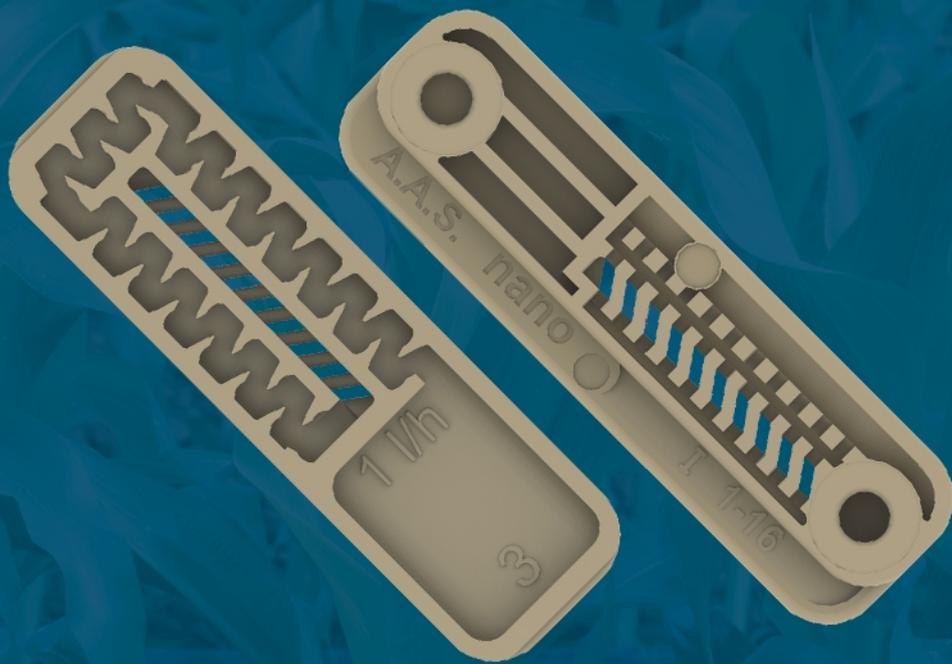




Advanced  
Automation  
Systems



# Nano

## Flat Turbulent Emitter

The most affordable approach for the end user due to the small weight and dimensions of the emitter

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## Flat Turbulent Emitter

**The most affordable approach for the end user due to the small weight and dimensions of the emitter.**



The small dimensions of Nano emitter along with its curved edge design provide a very low kd factor resulting in extremely low friction losses of water flowing inside the dripline.

### 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 vortexes inside the flow path and therefore prevents clogging.

### Emitter Characteristics

Wide range of flow rates from 0,6 to 2,0 l/h.  
State of the art combination of performance and manufacturing technology enable emitter spacings starting from 10 cm and wall thicknesses from 5 mil and greater.  
Suitable for driplines with any diameter from 12 mm and on.  
Superior and efficient emitter design enables very high downstream production speeds.

Excellent Coefficient of Variation (CV), less than 5%, far superior to labyrinth tape products, due to the long length of the finely tuned labyrinth.

Specially designed labyrinth creates turbulent flow, thus preventing clogging of the emitter.

Advanced Three-Dimensional water inlet increases filtering area, thus enhancing the anti-clogging performance of the emitter.

Cost efficient, due to its ultracompact design.

The finished coils contain more meters for the same outer dimensions, resulting at lower logistics costs per meter, compared to other thin wall and tape products.

### Product Applications

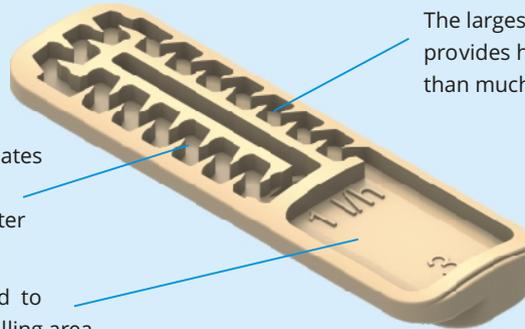
Row crops  
Vegetables  
Gardening  
Suitable for both on surface and shallow subsurface installations depending on wall thickness

## Nano Design Characteristics

### 3D Filtration Area

The unique 3D filtration area of Nano prevents particle insertion into the emitter. The inlet design provides a filtration area larger than much bigger emitters

Nano emitters are tested from both CIT and Irstea institutes and achieved the highest ranking for CV, emission uniformity, flow accuracy and clogging resistance



Specially designed labyrinth creates high turbulent flow, therefore preventing clogging of the emitter

The largest cross section in the industry provides high clogging resistance, better than much bigger flat emitters

Vast drilling tolerance compared to similar emitters due to large drilling area

#### Actual Size



#### Packaging



50.000 pcs



120 boxes  
6.000.000 pcs



11 pallets  
66.000.000 pcs

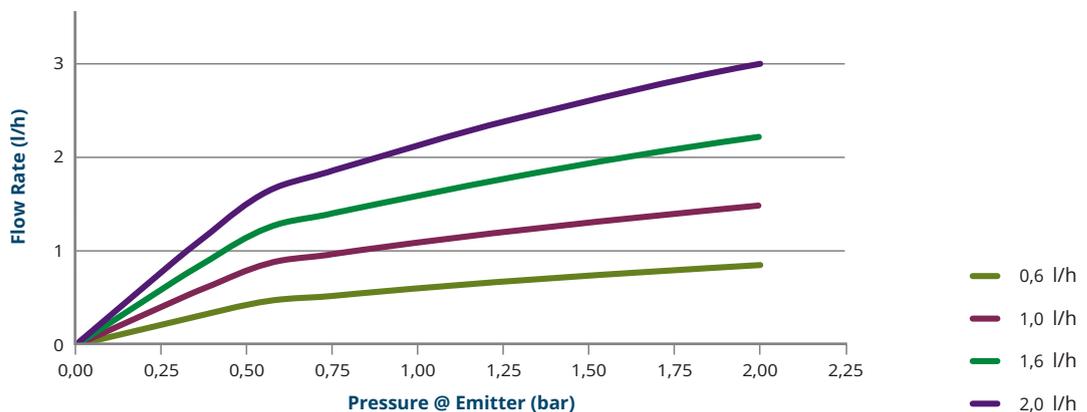


22 pallets  
132.000.000 pcs

## Nano Emitter Specifications

Nominal Flow Rate (l/h @ 1bar)	Constant k (bar)	Exponent (x)	Water Passage Width x Depth x Length (mm)	Filtration Area (mm <sup>2</sup> )	Recommended Filtration (mesh/micron)
0,6	0,60	0,48	0,51 x 0,46 x 44,2	28,20	150/100
1,0	1,09	0,46	0,59 x 0,60 x 41,9	28,20	120/130
1,6	1,60	0,47	0,69 x 0,65 x 40,0	28,20	120/130
2,0	2,13	0,49	0,80 x 0,65 x 38,2	28,20	120/130

## Nano Emitter Flow Curves





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