

# Agra-Tron

## Agra-Tron | Technical Specification

Fluid Dynamics have been pioneers in innovative water treatments for more than 35 years developing non-chemical treatment technologies for a wide range of problems for commercial, industrial and government sectors.

With a large focus on scale prevention Fluid Dynamics latest product Agra-Tron has been designed to improve an number of issues facing the agricultural industry such as pipe scale deposition, blocked nozzle sprayers, and inefficient crop/plant growth.

### Agra-Tron Technology

Agra-Tron comes supplied in stainless steel pipe housing with either flanged connections or universal pipe couplings for an easier installation.

Using a combination of both its proven catalytic and magnetic treatment systems the Agra-Tron is the most effective non-chemical scale prevention system producing a more complete treatment reaction resulting in a better quality water.

Agra-Tron works by precipitating a bulk of the dissolved minerals in the water into suspended crystal formations, thus increasing the waters solubility and preventing the need for mineral precipitation further downstream in nozzles, pipelines or in pumps.



### Benefits for crops

When hard water is sprayed on crops if that water contains calcium salts then as water evaporates so salts are left behind. In many cases calcium salts will be the main salts left around the roots of a plant .. when fresh water is sprayed on the roots

through the irrigation system that calcium residue left from previous sprayings acts as a barrier to water and health enhancing salts entering the plant and this restricts both the plants growth and also the crop yield.

The Agra-Tron works by turning what would have been a hard crystalline deposit into a soft permeable residue through which irrigation water can pass .. The Agra-Tron is a unique (patent applied for) combination of magnetic and catalytic water treatment technology – The Agra-Tron effect gives healthy plants better crop yields and can also lead to a lower water requirement to achieve the desired crop growth results.

### **Why choose Agra-Tron**

Unlike some treatment devices the Agra-Tron is in direct contact with the water to be treated allowing the most effective treatment. Agra-Tron also incorporates two totally separate scale prevention technologies.. It is well known that magnetically treated water will only remain treated for a short time before reverting to its previous state so water treated magnetically must be used quickly .. however Fluid Dynamics Patented Catalytic treatment system takes magnetically treated water and make the change in the water permanent so that once treated the water remains treated.

Unlike some treatment devices the Agratron is in direct contact with the water to be treated allowing the most effective treatment incorporating both surface contact with special alloy and introducing turbulence to encourage mineral precipitation.

## **Agra-Tron**

**21<sup>st</sup> Century technology. Totally environment friendly**

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### Agra-Tron selection and installation

The Agra-Tron is installed prior to centre pivots or after pump for drip systems. It is sized according to water flow rate at the installation point. Either supplied in flanges to a named specification by the purchaser or universal quick fit pipe couplings for the swiftest installation

Sizing should be done via flow rate, for example a flow rate of 50 m<sup>3</sup>/hr would require a 4" model

### Agra-Tron sizes

Nominal Diameter	Internal Diameter		Length	Weight	Maximum Flow
	Inch	mm	mm	Kg	m <sup>3</sup> /hr
50	2	50.8	750	12	8
65	2½	63.5	750	21	21
80	3	76.2	750	28	35
100	4	101.6	750	38	54
125	5	127.0	750	49	95
150	6	152.4	750	58	134
200	8	203.2	750	77	239

Alternative sizes available on request.