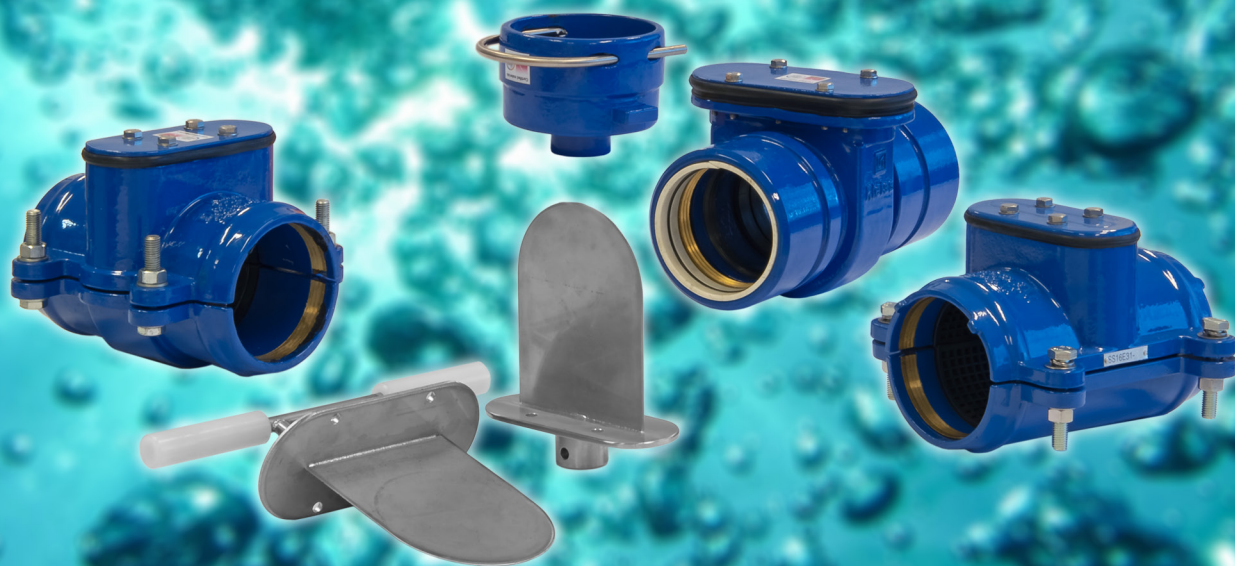


Cast iron guillotine valves for PE/PVC pipelines



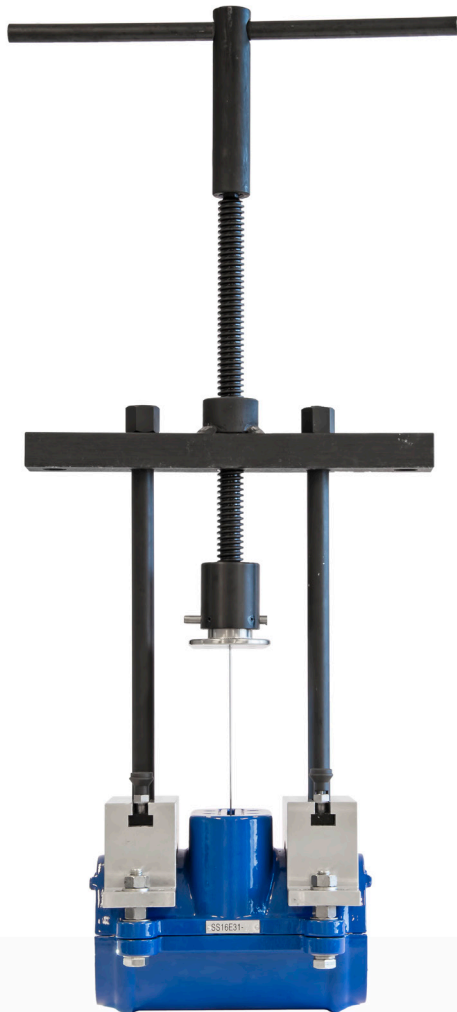
 **kleiss & co b.v.**



Watertool® Spade Valve

For stopping the flow in PE water mains DN63-DN160MM

With the patented Spade Valve pressurized PE water mains can be shut off safely and quickly with a minimum excavation work.



