

EZ™ Technology:

The Latest Advancement
in Valve Insertion or Line Stopping.

1 Machine, 2 Functions!



*"Take it or Leave it –
The Valve Bonnet,
that is." SM*

The EZ™ Process

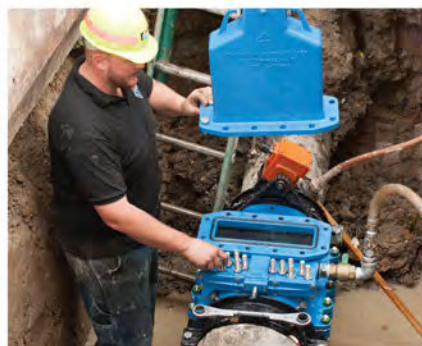
The EZ™ system was developed to provide important performance and installation benefits to professionals working under difficult conditions and with critical needs.

Advanced Valve Technologies Delivers

- High quality components meeting industry standards (AWWA material spec C-509-09/C-515 and UL Drinking Water System Component ANSI/NSF 61. Also certified to NSF/ANSI 372 MH49142.)
- 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"-12" (100mm-300mm), 14" (350mm), 16" (400mm), 20" (500mm) and 24" (600mm) systems – 18" (450mm) coming soon.

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.



Our patented wedge gate cuts through Tuberculation and seals off – guaranteed.

The EZ™ System



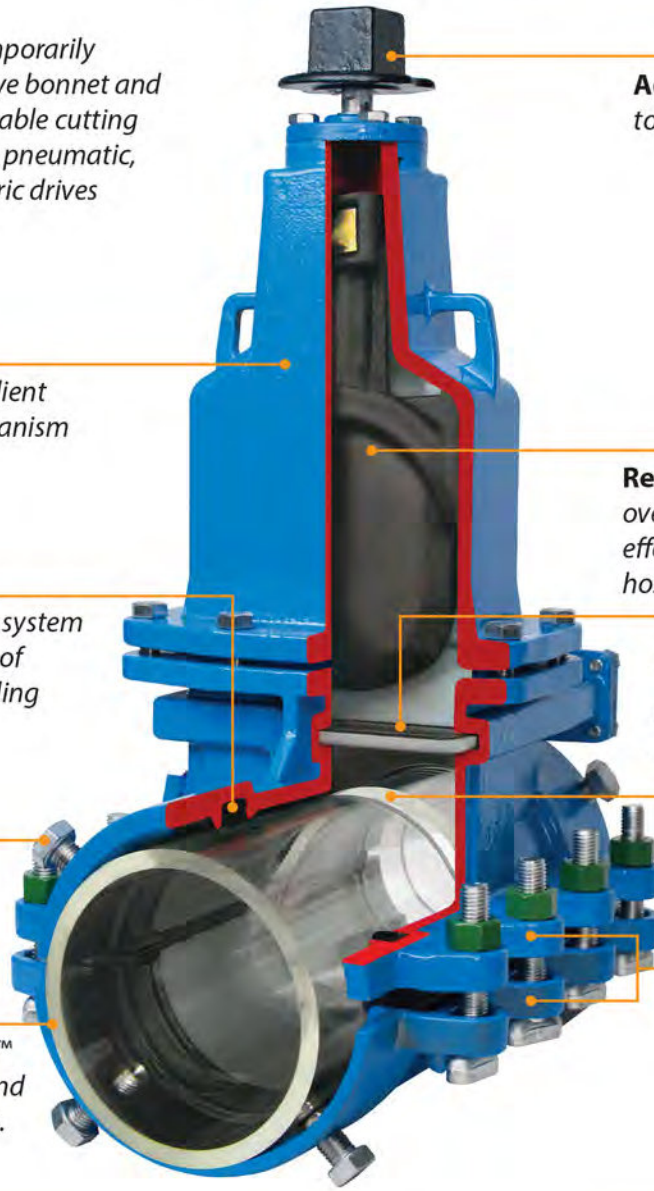
End Mill Machine Temporarily mounts in place of valve bonnet and features field-replaceable cutting blades available in pneumatic, hydraulic or electric drives

Removable Valve Bonnet Resilient wedge gate and actuation mechanism are contained for fast and 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™ design works with all common and many uncommon pipe materials. Consult AVT for details.



Actuator Standard number of turns to open and close valve

Resilient Wedge A wedge gate 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 One narrow slot over 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

Rapid and Reliable Installation



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 (16 BAR) and temporarily permit rotational travel for milling



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

EZ™ Benefits

Installation

*Fast and
Convenient*

Both the final EZ™ 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.

Performance

*Meets Industry
Standards*

The ductile iron castings, corrosion resistant coatings, and stainless steel fasteners incorporated in the EZ™ system have been carefully chosen and tested to deliver reliable and trouble-free service. EZ™ materials meet AWWA C-509-09/C-515 standards and UL Drinking Water System Component ANSI/NSF 61. Also certified to NSF/ANSI 372 MH49142.

Quality

*Precision
Engineered*

EZ™ 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.

Design

*Unique
Concept*

An EZ™ 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.

Versatility

*One System,
Two Functions*

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

Environment

*Single Excavation
and Low Profile*

EZ™ installs under pressure and in one excavation 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, EZ's™ low-profile design usually permits plating over to keep traffic moving instead of requiring alternative routing and the attendant costs.

Installation Process



While maintaining system line pressure, mill a slot over a 120° 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 EZ™ valve as needed. For Line Stop Applications: Replace valve bonnet with a blind flange by utilizing isolation valve

**EZ™ provides
precision,
convenience,
speed,
and reliable
performance**

The milling bit:
A pivotal component in
maintaining pipe integrity
that also saves time and money



The EZ Valve design maintains pipeline integrity by only milling out a narrow slot 120° across the top of the pipe allowing our resilient wedge design to make a solid seal even in tuberculated pipe.

↑
Milled Slot –
No Coupon
to Drop
↓

3 Easy Steps . . . Plus Your Choice

1



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

2



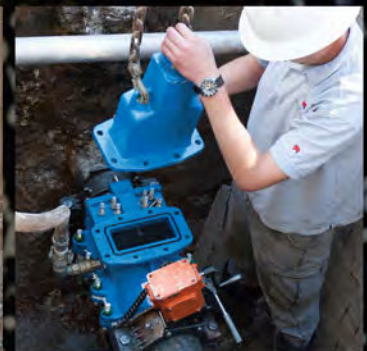
Mill the slot by rotating valve assembly and cutter 120° across the top of the pipe (no coupon, all milling chips removed).

3



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

Plus



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”SM** – The Valve Bonnet stays for a permanent valve insertion or it leaves for reuse after a temporary line stop.

6" (150mm) installation shown above

EZ™ Technology

*We dare you
to compare...*



*... You'll find out
why EZ™ Valve is
The World Leader by Choice*

*The patented Resilient Wedge Gate powers through tuberculation.
The body casting, unlike a competitor's, does not have a debris catching recess.*

“The 8th Wonder of the World”

We didn't say it about our EZ™ Valve, but we appreciate that an important customer did. And he had many good reasons to feel positive about the EZ™ performance.

His municipality benefitted greatly –

- Under 1 hour install time while maintaining 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 (16 BAR) 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.)