Multi Head Packing Nuts are Expensive

Application Sheet #30

SITUATION

- A customer operating in central Alberta was using more chemical than expected at a cost of \$4 per Litre (~Quart).
- The multi-head mechanically adjusted chemical pump being used, had a packing nut which allowed rates to be adjusted, without changing the motor speed or duty cycle (time on).
- Setting the nut accurately was difficult and time consuming. The problem was further compounded because the nut tends to back off resulting in significant and costly over injection.
- The desired rate was 23 L/day; however, the operator would often arrive on site to find the packing nut had backed out and the pump was injecting closer to 40 L/day.
- Based on work load, the Operator checks his pumps on a weekly basis. Historically the pumps were found to be over injecting 17 to 23 L/day, once every two months. In all probability the over injection was occurring for 2 to 4 days before the operator discovered it.

SOLUTION

- The customer installed Sirius' Stack multi-point injection system with no mechanical adjustments necessary for rate control.
- The Smart Fusion controller allows the operator to quickly adjust rates electronically, providing consistent and accurate injection.

RESULTS

- Chemical Injection was accurate and delivering the target amount saving on average 360L/year resulting in a cost reduction of \$1,400 per year.
- Time to set rates dropped from near nearly one hour, to less than 5 minutes saving the operator 10% of his day to carry on other responsibilities.
- Rates remain accurate reducing site visits.

REAL TIME BENEFIT

Chemical savings \$1,400 annually. Operator has more time to perform duties.





The Stack

