

The background of the entire page is a photograph of a cornfield. The top half shows the upper parts of the corn plants with their tassels against a bright blue sky with scattered white clouds. The bottom half shows the lower parts of the corn plants, including the leaves and developing ears, with a dark blue semi-transparent overlay across the middle. The text "Turbo Line" is centered in the white overlay, and "Flat Dripline" is in the bottom left corner.

# Turbo Line

Flat Dripline

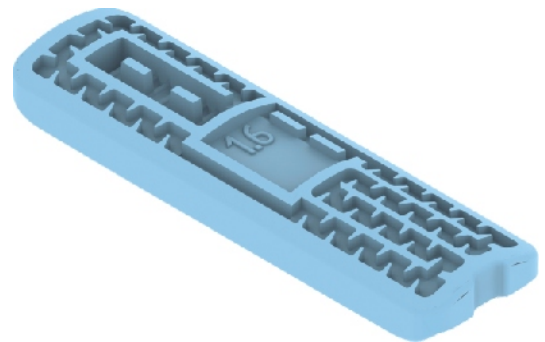
# Turbo Line Specifications

Turbo Line is produced with the highest quality raw material, in state-of-the-art production lines by integrating the most advanced emitter of the industry. Provides extreme tensile strength, since it is produced with high-quality resins. Offers excellent performance on the field due to the flawlessly designed, injected molded Turbo emitter with very low CV. The unique design of Turbo emitter, provides high clogging resistance and offers the highest emission uniformity. The combination of those elements translates to superior quality, evenly grown crops and increased overall yield which leads to higher income for every farmer worldwide.

## Flat Turbulent Emitter

The world's most proven and trusted flat turbulent emitter, used in both surface and subsurface applications for more than 20 years worldwide.

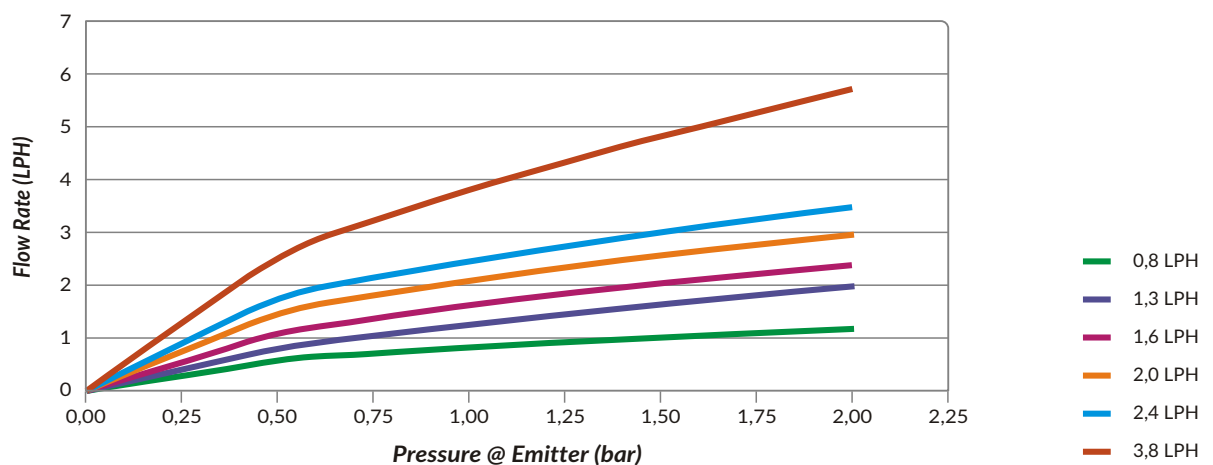
One of the most important element in the design of an emitter is the flow path. Its width depth and length determines the flow rate of the emitter in liters per hour but most importantly determines their anticlogging ability. A high turbulent flow path design creates a vortex effect inside the emitter and therefore prevents clogging.



### Turbo Emitter Specifications

Nominal Flow Rate (lph @ 1bar)	Constant (k)	Exponent (x)	Coefficient of Variation CV (%)	Water Passage Width x Depth x Length (mm)	Filtration Area (mm <sup>2</sup> )	Recommended Filtration (mesh/micron)
0,8	0,82	0,55	1,4	0,62 x 0,62 x 116	20	120/130
1,3	1,25	0,65	1,6	0,70 x 0,62 x 106	20	120/130
1,6	1,61	0,58	1,8	0,70 x 0,67 x 106	20	120/130
2,0	2,07	0,52	1,7	0,75 x 0,75 x 104	20	120/130
2,4	2,46	0,50	2,1	0,75 x 0,85 x 104	20	120/130
3,8	3,80	0,59	2,2	0,97 x 0,85 x 64,4	12	120/130

