



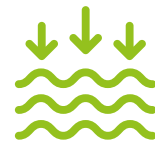
Subsurface watering with WATERMIL TECH

Watermil TECH is an underground drip line with pressure compensation, a self-flushing mechanism, a check valve (CV) and a patented system that protects it against root penetration into the tube. Cupron® copper oxide (Cu_2O), mixed in the production process with the emitters, effectively blocks the growth and penetration of plant roots into their interior.

Watermil TECH line allows for effective and precise irrigation and water savings. The subsurface irrigation system will work well for gardens and green areas, as well as row crops; it can also be used on slopes.

The use of an automatic, underground irrigation system brings a number of benefits:

- high precision of irrigation,
- saving water,
- aesthetics – almost the entire installation is hidden underground, which is crucial when the system is used in gardens and green areas.



**Pressure
compensation**



**System protecting
a pipe against roots
penetration**



**Check
valve (CV)**



Benefits of using the WATERMIL TECH subsurface drip line

Cupron® copper oxide (Cu₂O) technology effectively prevents plant roots from entering the HCVXR emitter. During the production process, copper oxide is mixed with the plastic from which the emitters are made. Thanks to this, it cannot wash off, wipe off or rinse out of the device. The top of the emitter contains copper oxide.

Protection against root penetration

Traditional drip lines are not suitable for installation below the ground. The developing roots of plants, especially grasses, growing towards wet places, reach into the drippers and block the holes. Watermil TECH underground drip line has a patented system that protects it against root penetration inside the system. Cupron® copper oxide (Cu₂O) mixed in the production process with the emitters, effectively blocks the growth and penetration of plant roots into the system.

Pressure compensation

Watermil TECH ensures even and precise distribution of water and nutrients over the entire surface of the garden or crop. It also allows for the construction of long strings of drip lines and prevents the suction of pollutants after turning off the irrigation system, thanks to which Watermil TECH works well in the subsurface irrigation system.

Check valve (CV)

The emitters open simultaneously when the pressure exceeds 0.14 bar, thus increasing the precision of irrigation and minimizing the risk of uncontrolled water discharge. Thanks to the check valve, it is possible to use lines on slopes up to a height of 1.4 m.

Increased filtration area – self-flushing mechanism

Watermil TECH emitters have an increased filtration area, thanks to which they are highly resistant to clogging with impurities coming from poor water quality. The self-flushing mechanism causes the filter inside the dripper to be cleaned while the line is in operation.

TurboNet™

The emitter labyrinth has wide channels that increase the water flow efficiency.

Technical specifications

- Emitter efficiency: 2.3 l/h
- Spacing of the drippers: 30 cm
- Pressure compensation range: 1.0–4.0 bar
- Antisiphon mechanism
- Anti-drainage mechanism – cut-off pressure 0.14 bar
- Recommended filtration: 130 micron/120 mesh
- Roll length: 100 m

Find out more about Cupron® technology

Cupron® technology remains effective for the entire lifetime of the product.

- In 2010, this technology was applied to special socks that were given to miners from Chile when they were trapped underground as a result of the natural catastrophe. These anti-odor socks prevent 99.9% of bacteria and fungi from growing and improve the overall health of the skin.
- The Israeli Defense Forces were the first in the world to provide their soldiers with antibacterial socks using the innovative Cupron® technology.

Technical specification of emitters

Emitter efficiency (l/h)	Operating pressure (bar)	Dimensions of water ducts (width/depth/length)	Filtration area (mm ²)	Exponent *X	Recommended filtration (mikrony/mesh)	Output pressure (bar)
2.3	1.0–4.0	1.26 x 0.95 x 40	130	0	130/120	0.14

Technical specification of drip line

Model	Inside diameter (mm)	Wall thickness (mil/mm)	Outside diameter (mm)	Max. operating pressure (bar)
16012	14.20	47/1.20	16.60	4.0



Subsurface watering system

Subsurface drip irrigation systems effectively reduce water consumption and stimulate root growth. Milex company offers top-quality end-to-end subsurface irrigation solutions.

