



The Customer's Challenge –

In order to more efficiently utilize energy and reduce emissions in the oil & gas extraction process, our customer required an electric motor and drive solution for a glycol circulation pump that was currently being powered by a methane fueled combustion engine. Methane is a by-product of the extraction process and had previously been used on-site for this application while excess methane was burned-off as waste. The new solution needed to be an energy efficient system that is battery powered and solar charged, rather than relying on the inefficient combustion engine that produced unwanted emissions. The success of this newly implemented, highly efficient, energy saving system relies on an ElectroCraft brushless DC motor and drive system that works on battery power.

Customer Requirements and Solution –

The customer needs a solar charged, battery powered motion solution for a glycol pumping system. The system is required to run a minimum of 7 days without charging the battery unit, therefore low power consumption and efficient operation is key. However, the pumping system periodically encounters large torque spikes, such as during startup, that require a drive system with enough current to power through the heavy loads. This combination of highly efficient operation coupled with the ability to provide high output torque during varying conditions is difficult to achieve with traditional motor and drive platforms.

Upon review with the ElectroCraft sales and engineering team, the ElectroCraft CompletePower™ Plus Universal Drive paired with an RP34 Brushless DC motor was specified for the application. ElectroCraft also provides additional value by delivering the system pre-configured, pre-wired and ready for operation.

ElectroCraft Advantages –

ElectroCraft drive technology proved to be the difference. With 24A of continuous output current and up to 60A peak current for short periods of time, the ElectroCraft system can effectively manage wide variations in load, allowing the motor and pump system to run smoothly and efficiently under normal conditions while also providing the ability to power through periodic spikes in motor load. Additionally, the RP34 brushless DC motor provides the power, efficiency and reliability that is required for this challenging application.

Customer Benefits –

- Highly efficient brushless DC motor and drive platform reduces energy consumption, saving the customer money and improving operating profit.
- ElectroCraft provides a complete solution, including motor, drive, cabling, pre-configured with plug and play installation reduces onsite setup and commissioning time, saving the customer money.
- Powerful ElectroCraft CompletePower[™] Plus Universal Drive platform offers high-performance and efficiency, intuitive setup and configuration, and the ability to adapt to changing loads with ease – simplifies engineering design effort, reduces development time, lowers up-front investment costs, improves ROI.

There have been hundreds of successful implementations to date, with thousands more being planned in the near future.











