

Tornado Ray-Jet

For under tree irrigation in fruit orchards

[Order Tornado from: www.irrigationglobal.com](http://www.irrigationglobal.com)



IRRIGATIONGLOBAL.COM

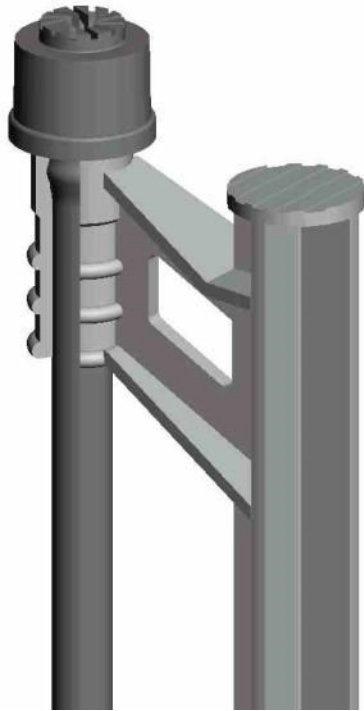


Tornado

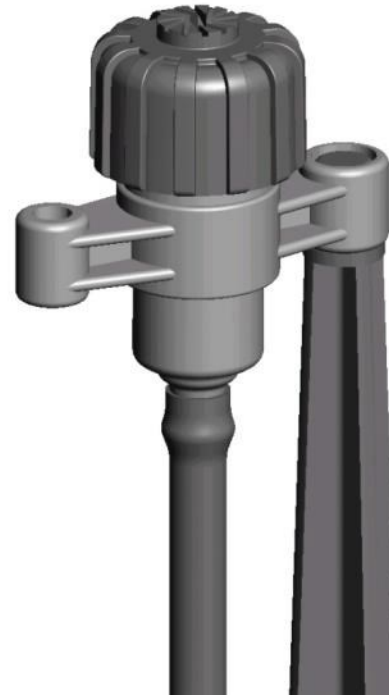
- Unique Vortex chamber
- Best clogging resistance and reliability
- Years of proven experience in many different crops worldwide
- Robust structure with compact dimensions



The Tornado Family




Ray-Jet



Openable
Ray-Jet
Take Apart

Tornado Specifications

	Ray-Jet sprayer	Take Apart jet sprayer (openable)
Flow rates* (lph)	25, 34, 55, 70	
Nozzle color and size (mm)	Black(0.9), blue(1.3), green(1.7), red(2.0)	
Operating pressure (bar)	1.5 - 3.0	
Wetting diameter (meter)	2.4 - 4.2	
Wetting patterns		

* Ray jet at 1.5 bar

- Take- apart (Openable) compatible with pressure regulated Meteors
- Materials: Vortex chamber - Acetal; Cap – Polypropylene
Agro-chemical resistant
- Protected against UV degradation



Vortex Mechanism

Vortex mechanism

- Tornado sprayers incorporate a unique vortex chamber. This mechanism controls the flow rate of the emitter, and allows large water passages even with low flow rates
- Water passages in a Vortex chamber are **150% larger** than those in an orifice nozzle with the same flow rate
- Example : at 34 lph emitters - water passage is 1.3mm compared to 0.85mm orifice nozzle



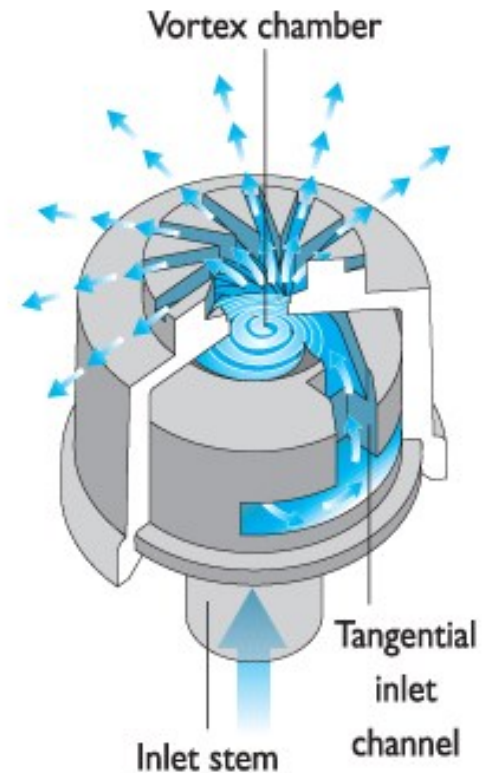
5mm threaded inlet nozzle



Conic inlet nozzle



Nozzle for pressure regulator



Benefit - Outstanding resistance to clogging

Tornado Ray Jet Sprayer - Benefits

- No moving parts to break, jam or wear out
- No bridge - robust structure
- 2 installation options - Upright or inverted position
- 3 Wetting Patterns – 180°, 300°, 360° (300° for stem protection)



