Getting the Most from Your K-Line Irrigation System

RX Plastics, New Zealand

Water is a finite resource and demand for it continues to increase, so it’s important to the running of any farming or horticultural enterprise that this precious commodity is used efficiently with minimal waste.

Debate has arisen over the effectiveness of different types of pasture irrigation systems, with a focus particularly on the coverage each option provides within the irrigated area, and concentrating on the spacing of the sprinklers to achieve the optimal result.

Overlap is an essential part of the process, but the critical aspect is the way the sprinklers overlap to ensure the best uniformity and optimal application rates.

The costs involved in using more water than is absolutely necessary including not only any water rates that may apply, but also the cost of energy involved in pumping the water through your irrigation system.

Plants suffer stress when they don’t get enough water and pasture yield is reduced. By optimising water use through applying the correct amount of water and distributing it uniformly, this maximises the yield and quality of your crops.

RX’s K-Line Std irrigation technology ensures that you achieve this efficiency of application and uniformity of distribution, making for a better result for your crops. The standard layout suggested when farmers invest in a K-Line system provides an initial guide to how many pods and how much pipe would be required as an average to irrigate a standard field.

In reality, even if there is some degree of overlap in distribution by the sprinklers, our experience has shown that grass grows extremely well with this form of irrigation – keeping
in mind that water doesn’t simply stay where it falls, but continues to move once it penetrates the ground surface.

Differing degrees of uniformity in an irrigated area may be caused by poor design or poor management of an irrigation system. As part of our ongoing commitment to leading the market in irrigation, we recently carried out research with the manufacturers of our sprinklers to compare irrigation sprinkler systems and have found that operation on 11 x 17m spacing, 13.5 x 20m spacing and 15 x 15m spacing (depending on the sprinkler choice) can improve the distribution of water to your field.

This analysis proved the uniformity of K-Line products and highlighted the efficiency of the 17 x 11 K-Line configuration with a Naan 5022 sprinkler, in contrast to the 15 x 15 configuration.

The same tests were carried out using a number of other sprinkler options commonly used with K-Line Std product with similar outcomes.

The images below demonstrate testing of K-Line that was carried out in September 2012. This process revealed the high efficiency of K-Line Std irrigation systems, producing evenly distributed water and great results for green grass.

The introduction of an Irrigation Code of Practice (NZ) has created some confusion in the market around the uniformity of K-Line products. This research however debunks this myth – with K-Line you are able to have high uniformity, provided you set up your system appropriately.

Check out the results of our research below:

Naan 5022 Irrigation 11 x 17m shift 4.0bar
R2000WF 15x15 Total
R33 Nelson 13.5 x 20m 4Nozzles