

PRESSURE REGULATING SYSTEM: SAVINGS THAT ADD UP

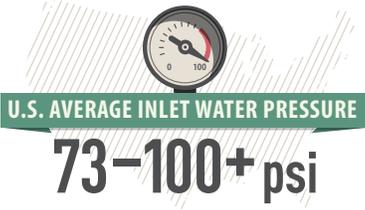
THE CHALLENGE:

One of the ongoing challenges that traditional in-ground irrigation systems face is variable level of water pressure from location to location, city to city and state to state.

Most rotors and sprays are designed to function best at a recommended inlet pressure.



Studies indicate that the average inlet water pressure in the U.S. is 73 psi, with many sites exceeding 100 psi.



- When pressure exceeds the recommended level, precipitation rates (PR), application efficiency (AE) and distribution uniformity (DU) all suffer. The result is less than optimal performance and wasted water.
- Rain Bird offers a patented pressure regulating technology called Pressure Regulating Stem (PRS), designed specifically to keep performance at optimal levels regardless of varying inlet pressure.

THE STUDY:

To prove the viability of Rain Bird's PRS technology, an independent comparative study was commissioned, utilizing the University of Arizona's Department of Soil, Water and Environmental Science at the Karsten Turf Research Facility. The study was designed to compare the performance characteristics of rotors and sprays with PRS technology vs. similar products without. The study was led by Dr. Paul Brown, with assistance by Jeff Gilbert.

- For the purposes of comparison, eight different turf plots were evaluated (4 with PRS and 4 without) at different inlet pressure levels.
- In each case, 10 different tests were conducted measuring precipitation rate (PR), application efficiency (AE) and distribution uniformity (DU).
- Industry standard tests for DU included the use of "catch cans" with calculations made for low quarter distribution uniformity (DULQ) and low half distribution uniformity (DUHL).

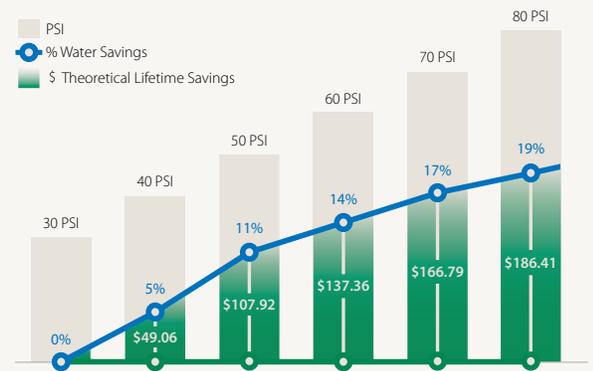
THE RESULTS:

The proprietary Rain Bird Pressure Regulating Stem (PRS) system showed marked improvements in the three key performance characteristics across the body of tests, particularly at inlet pressure levels that exceed the manufacturer recommended level. Specifically:

PRS Rotors Testing



PRS Sprays Testing



**Theoretical Lifetime Savings is normalized water savings based on EPA WaterSense estimate of average US household/outdoor water use, an average cost/1,000 gallons of water in the US and an average product lifespan of 7 years. The totals are theoretical. Actual water savings will vary based on conditions.*

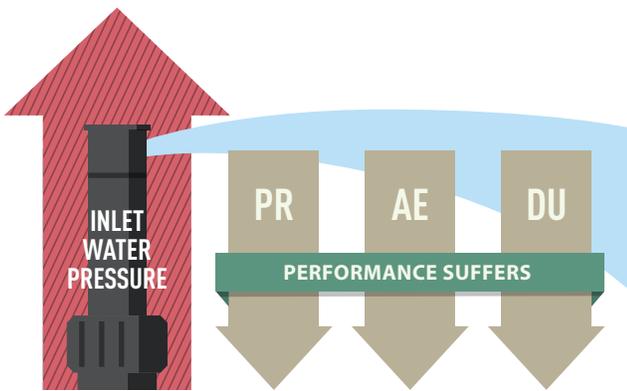


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CONCLUSION:

The use of Rain Bird's patented Pressure Regulating Stem (PRS) technology can provide significant water savings, cost savings, and improved performance vs. non-PRS systems. The savings reaped per rotor or spray can be multiplied across an entire system, resulting in significant differences financially and in gallons of water used.

Pressure / Performance Connection



For more information on Rain Bird® PRS technology, visit www.rainbird.com/ProjectPRS.

PRS REBATES:

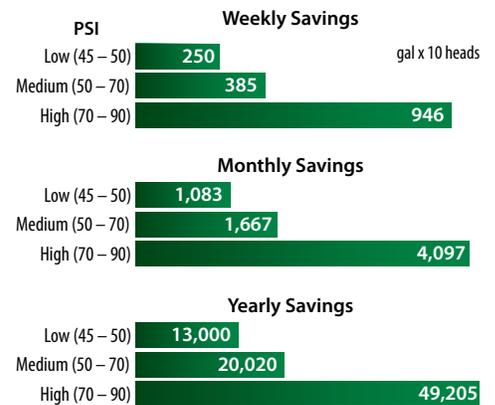
Leading organizations such as the Irrigation Association (IA) and the American Society of Agricultural and Biological Engineers (ASABE) recommend pressure regulation in sprays and rotors. Many municipalities and water agencies offer substantial rebates and incentives to offset the cost of upgrading. Check with your local agencies to see what incentives are available.



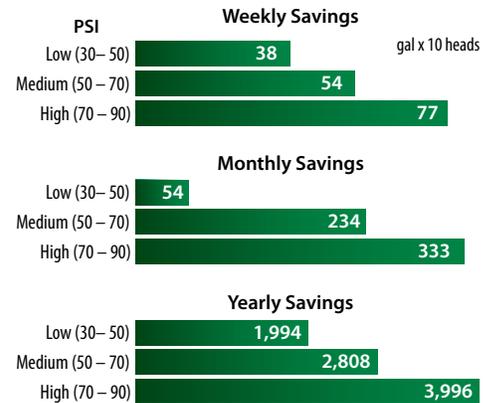
Project PRS challenges contractors to save more water by using PRS rotors and sprays on their installations. Test

data shows that PRS rotors and sprays can save each property up to 50,000 gallons or more every year.

Project PRS Savings: Rotors



Project PRS Savings: Sprays



Based on run time of 25 minutes for rotors and 10 minutes for sprays, 1 cycle per day, for 5 days. Savings is for 10 rotors or 10 spray heads. Take (# of heads / 10 x savings above) to achieve site savings.

