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Automated Sprinkle Irrigation Advantages and Disadvantages

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Abstract: *In light of continuous progress in agricultural technology, the rise of autonomous systems has led to the development of advanced solutions like the Sprinkler Robot. This comprehensive paper reviews the design, functionality, and applications of Sprinkler Robots in modern agriculture. It emphasizes their vital role in optimizing water distribution and crop management to tackle challenges related to water scarcity and labour-intensive irrigation practices. By examining the integration of Sprinkler Robots into current agricultural frameworks, the study delves into underlying technologies such as artificial intelligence, sensing mechanisms, and precise control. Moreover, it explores the potential environmental and economic benefits linked with the widespread adoption of Sprinkler Robots, underlining their contribution to sustainable and efficient agricultural practices. The paper also evaluates existing limitations and future research prospects, providing a comprehensive perspective on the impact of Sprinkler Robots on the future of precision agriculture.*

Keywords: Sprinkler Robots.

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