keep traffic moving instead of requiring alternative routing and the attendant costs.

Rapid and Reliable Installation Process



While maintaining system line pressure, mill 1-5/8 inch slot over a120° path Note: Slot is normally cut to provide for a vertical valve alignment, but installer can select any desired position.



Retract milling head, close isolation valve, and replace milling tool with valve bonnet; remove rotational control assembly and tighten casting fasteners to final torque values



Open isolation valve and operate EZ₂™ valve as needed.
For Line Stop Applications:
Replace valve bonnet with a blind flange by utilizing isolation valve

EZ2™ Technology



The EZ₂ System is compact & lightweight for rapid deployment in emergency situations

"The 8th Wonder of the World" We didn't say it about our EZ_2^{TM} Valve, but we appreciate that an important customer did. And he had many good reasons to feel positive about the EZ_2^{TM} performance. His municipality benefitted greatly –

- Under 1 hour install time while maintaining line pressure
- No boil orders issued
- No need to de-chlorinate or re-chlorinate
- Avoided a shutdown that would have effected one-third of the city
- Local restaurants, retailers, and businesses did not suffer losses
- Installed valve meets AWWA material standards
- Provides a 250 psi rating
- Operates with the normal number of turns
- EZ Valve has a Super OD range which accommodates most types of pipe. For special OD's contact your nearest AVT representative.

For complete information about products and services contact your AVT representative or our main office.

Distributed in the U.S. and Canada exclusively by



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