Pump Affinity law

- When the flow is reduced to ½, the total pump pressure is reduced to ¼ and the energy consumption is approximately reduced to 7/8's. In reality, the energy reduction is often ¾'s.
- Slower flow and lower pressure = increased energy efficiency and decreased cost of operation. By lowering the pump speed by ½, and doubling the pumping time, there is still an approximate energy savings of 50%.
- This is a pure law (equation) meaning that it doesn't take into account, dynamic filter loads, piping, valves or dirty pump strainers.

Pump affinity law and overview of pool pump energy reduction