The Watertool Spade Valve is a cast iron valve, supplied with 2 aluminium support blocks, a manual guillotine-assembly and a stainless steel spade. After the valve is installed onto the pipe, the two aluminium support blocks are mounted onto the upper bolts of the valve unit after which the spade is pushed into the PE pipe wall by means of the guillotine. One of the characteristics of the patented invention is that the spade cuts into the PE pipe wall without completely cutting it.

After the procedure is completed, the water flow is activated by pulling the spade completely out of the PE pipe wall and the valve body. A special sealing gasket in the upper part of the valve ensures, in combination with the pressure inside the valve, complete sealing. The valve, complete with a fully restrained (end loaded) connection, remains on the pipe and can operate as a standard isolation valve.

Advantages

- Patented technology for shutting off pressurized PE water mains;
- Fit for use in case of emergency when the flow of water needs to be stopped quickly;
- The user can determine the most convenient place for a pipe section to be isolated;
- A minimum excavation work reduces disruption to local businesses and residents. Ease of operation;
- Safe and quick;
- Spade valve remains in the network as a standard isolation valve;

Specifications

Valve body	Ductile Iron GGG
Coating	Resicoat R4 blue
Sealing	EPDM with WRAS/Kiwa/Belgaqua approval
Spade	Hardox steel (Stainless Steel)
Guillotine tool	Blackened galvanized steel
Pressure rating	PN16

Watertool® Socket Valve

**Safe installation of water mains
DN63-DN160MM for PVC/PE without
the requirement to install temporary
pipelines during a new installation.**

The patented Water Socket Valve enables the operator to renew the old water main without loss of mains water pressure. The Watertool Socket Valve is a cast iron valve that uses a moveable stainless steel slide for isolation purposes. After installation the Water Socket Valve operates as a standard isolating gate valve.



In a situation where water pressure needs to be maintained, normally it is necessary to construct a new pipeline parallel to the main line; this is a temporary service line to which all houses are then connected. Once the work is completed these temporary connections are removed. Usually this has to be done several times and as a result, homes and businesses have to be disrupted on numerous occasions.

The advantage of using the Water Socket Valve means that the water pressure can be maintained during operation after the initial connection. There is no requirement to install a parallel new pipeline which means saving on plant and machinery, new material and excessive excavation work. A total cost saving and minimal disruption to local business and household consumers.

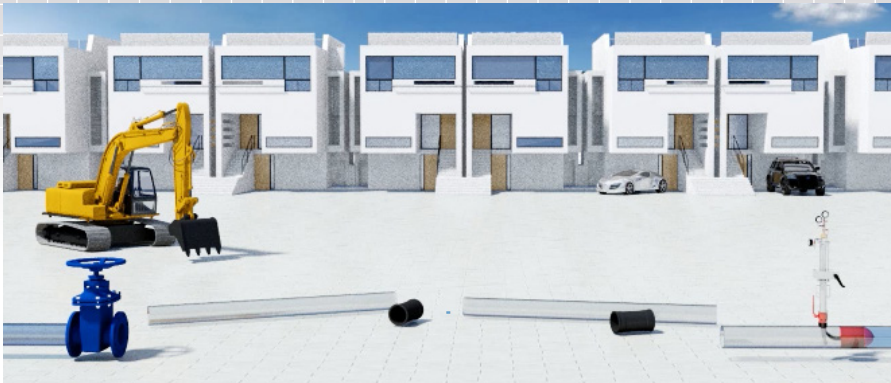


Advantages:

- Applicable for PE and PVC water mains;
- Safe and quick installation by one person;
- No necessity for temporary service lines;
- Only a one-time-disconnection from the water supply;
- Considerable reduction of excavation work and less disturbance to the environment;
- Cost reduction up to 50%;
- Fully restrained end loaded connection;
- Socket valve remains in the water supply network operating as a standard isolation valve;

Specifications

Valve body	Ductile iron GGG
Coating	Resicoat R4 blue
Sealing	EPDM with WRAS/Kiwa//Belgaqua approval
Spade	Hardox steel (Stainless Steel)
Pressure rating	PN10



Isolate the flow in the existing pipeline. Release the pressure and remove the pipes from the isolated section.



