



Advanced
Automation
Systems



Cu Turbo™

Copper Oxide Infused
Flat Turbulent Emitter

The most successful flat emitter, developed for a wide range of shallow and deep buried subsurface applications

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Copper Oxide Compound

Our Cu Emitter Line™, provides a solid defense against root intrusion in SDI installations. The copper oxide compound which our emitters contain, act as a barrier to roots and invasive underground rhizomes of the plants. Moreover, the Cu compound that we use inhibits the growth of algae, bacteria, and fungi development, reducing the risk of clogging in the emitters and dripline. The Cu Emitter Line™ products use the same injection moulding process as the non Cu emitters, since the PE compound contains the active copper oxide ingredients.

Emitter Flow Path

One of the most important elements in the design of an emitter is the flow path. Its width, depth and length determine the flow rate of the emitter in liters per hour but most importantly determines their anti-clogging ability. A highly turbulent flow design creates multiple vortices inside the flow path and therefore prevents clogging.

Emitter Characteristics

Cu compound infused emitter that prevents root intrusion and inhibits the growth of algae, bacteria, and fungi development.

Wide range of flow rates from 0,8 to 3,8 l/h.

Designed for insertion systems of wall thicknesses ranging from 5 mil up to 47 mil (0,135 mm - 1,2 mm).

Suitable for driplines with any diameter from 12 mm and on.

Highly turbulent labyrinth with large cross section design, ensure superior clogging resistance.

Symmetrical design allows the highest insertion rates and higher production speed.

Ideal for single season as well as multi-season subsurface installation.

Injected molded emitters with excellent Coefficient of Variation (CV), less than 5%.

Advanced water inlet design, increases filtering area and prevents particle insertion in the emitter, thus enhancing the anti-clogging performance.

SDI Applications

Suitable for both shallow and deep buried SDI installations, for up to 15 years, depending on dripline thickness.

Cu Turbo™ Design Characteristics

The Most Successful Flat Emitter

Developed for a wide range of SDI applications, up to 15 years depending on dripline thickness

Cu Turbo™ emitters have been tested by independent institutes worldwide and achieved the highest ranking for CV, emission uniformity, flow accuracy and clogging resistance

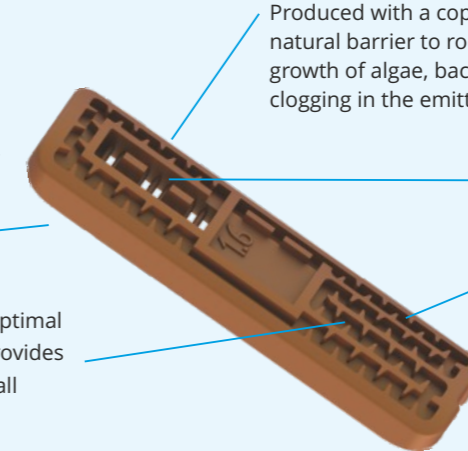
Symmetrical emitter for easier inserting and drilling. Along with its unique design, it can achieve the highest production speed in the industry

Produced with a copper oxide compound which acts as a natural barrier to roots and at the same time inhibits the growth of algae, bacteria, and fungi, reducing the risk of clogging in the emitters and dripline

The unique design and the optimal dimensions of the emitter provides the ability to insert it in all wall thicknesses and diameters

Advanced water inlet design with industry leading filtration area

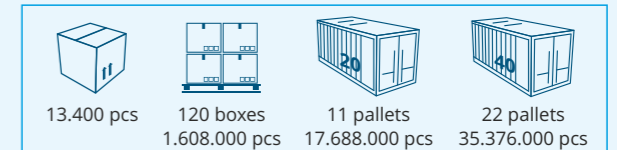
The large cross section along with the high turbulent flow path, provides high clogging resistance



Actual Size



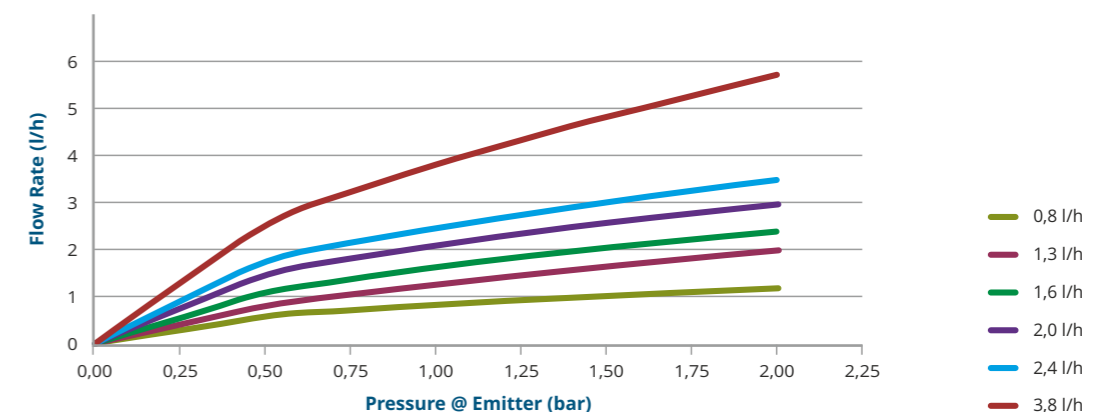
Packaging



Cu Turbo™ Emitter Specifications

Nominal Flow Rate (l/h @ 1bar)	Constant k (bar)	Exponent (x)	Water Passage Width x Depth x Length (mm)	Filtration Area (mm ²)	Recommended Filtration (mesh/micron)
0,8	0,82	0,48	0,62 x 0,62 x 116	20,00	120/130
1,3	1,25	0,49	0,70 x 0,62 x 106	20,00	120/130
1,6	1,61	0,49	0,70 x 0,67 x 106	20,00	120/130
2,0	2,07	0,47	0,75 x 0,75 x 104	20,00	120/130
2,4	2,46	0,48	0,75 x 0,85 x 104	20,00	120/130
3,8	3,80	0,49	0,97 x 0,85 x 64,4	12,00	120/130

Cu Turbo™ Emitter Flow Curves





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