

# IrriStand System

## Installation manual

Lightweight and user-friendly irrigation stands for fixed systems used in growing seasons

### Required equipment

- Continuous PE tubes, wound on reels, for mechanized laying out and rewinding  
50 mm tube: 700 m/reel; 40 mm tube: 1,000 m/reel
- Tractor with laying out/winding equipment
- 8 mm punch and insert tool
- PE tube welder
- Sprinklers, 52, 53 or 56 stand, start connectors according to type of stand



- **Stand adaptor** (installed at the top of the galvanized rod), as required by the customer, enables easy separation of the sprinkler from the metal rod at the end of the season



### Laying out and installation in the field

Anchor the start of the tube to the peg and drive the tractor slowly towards the end of the row. Allow an extra 1-2 m from the last sprinkler for accumulation of dirt.

### Important!

After laying out the tubes in the field, wait one day (or overnight) until the tube straightens out from the coiled position before the next stage: punching and inserting the start connector in a straight line on the upper part of the tube. Once the tubes settle, connect to the submain.

### Marking, punching holes and inserting start connectors

Required equipment

- 8 mm punch (option of three models according to scope of work). Use a standard punch only. Proper use of the punch ensures a clean round hole of a suitable diameter, to prevent leakage from the start connectors and release from the tube.
- Measuring string with two pegs, at the length planned between the stands along the tube.

Mark the position of the first sprinkler, punch a hole and insert the first start connector. Use the measuring tool to continue until reaching the position of the last sprinkler on the tube. The first and last sprinkler will be planned as close as possible to the edge of the plot to achieve optimum distribution uniformity, at the edge of the field as well.



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Installation of part-circle sprinkler model AG 427 or Road Protector for sprinkler model Super 10 is optional.

In general, the distance of the last sprinkler from the end of the row/plot is as follows:

5022 nozzle 2.8, 2.5, 2.3 mm:	5.0 m
5022 nozzle 2.4 mm:	2.0 m
Super 10:	4-5 m
Maestro:	5.0 m

**Tip:** It is difficult to punch a cold tube (in the morning). If there is any difficulty, wait for a few hours until the tube warms in the sun.

### Sprinkler stand assembly

Connect the 1/2" adaptor firmly to the galvanized rod, push all the way (3.7 cm) until the rod reaches the upper hole (tap the adaptor surface lightly to help). This will ensure that the sprinkler is secure and able to rotate properly.



### Stand position

Install the sprinkler stand near the start connector outlet (usually between the raised beds) to compensate for contraction of the PE tube without overstressing the sprinkler lateral.

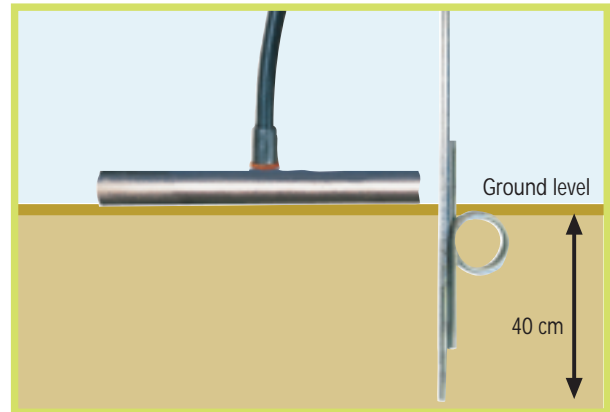
Insert the stand 40 cm into the ground. In hard ground, repeat the operation after initial wetting or alternately, use a hammer and 8 mm penetration shaft.

Insert the rod with the stabilizer ring up to the upper point of the ring.



The stand positioned close to the start connector

The sprinkler stand should always be stable and upright in the ground.



This is essential for optimal operation and irrigation performance.

Connect the stand tube (male barb) to the female start connector by pressing firmly (maintain a 1.0 mm gap from the female start connector) to prevent disconnection when irrigation starts.

### Flushing to clean the system

It is essential for flushing to be thorough, for complete cleaning of the irrigation system.

To produce the required flushing pressure, open the valves gradually. After flushing, assemble a plug at the end of each lateral.

### System start, checking sprinklers and pressure

Test the operation of the system after completing installation.

Check: pressure at the head of the field and end of the plot, minimal pressure according to type of sprinkler and stand spacings

5022:	2.5 bar
Super 10:	3.0 bar
Maestro:	3.0 bar
Regulated sprinkler:	3.0 bar

### General

1. Water hammer: Avoid water hammer in the system and/or quick opening of water. Installation of air valves will control damage.
2. Germination: It is customary to give short irrigations a number of times a day. In systems based on Maestro sprinklers, plan a minimum irrigation dose of 20 minutes to achieve optimum water distribution.

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### Collection at the end of the growing season

Disconnect the sprinkler stands from the tubes and collect them in the storage containers.  
 Use a flat screwdriver to disconnect the 13/9 lateral barb from the start connector.  
 If the start connector breaks, use a cutter to cut the head of the start connector, push the remaining tail into the tube and install a new female start connector.  
 Collect 15-20 sprinklers in a bunch for storage.  
 After draining the water, use a hydraulic rewriter to wind the tubes onto the empty reels.  
 Diameter of the reel center:  
 40 mm pipe: 91 cm  
 50 mm pipe: 111 cm  
 Start by pulling the pipe manually.  
 Wind the tube layer by layer and arrange the coils without crossing to avoid kinks.  
 Connect the PE tubes to each other using a 12V DC welding machine.  
 Weld the end of the tube on the reel to the new wound lateral.  
 Welding time: 1-2 mins. Winding can continue immediately after welding.

### Store all system components.

Arrange the sprinkler stands on pallets or in containers to prevent breakage and to facilitate work in the next season.  
 Store the reels in a dry, clean place that is protected against rodents.

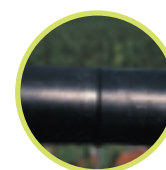
welding machine



LM2 Pipe Welder



12 V DC machine Welder



Welded tube

### Instruction Table

Pipe diameter mm	W.T mm	Heating duration sec.	Heat stage pressure kg	Connecting stage pressure kg	Cooling time sec.
40	2	20	1	4	30
50	2	20	2	5	30
63	2.5	25	2	6	40
75	3	30	3	6	60
90	5	50	4	special order of spring	90

Combined winder and welding machine



Removing tubes from field and winding on reels



Pipe collected from the field