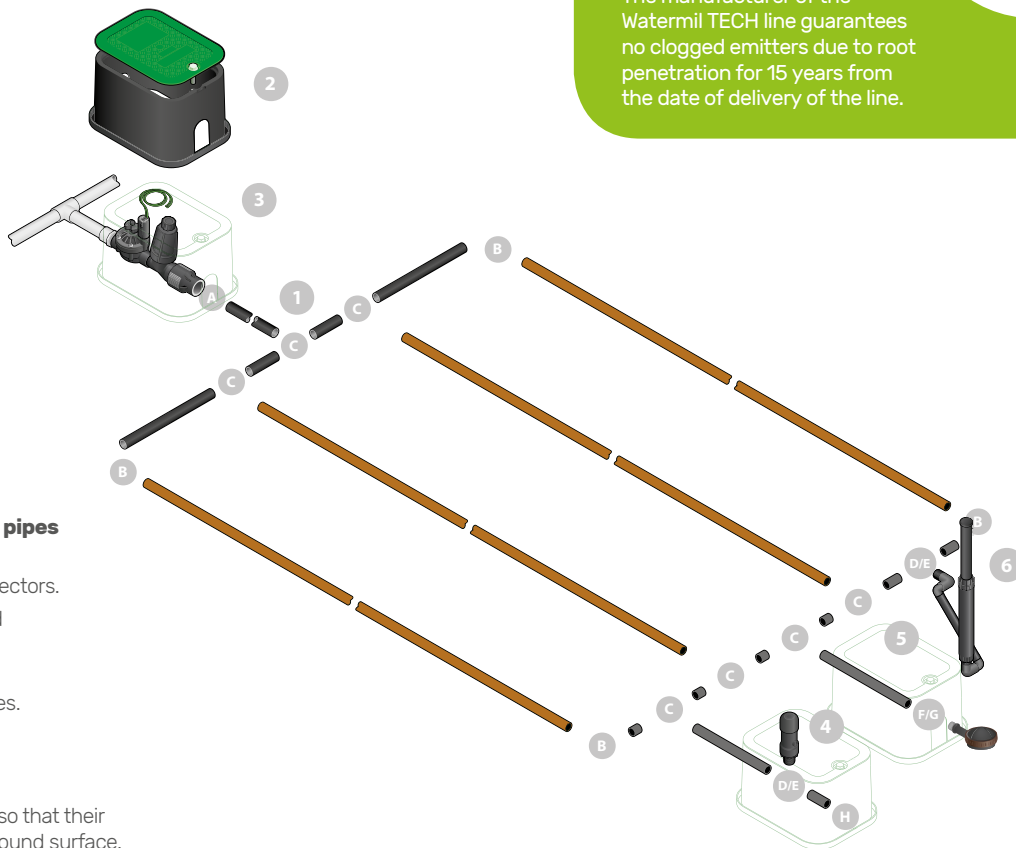
Longest warranty for protection against root penetration

15 years

The manufacturer of the Watermil TECH line guarantees no clogged emitters due to root penetration for 15 years from the date of delivery of the line.

Recommended fittings

- A Coupling QJ 16-¾" M
- B Elbow QJ 16-16
- C Tee QJ 16-16-16
- D Tee QJ 16-¾" M-16
- E Muff ¾"
- F Coupling QJ 16-½" M
- G Muff ½"
- H Plug QJ 16



1 Connecting collector made of PE pipes

- QJ fittings are recommended for the construction of connecting collectors.
- Irrigation tube should be connected to the drip line with QJ fittings.
- Due to their structure, QJ fittings are specially adapted to the drip lines.

2 Sump for solenoid valves

- Manholes are placed in the ground so that their cover is on the same level as the ground surface. The green cover ensures discreetness - it is not visible at first glance.
- Watermil manholes are available in oval (verde), round (mini and large) and rectangular (standard and jumbo) versions.

3 Control Zone Kit

- PGV solenoid valve with female thread.
- HFR10007540 strainer: 150 mesh with pressure reducer up to 2.8 bar.

4 Vent or vacuum valve

- Prevents water hammer and line flattening by venting the system during system startup and supplying air during shutdown.
- Valve should be installed at the highest point of the section.

5 Automatic flushing valve AFV-T

- Automatically flushes out contaminants each time the system is started.
- Equipped with a reversible diaphragm for high or low flow operation.
- Removable top for easy diaphragm maintenance.

6 Watermil TECH line work indicator

- Its ascent above ground level clearly indicates that the underground irrigation system is working.
- Indicates undesirable pressure drops or fluctuations.
- SJ swivel joints or HSBE elbows provide flexible connections.



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