

Communication – November 2021

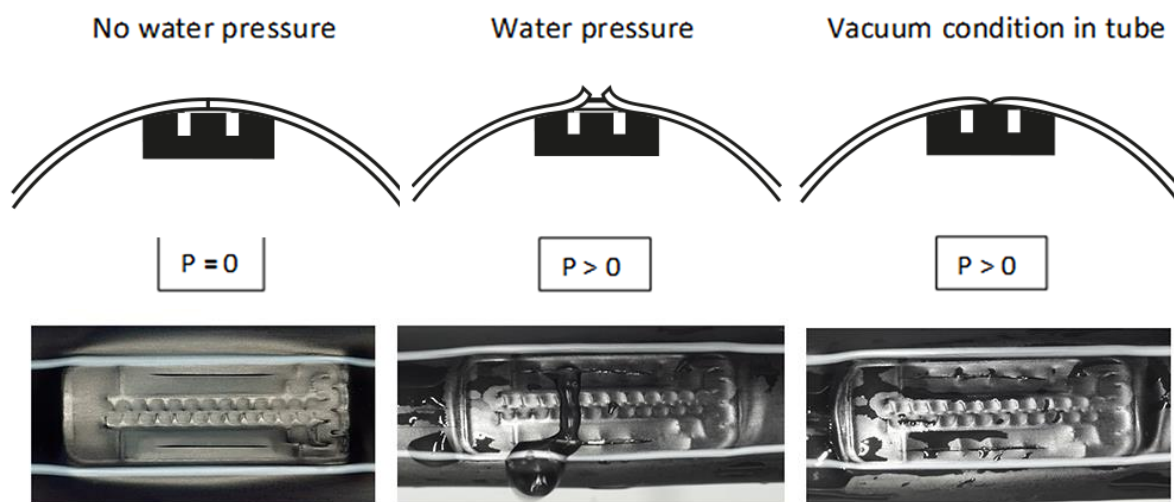
THE Machine's Patented "Slit Outlet" Solutions – for Maximal Dripper Protection

Drip Irrigation has emerged, in the last decade, as a preferred Irrigation solution, providing a most efficient water and fertilizers savings. Subsurface application has evolved in recent years as a further step forward to providing even further savings and precision irrigation.

The major challenges facing the Sub-Surfaced Drip Irrigation Pipes are those related to the risk of dripper clogging due to the incorporation of sand and debris through the water outlet – as of the Siphon effect, well as possible Root Intrusion & Insect nesting. These malfunctions remain irreparable in most cases, and result in crop yield loss.

THE Machines, along with Pro Tool Switzerland, has developed & patented a solution to reduce significantly the risk of clogging in Sub Surface Drip Irrigation Pipes.

Slit outlets are widely used in the market. This novel solution provided herein attains a firm "lock" during water shut down, thus assuring the protection from any foreign object to enter in to the drip pipe:



The unique Outlet Solution applies to both our PTH-S and the PTH-U emitters.



These drippers and pipes are produced on high precision & performance Pro Tool Switzerland molds, and extruded with THE Machines exclusive LIS106 line, tailored to perform Slitting Outlets with unmatched performances.

Features and benefits

- Protected water outlet – for max. Anti-Siphon effect
- Wide flow rate range – also up-on demand
- High flow uniformity
- Superior clogging resistant (see Irstea report in Annex 1)

Applications

- Surface Irrigation
- SDI – Subsurface Drip Irrigation
- Green Houses

Technical data

Tube Diameter	Ø16 - 36	mm
Tube Wall Thickness	5 – 18	mil
Flow Rate	0.6-4.0	L/h
Cv	<3	%
Spacings	10-100	cm
Line Speed Max	400	m/min
Dripper Feeding & Slitting Max	2'000	1/Min
Min Pitch	10	cm

For further more detailed information, please don't hesitate to contact us.