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Nelson's new solution to save water, energy and do a better job irrigating

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[Nelson Irrigation](#)'s Rotator Technology has been field-proven for over 35 years. In the solid set market it has been used in a number of products with flows ranging from nine gph to 11 gpm and radius of throw from seven to 51 feet.



The newest addition to the family is the R2000FX. Its flow range is one to three gpm, radius of 29 to 40 feet, pressure range of 20-35 psi. There are four different plate options that deliver water at 12 degrees, 15 degrees or 24 degrees. It combines proven Rotator Technology with Off-Axis plate motion to deliver low pressure operation with unparalleled radius of throw. This allows the sprinkler to be used at wider spacings with lower application rates compared to currently available low pressure sprinklers. Small changes in field pressure have a significant effect on the flow of low pressure sprinklers.

Flow Control nozzles are standard on the R2000FX and ensure uniform application of water across a complete system. The Flow Control nozzles used in the R2000FX are a new design for operation at lower pressures. The orifice diameter is greater when unpressurized and smaller when pressurized.

This flexing has shown significant resistance to plugging.

The combined Rotator and Off-Axis action has shown reliable operation when water with high mineral content is used. Deposition of minerals can cause other sprinkler models to stall.

Less energy is required to run an R2000FX system because of the low operating pressure. The lower application rates which are possible with the R2000FX allow for better water infiltration into the soil which increases water use efficiency. The Flow Control nozzles deliver the same application rate within and between blocks of sprinklers regardless of changes in the elevation of the land or changes in pressure due to friction loss in the pipe network. The Flow Control nozzles also reduce the need to accurately set valve pressures. Operation of an R2000FX system is simpler and less prone to poor management. Plug resistance and stalling resistance reduce labor, dry sectors and energy wastage.

The R2000FX can be used in permanent solid set or portable solid set irrigation systems. The systems can be used for irrigation, freeze protection or crop cooling. Permanent solid set crop examples include blueberries, nuts, bananas, African oil palm and overhead cooling of fruit crops. Portable solid set crop examples include potatoes, vegetables, alfalfa, corn and pasture.

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