



### Service/Product Provider

#### ***Bay Controls, LLC***

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Business: Air Compressor Controls  
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### Industrial Partner

#### ***Ford Motor Company***

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Business: Automotive Manufacturing  
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### **Ford and Bay Controls partner to improve air compressor performance resulting in annual energy cost savings of \$3 million.**

#### **Project Scope**

Ford and Bay Controls implemented a state of the art compressed air control system for Ford's Vehicle Operations plants (22 facilities and 157 air compressors). Air Compressors at each site were upgraded with Bay's Vantage control system and integrated using distributed capacity control technology. In addition to controls standardization, the project included internet-based monitoring of all air compressors via Bay Controls' BayWatch service.

#### **Project Summary**

By utilizing the Bay Controls' air compressor control system each plant was able to optimize their compressed air requirements relative to energy use. The internet-based BayWatch monitoring system provides Ford with continuous real-time and historic air compressor performance information. Additional benefits included in this project were Bay Controls' auto start/stop, performance log, and scheduling software. This project included all engineering, labor, and training for a turnkey installation.

- **Energy Savings**  
Projected annual energy cost savings is \$3 million (50,779,601 KWH) or a 13% improvement
- **Investment**  
Total project investment was \$3,654,710
- **Financial Return**  
Payback for this project is 15 months
- **Other Benefits**  
Productivity, maintenance, and reliability benefits were realized as well

#### **Monitoring & Verifying Energy Savings**

The BayWatch service was employed to monitor and verify energy savings.

#### **Distinguishing Value**

Standardization of controllers across Vehicle Operations coupled with the BayWatch engineering service has proven to be a valuable predictive maintenance tool. Plant powerhouse operators and Bay technicians at the BayWatch Center have resolved real-time air generation issues. The reliability and responsiveness of Bay's products and support team have improved vehicle production stability.