Install the new pipe section and fit the Kleiss Socket Valve to the end of the new installed pipe section. Refill the new pipeline and release the air using the Kleiss Socket Valve and the Kleiss End Cap.



Isolate the flow of water by inserting the sealing knife.



The following day determine the section of pipe to be removed and isolate the flow.



Continue the installation using the above steps.

Watertool® Cord Valve

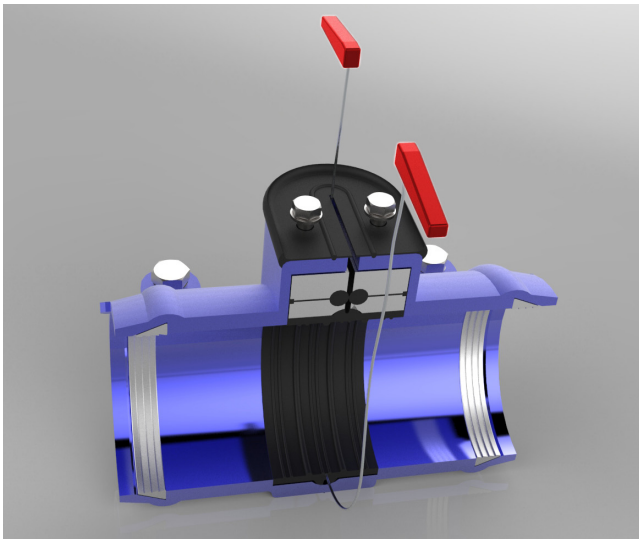
For the isolation of PVC water mains DN63-DN160MM

With the patented Cord Valve, pressurized PVC water main sections can be safely isolated with a considerable reduction in excavation work.

The Watertool Cord Valve consists of two semi-circular sections which are bolted together around the circumference of the pipe. The assembly also includes a cutting cord and a stainless steel slide. The cutting cord extends from the lower rubber sealing gasket, and feeds through the top half sealing. The pipe is then cut manually using the steel cutting cord.

After the pipe has been cut, a stainless steel slide (guillotine) is pushed fully downwards creating the seal within the pipeline.

After the work is finished the slide is removed. Then a special sealing design gasket ensures that the valve remains water tight throughout after which a dedicated sealing plate is fitted to the top of the valve, ensuring that the valve operates as a standard isolation valve.



Advantages

- Patented technology for isolating under pressure PVC pipeline sections;
- Ideal solution for emergency situations and also for any remedial/renovation works;
- Quick and safe installation by one person;
- Versatile application which can be used at almost any position within the pipeline network;
- Minimal excavation work requirement;
- Cord Valve remains as regular isolation valve;

