Improving Capabilities of Third Party Pumps

Application Sheet # 15

SITUATION

- An Oil and Gas Company operating in North Dakota uses mechanically adjusted diaphragm pumps for high rate methanol applications.
- The pumps being mechanical in nature, require physical adjustments to alter flow rates. The accuracy these pumps can achieve is limited and does not meet the customer's expectations.
- The customer would also like to automate parts of the field; however, the mechanical pumps do not have that capability.

SOLUTION

- The stock motor on the Milton Roy was replaced with the Sirius Gemini high torque motor and controller to provide electronic rate control.
- The automation capabilities of the Gemini Controller provided the customer with remote access.
- With an Analog Input tied into the Gemini Controller, the PLC is programmed to change chemical injection rates as the flow into the compressor station changes.

RESULTS

- The electronic control provides a turn down ratio that was not achievable with mechanics alone.
- The amount of chemical injected can now be optimized.
- Remote capabilities of the Gemini Controller allow the customer to control chemical injection with the click of a button, removing the necessity of a person to physically visit location.

REAL TIME **BENEFIT**

Efficient solution to provide automated and accurate injection of existing mechanically adjusted pumps. Optimized chemical injected. Saved manpower.





sirius