Pump Control Industry

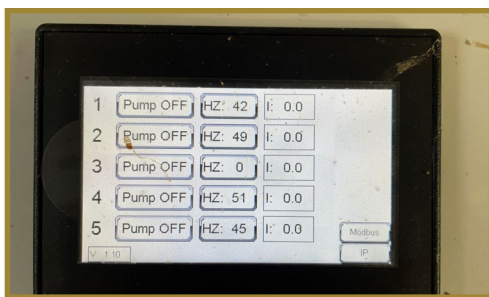## Rockport Electric and Horner's Micro X4A

Pump Station Project,
Alexandria, South Dakota

Current panel with Micro X4A

Pump Station controls

X4 showing pump status

CHALLENGES

Pivots and Pump Stations -
Rockport Electric owns around 30 pivots with two pump stations to service those pivots. The pump stations are up to five miles from the pivots in very remote locations and any changes that have to be made in water pressure or flow required someone to drive to the pump station. This could happen ten or more times a day. Also, when starting and cleaning the pivots in the springtime, someone had to be at the pump station full-time for a couple of days to start/stop the pumps as needed.

SOLUTION

Rockport chose the Horner X4A controller to communicate with the VFDs over Modbus, using the PLC's built-in RS485 port, enabling them to start/stop and change the speed of the pump. Using Modbus also gave them the ability to read operating data from the VFDs such as hertz, amps, temperature, and other useful data. The X4A then communicates with a smartphone app directly over TCP/IP Modbus. Operators can now use the app remotely to start/stop the pumps, control pump speed, and view operating data.

TESTIMONIAL

"Setting up Modbus on the Horner X4A was very easy and user-friendly with the built-in utility in Cscape. This solution also saved me $1000's compared to an OEM solution!"

~ Daniel Wipf, Rockport Electric, Alexandria, South Dakota

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