

# Prove It!

## The Power of Integrated Project Delivery

# INTERSTATES

A client's greenfield oilseed project presented a challenging site layout, hazardous area classifications, and budget constraints. By selecting Interstates as a turnkey E&I provider, they were counting on a holistic approach to solving these and other E&I challenges on the project.



**Extensive use of explosion proof conduit systems can blow your budget!**

the Interstates team discovered an opportunity to deliver an innovative solution that reduced capital (initial) costs, and life cycle costs. By taking a balanced view from all E&I perspectives and working closely as a team with the client, the team developed a proposed solution.

The proposal: use intrinsically safe instrumentation, control panels, communication technology and wiring methods to minimize wire lengths, put critical controls closer to the equipment and to allow for routine maintenance without a complete shutdown. A traditional explosion-proof installation would require explosion-proof instrumentation in the hazardous area and the associated wiring back to a non-hazardous location some distance away.

The Interstates team was able to develop this solution because they had the latitude to specify the control technology, the instrumentation and the wiring methods used in the installation. Often, the early technology decisions are made based on the

initial cost and features of specific equipment options. The overall capital cost (including wiring) and the lifecycle impact to the project are not considered. In this case, the more expensive intrinsically safe control hardware and instruments were a cost effective trade-off to receive a far greater savings in wiring.

As a result, the client received an intrinsically safe wiring system that allowed the team to install instrumentation and control panels in a Class I, Division 1 hazardous rated area without the expense associated with explosion-proof conduit and components or long runs of control wiring to remote control panels. The explosion-proof conduit and wiring (and related costs) were minimized. The owner benefited by having access to



**No flames, arcs or ignition sources allowed!**

the control panels during operations and maintenance. With this arrangement, staff could then partially maintain the instrumentation and control during operations and avoid purging the area (at least a 5 hour shutdown and restart each time). This was a significant uptime savings for the client over the lifecycle of the facility, provided additional safety for the plant, and reduced capital costs. This innovation would likely not have happened if each service had been bid out separately and each discipline purchased on a low first cost basis.

***By working early and in concert, Interstates can implement the appropriate technology and overcome the barriers in your project. Call us with the unique challenges of your business and tap into the power of Interstates' Integrated Project Delivery.***

**For more information, contact  
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