### Turbo Emitter Flow Curves





# Turbo Line

## Flat Dripline

Turbo Line Specifications															
Nominal Diameter (mm)	Internal Diameter (mm)	Wall Thickness (mil)	Max. Operating Pressure (bar)	Coil Length According to Emitter Spacing (m)	Flow Rate (lph)	Maximum Recommended Length (m) in Flat Terrain at 10% Flow Variation for the Following Emitter Spacing									
						15cm	20cm	25cm	30cm	33cm	40cm	50cm			
16	16,1	6	1,0	2300 (15 cm)	0,8	95	117	137	156	167	191	223			
				2400 (20 cm)	1,3	71	87	103	117	125	142	166			
				2500 (25 cm)	1,6	61	75	88	100	107	122	143			
				2600 (30 cm)	2,0	52	65	76	86	92	106	124			
					2,4	47	58	69	78	83	96	112			
		8	1,2	2200 (15 cm)	2300 (20 cm)	2400 (25 cm)	2500 (30 cm)	0,8	95	117	137	156	167	191	223
								1,3	71	87	103	117	125	142	166
								1,6	61	75	88	100	107	122	143
								2,0	52	65	76	87	93	106	124
								2,4	47	59	69	79	84	96	112
		10	1,4	1800 (15 cm)	2000 (20 cm)	2100 (25 cm)	2300 (30 cm)	0,8	95	117	137	156	167	191	223
								1,3	71	87	103	117	125	142	166
								1,6	61	75	88	100	107	122	143
								2,0	52	65	76	87	93	106	124
								2,4	48	59	69	79	84	96	113
		12	1,5	1300 (15 cm)	1400 (20 cm)	1500 (25 cm)	1700 (30 cm)	0,8	95	117	137	156	167	191	223
								1,3	71	87	103	117	125	142	166
								1,6	61	75	88	100	107	122	143
								2,0	52	65	76	87	93	106	124
								2,4	48	59	69	79	84	96	113
15	1,8	1050 (15 cm)	1150 (20 cm)	1200 (25 cm)	1300 (30 cm)	0,8	95	117	137	156	167	191	223		
						1,3	71	87	103	117	125	142	166		
						1,6	61	75	88	100	107	122	143		
						2,0	52	65	76	87	93	106	124		
						2,4	48	59	70	79	85	97	113		
22	22,2	8	1,0	1500 (15 cm)	0,8	171	209	244	276	295	336	390			
				1600 (20 cm)	1,3	127	156	182	206	220	251	291			
				1700 (25 cm)	1,6	109	134	156	177	189	215	250			
				1800 (30 cm)	2,0	95	116	135	153	164	186	217			
					2,4	85	105	122	139	148	169	196			
		10	1,3	1300 (15 cm)	1400 (20 cm)	1500 (25 cm)	1600 (30 cm)	0,8	171	209	244	276	295	336	390
								1,3	127	156	182	206	220	251	291
								1,6	109	134	156	177	189	215	250
								2,0	95	116	136	154	164	187	217
								2,4	86	105	123	139	149	170	197
		12	1,4	1150 (15 cm)	1250 (20 cm)	1350 (25 cm)	1450 (30 cm)	0,8	171	209	244	276	295	336	390
								1,3	127	156	182	206	220	251	291
								1,6	109	134	156	177	189	215	250
								2,0	95	116	136	154	164	187	218
								2,4	86	105	123	140	149	170	198
		15	1,6	950 (15 cm)	1050 (20 cm)	1150 (25 cm)	1250 (30 cm)	0,8	171	209	244	276	295	336	390
								1,3	127	156	182	206	220	251	291
								1,6	109	134	156	177	189	215	250
								2,0	95	116	136	154	164	187	218
								2,4	86	106	124	140	149	170	198
	3,8	62	76	89	101	108	123	143							

# Turbo Line

## Flat Dripline

### Product Characteristics

Available in 16 and 22mm diameter, from 6mil up to 15mil wall thickness that enables both surface and shallow subsurface installations for single or bi-seasonal use, depending on wall thickness

The widest range of flow rates in the market 0,8 / 1,3 / 1,6 / 2,0 / 2,4 and 3,8 lph for a wide range of irrigation needs

Excellent Coefficient of Variation, lower than similar products due to the excellent emitter design and their production on state-of-the-art injection machines

Advanced water inlet design, increases filtering area and prevents particle insertion in the emitter, thus enhancing the anticlogging performance

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

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

### Ideal Applications

Row crops

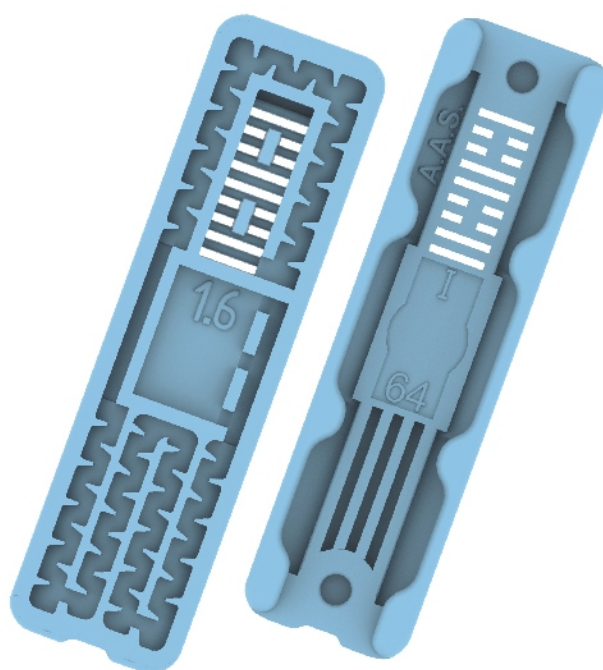
Orchards

Landscaping

Vegetables

Gardening

Suitable for both on surface and shallow subsurface installations depending on wall thickness



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