



### Service/Product Provider

#### **Johnson Controls, Inc.**

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### Industrial Partner

#### **Ford Motor Company**

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Business: Automotive Manufacturing  
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### **Johnson Controls teams with Ford to save \$3 million at Ford World Headquarters.**

#### **Project Scope**

Johnson Controls developed ventilation and other energy and water savings improvements for Ford Motor Company's World Headquarters resulting in a projected ten-year utility savings exceeding \$3 million.

#### **Project Summary**

A key element of the project is Demand Control Ventilation (DCV). By installing DCV, Johnson Controls is able to adjust ventilation based on real-time occupancy and actual measured carbon dioxide (CO<sub>2</sub>) levels, instead of providing fixed airflows based strictly on static maximum occupancy calculations. This automatically provides fresh air in the appropriate volumes and to the appropriate locations for occupant comfort. At the same time it saves energy by continuously matching the ventilation to the occupancy level and location in the building. Other facility improvement measures included lighting upgrades and water conservation.

- **Energy Savings**  
Approximately \$300,000 per year or 9%
- **Investment**  
No net out of pocket investment
- **Financial Return**  
Project was completely vendor-funded, producing guaranteed positive cash flows throughout the 6-year finance period
- **Other Benefits**  
Both boiler and chiller loads are dramatically reduced, thereby extending maintenance and operating life.

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

Computerized monitoring provides ventilation data that is then compared to baseline measurements taken prior to construction.

#### **Distinguishing Value**

The responsiveness, professionalism and innovative energy saving ideas offered by the Johnson Controls team have been a great asset in achieving the energy reduction goals of the Ford Motor Company.