Success Story: Precision Manufacturing

ATLAS Aerospace Components Reduces Downtime by 28% with Honeywell Fixed Mount Computing Solutions

Company Profile

Industry: Aerospace Manufacturing

Location: Seattle, WA with additional facilities in Dallas, TX and Hartford, CT

Size: 350 employees across three facilities

Annual Revenue: \$78.5 million

Products: Precision-machined components for commercial and military aircraft

Challenge

ATLAS Aerospace Components, a tier-one supplier for major aircraft manufacturers, was facing significant operational challenges that threatened both their profitability and reputation for quality:

- **Unplanned Downtime:** Their CNC machining centers were experiencing unpredictable failures, resulting in approximately 120 hours of lost production time per month.
- **Quality Control Issues:** Without real-time monitoring, quality defects were often discovered late in the production process, leading to expensive rework and occasional shipment delays.
- **Data Silos:** Critical machine performance data was isolated in separate systems, making it impossible to identify patterns or predict potential failures.
- **Skilled Labor Shortage:** Experienced machine operators were spending up to 30% of their time troubleshooting issues rather than focusing on high-value tasks.
- **Compliance Documentation:** Manual record-keeping for aerospace industry compliance was labor-intensive and prone to errors.

"We were essentially operating in reactive mode," explains Maria Chen, Operations Director at ATLAS. "Every unexpected machine shutdown meant missed deadlines and compromised margins. In our industry, where precision is measured in thousandths of an inch and delivery schedules are tight, this approach was unsustainable."

Solution

After consulting with Ahearn & Soper Inc, ATLAS implemented a comprehensive solution built around Honeywell's fixed mount computing technology:

Hardware Implementation

- Honeywell Thor™ VM1A Fixed Mount Computers installed at 28 critical production stations
- Honeywell Smart Sensors retrofitted to legacy equipment to capture performance metrics
- Honeywell PM45 Industrial Printers for compliance labeling and documentation

Software Integration

- Integration with ATLAS's existing MES (Manufacturing Execution System)
- Implementation of predictive maintenance analytics dashboard
- Real-time quality monitoring and alert system

Process Transformation

- Development of condition-based maintenance protocols
- Training program for shop floor personnel
- Creation of data-driven decision-making framework for production scheduling

"The Ahearn & Soper team didn't just sell us hardware," notes Chen. "They took the time to understand our specific challenges and designed a solution that addressed our immediate pain points while creating a foundation for future improvements."

Implementation Process

The implementation was completed in three phases over six months to minimize disruption to ongoing production:

Phase 1: Pilot Program (Weeks 1-6)

- Installation of fixed mount computers and sensors on two production cells
- Configuration and testing of data collection systems
- Initial operator training and feedback collection

Phase 2: Full Deployment (Weeks 7-18)

• Rollout to remaining 26 production stations

- Integration with enterprise systems
- Comprehensive staff training program

Phase 3: Optimization (Weeks 19-24)

- Fine-tuning of predictive algorithms
- Development of customized reporting dashboards
- Creation of standard operating procedures

"Ahearn & Soper's phased approach allowed us to validate the concept, build internal support, and refine the solution before full deployment," says Robert Kang, IT Director at ATLAS. "Their technical team was on-site throughout the process, ensuring minimal disruption to our production schedule."

Results

Within twelve months of full implementation, ATLAS achieved remarkable improvements across multiple operational metrics:

Primary Outcomes:

- 28% Reduction in Unplanned Downtime (from 120 hours to 86 hours monthly)
- \$1.24 Million in Annual Savings from improved productivity and reduced overtime
- 21% Decrease in Quality Defects through real-time monitoring and early intervention
- 18% Improvement in On-Time Delivery Performance

Additional Benefits:

- Enhanced Compliance Documentation: Automated record-keeping reduced administrative burden by approximately 25 hours per week
- Improved Workforce Utilization: Skilled operators now spend 85% of their time on value-added activities compared to 70% previously
- **Data-Driven Decision Making:** Management now has visibility into production metrics that enable proactive resource allocation

"The return on investment exceeded our expectations," confirms James Wilson, CFO of ATLAS. "We projected a 24-month payback period for the entire system, but we reached that milestone in just 17 months due to greater than anticipated efficiency gains." Several elements contributed to the exceptional results achieved by ATLAS:

- **Executive Sponsorship:** The COO championed the initiative and ensured cross-departmental cooperation
- Phased Implementation: Gradual rollout allowed for adaptation and refinement
- Comprehensive Training: All shifts received hands-on training and ongoing support
- Integration Approach: The solution connected previously isolated systems, creating a unified data environment
- Partnership Mindset: Ahearn & Soper and Honeywell teams worked as extensions of the ATLAS team

Future Plans

Building on their success, ATLAS is now exploring additional opportunities:

- Expansion of the system to their Dallas and Hartford facilities
- Integration of Honeywell wearable computers for maintenance technicians
- Development of advanced analytics capabilities to further optimize production planning

"What started as a project to reduce downtime has evolved into a digital transformation of our entire operation," says Chen. "The partnership with Ahearn & Soper and Honeywell has given us capabilities we didn't think were possible with our existing equipment and budget constraints."

Partner Perspective

"ATLAS exemplifies how manufacturing companies can leverage intelligent automation to overcome complex operational challenges," explains David Sharma, Manufacturing Solutions Specialist at Ahearn & Soper Inc. "By connecting their machines, people, and processes through Honeywell's fixed mount computing platform, they've not only reduced downtime but created a foundation for continuous improvement and innovation."

For more information about Honeywell's fixed mount computing solutions, contact your local Honeywell authorized partner or visit <u>www.honeywell.com</u>