

## E-Blast

### Innovative Industrial Solutions from HVD

## Stainless Steel Flow Controls

#### Application:

A food processing plant has a main hydraulic system that feeds drop down lines for various hydraulically run equipment such as conveyers. Each conveyer, or other piece of equipment, requires a varying amount of flow to work at the desired speed. The customer utilizes pressure compensated flow control valves so that each valve can be adjusted as needed. Chemical wash downs occur regularly at these facilities which cause the steel versions to corrode. This creates a problem because the valves can no longer be adjusted or are more difficult to adjust once the corrosion occurs. The plant's equipment then does not run to optimal efficiency and also requires the valves to be replaced much more frequently.



#### Solution:

The solution is to replace the steel pressure compensated flow control valves with a stainless steel version. The internals can continue to be steel since the corrosion is caused by an external element



#### Success Factors:

The main success factor of these pressure compensated valves is that they can be made out of a material that has higher corrosion protection. Even though steel is often acceptable in this industry, the adjustability of these valves is hindered because of the corrosion.

This product helps the food processing plant's equipment run more efficiently over longer periods of time. This saves the company both time and money when they utilize the stainless steel pressure compensated flow control valves.

#### Customer Values:

Fewer replacements of the stainless steel version compared to the steel version saves the customer approximately \$35K in both valve purchases and also maintenance time costs over the course of a year.

When the valves are not able to be adjusted properly, even a short timeframe of downtime can cost the plant immensely in lost production. This can vary significantly by plant, product, etc, but \$600/min in lost production could be realistic. (all values are USD)