Tornado Take Apart (openable) - Benefits

- Easy to take apart (Openable) for cleaning
- Available with pressure regulator



Design Flexibility

- Suits density planting distances
- Variety of flow rates and wetting diameters / patterns

Tornado Ray Jet - Performance Data

Nozzle Color & Size (mm)	Flow Rate (lph)**	Wetting Diameter (m)***	Lateral Pipe Diameter (O.D. mm)	Max. No. of Jet Sprayers on Irrigation Laterals*										
				Spacing between Sprayers (m)										
				2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	
Black			16	26	24	22	21	20	19	18	18	17	16	
●	25	2.4	17.8	32	29	27	26	24	23	22	22	21	20	
0.9			20	40	37	34	33	31	30	28	27	27	26	
Blue			16	20	19	18	17	16	15	14	14	13	13	
●	34	3.2	17.8	25	23	21	20	19	18	18	17	16	16	
1.3			20	32	29	27	26	25	23	23	22	21	20	
Green			16	15	14	13	12	12	11	11	10	10	10	
●	55	3.6	17.8	19	17	16	15	14	14	13	13	12	12	
1.7			20	24	22	21	19	18	18	17	16	16	15	
Red			16	14	13	12	11	11	10	10	10	9	9	
●	70	4.2	17.8	18	16	15	14	13	13	12	12	11	11	
2.0			20	22	21	19	18	17	16	16	15	15	14	

* At ± 5% flow variation

** Inlet pressure: 1.5 bar

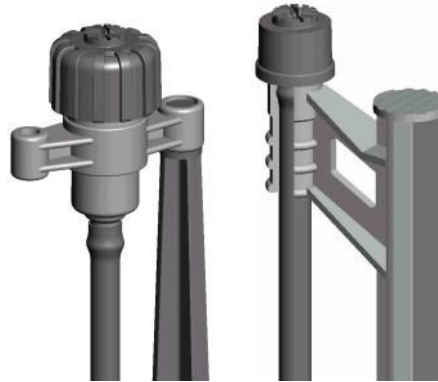
*** Upright position, 25 cm above ground level (360°- 12 jet streams)

Accessories



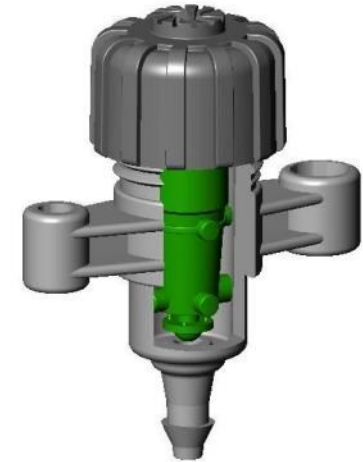
1/2" THF Riser adaptor
x Top conic female outlet

Stakes



Cantal

Cantad



Meteor adaptor
(MSA 46)



2.8mm simple punch &
adaptor inserter



Tornado – A Reliable, Heavy-Duty Product

- Tested and proven for more than 20 years
- Installed worldwide in many different fruit orchards
- In Florida, a well known citrus orchard growing area, many growers chose the Tornado for irrigation

*Citrus orchards irrigated with
Tornado Ray Jet since 1989 –
Hendry county, Florida*



Tornado Applications

Guava



Palm



Almond



Pomelo



Avocado



Orchard



Tornado Applications

Cherry



Nectarine



Citrus



Pear



Apple



Apple



Conclusion

- **Tornado** is very reliable Ray-Jet
- **Tornado** has outstanding resistance to clogging
- **Tornado** Ray-Jet has years of successful experience in many different conditions and applications



Tornado - an irrigation emitter you can trust !

Good luck!



Contact:

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