Pressure Compensating Drippers

Withstanding the Test of Time

If it isn’t broke...

...don’t fix it. That’s the old saying, and for Netafim’s pressure compensating (PC) drippers, it has been the guiding philosophy since the product was first developed. The product’s reliability has made it the irrigation product of choice for permanent crops, such as pistachios and vineyards.

“The initial design of the PC dripper was so effective, the only enhancements that have occurred since its initial development in 1974, have been changes in material choice,” says Mike Illia, product marketing manager for Netafim. “This is a product that has stood the test of time,” he adds.

According to Illia, as long as a grower follows proper maintenance guidelines, including flushing the lines and chemical treatments to remove biological materials, there is the potential for a drip installation to last as long as 30 to 40 years.

So, what contributes to the longevity of Netafim’s PC drippers? In simple terms, “It just doesn’t plug,” says Illia. Netafim On-Line Drippers are designed with a larger flow path allowing particles to pass freely. That design practically eliminates clogging and allows for long-term efficient operation.

Originally manufactured out of acetol that was more susceptible to chemical degradation, the drippers are now made out of polyethylene, and are extremely resistant to the strongest chemicals, even after seasons of fertigation.

According to Illia, the challenge with acetol is that it was more susceptible to degradation from the injection of chemicals and fertilizers. When the practice of ‘fertigation,’ as it is commonly referred to, became more prevalent in the mid 1980s, the acetol dripper showed some degradation. Netafim switched to a more chemically resistant plastic that was manufactured with polyethylene and polypropylene. The change in materials meant that the drippers do not degrade due to exposure to lower pH, and are more resistant to the effects of harsher chemicals.

The only other change has been to the disc inside the dripper that allows for the pressure compensation. Originally manufactured out of rubber, which proved to be too porous, the disc is now molded out of a silicon material.

Those manufacturing improvements are why Netafim’s products are so prevalent in vineyard and tree crop installations. Netafim’s dripper systems have been shown to perform in the harshest conditions.

“I’ve had countless first hand experiences with growers who are sourcing water out of open ditch and canal systems, where there is a lot of biological material going through the lines,” says Illia. “With proper maintenance and flushing procedures, the Netafim drippers can always be restored to their original flow specifications.”

Illia adds that in addition to the material advancements, part of the advantage of the Netafim PC dripper, is the size of the flow path. The larger size of the Netafim dripper flow path makes them less susceptible to plugging. Netafim drippers have the widest flow path in the industry, and a wider dripper cross-section allows for large particles to pass freely through the dripper. A continuous self-flushing system that is effective even while irrigating, provides improved resistance to clogging.

“That ‘trouble-free’ application is critical to our customers,” says Illia.