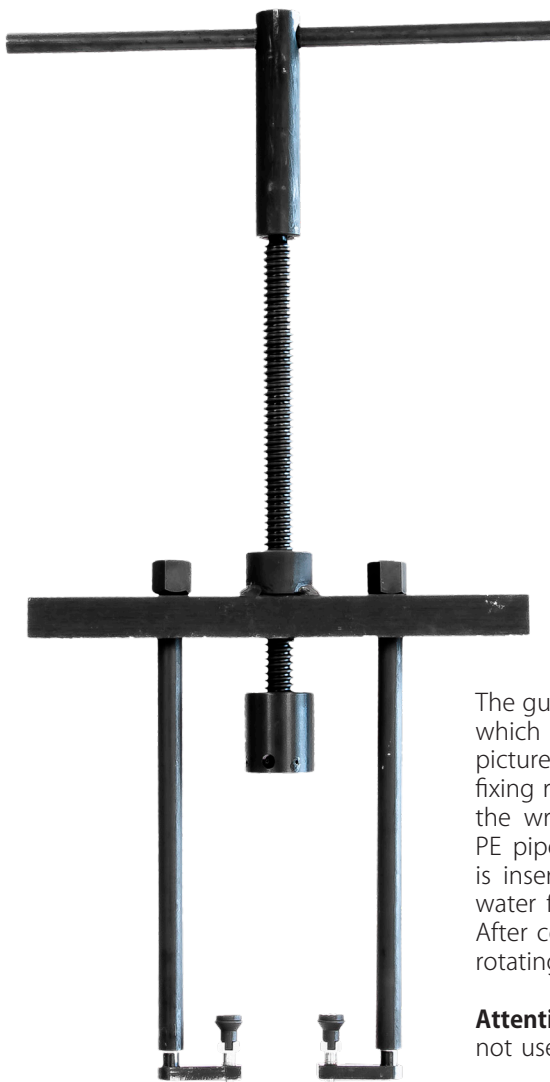
Specifications

Valve body	Ductile Iron GGG
Coating	Resicoat R4 blue
Sealing	EPDM with WRAS/Kiwa/Belgaqua approval
Spade	Hardox steel (Stainless Steel)
Pressure rating	PN10

Guillotine tool

For the Spade and Cord Valve only

The guillotine tool is used for the positioning of the stainless steel spade and slide into the Spade Valve and the Cord Valve. The guillotine tool is made of black galvanized steel, is light in weight and very easy to use.



The guillotine tool is mounted onto the two aluminium steel support blocks which are fitted by means of 4 bolts onto the Spade or Cord Valve. (See picture of Spade Valve page). After the spade has been connected into the fixing rod of the spindle, the spindle can be moved downwards by rotating the wrench. When cutting the PE pipe with the spade, the wall of the PE pipe is partially cut and remains intact. With the Cord Valve the slide is inserted by the same means but operates purely as a gate valve. The water flow is fully stopped once the spade is positioned within the valve. After completion of works the spade or slide is retracted from the pipe by rotating the wrench into the opposite direction.

Attention: With the Socket Valve, the spade is manually operated. You do not use the guillotine tool.

Watertool Spade Valve	
Article No.	Description
90507000	Spade Valve DN90
90507010	Spade Valve DN110
90507030	Spade Valve DN160
90507160	Spade DN90
90507170	Spade DN110
90507190	Spade DN160
90507165	Protective cover Spade DN90
90507175	Protective cover Spade DN110
90507195	Protective cover Spade DN160

Watertool Cord Valve	
Article No.	Description
90507650	Cord Valve DN63 incl. Cord
90507670	Cord Valve DN90 incl. Cord
90507680	Cord Valve DN110 incl. Cord
90507700	Cord Valve DN160 incl. Cord
90507653	Slide Cord Valve DN63
90507673	Slide Cord Valve DN90
90507683	Slide Cord Valve DN110
90507703	Slide Cord Valve DN160
90507655	Protective cover Slide Cord DN63
90507675	Protective cover Slide Cord DN90
90507685	Protective cover Slide Cord DN110
90507705	Protective cover Slide Cord DN160
90507706	Cutting cord with handgrips

Guillotine tool	
Article No.	Description
90507250	Bridge guillotine
90507280	Spindle guillotine
90507320	Verticle rod guillotine
90507330	Wrench guillotine
90507340	Nut Verticle rod guillotine
90507350	Interior (padding) transportation case
90507370	Transportation case guillotine
90507375	Guillotine complete in transportation case
90507376	Set aluminium supporting blocks

Watertool Socket Valve	
Article No.	Description
90507450	Socket Valve PVC DN63
90507470	Socket Valve PVC DN90
90507480	Socket Valve PVC DN110
90507500	Socket valve PVC DN160
90507455	End cap 63 mm
90507475	End cap 90 mm
90507485	End cap 110 mm
90507505	End cap 160 mm
90507550	Slide Socket Valve DN63
90507570	Slide Socket Valve DN90
90507580	Slide Socket Valve DN110
90507600	Slide Socket Valve DN160
90507574	Protective cover Slide Socket DN63
90507575	Protective cover Slide Socket DN90
90507585	Protective cover Slide Socket DN110
90507605	Protective cover Slide Socket DN160