

# Manufacturer Tidewater Block reduces downtime with Amazon Monitron

## Company Summary

Tidewater Block is a family-owned manufacturer and distributor of building and masonry products in a variety of shapes and sizes designed to meet any requirement. Their manufacturing process uses high-quality aggregates and meets or exceeds American Society for Testing and Materials (ASTM)-C90 specifications for load-bearing concrete units. Tidewater Block regularly conducts independent testing to ensure compliance with this ASTM standard. It supplies products to commercial and federal facilities, including the construction of many of the facilities at Norfolk Naval Base, Fort Eustis, and Langley Air Force Base. Additionally, Tidewater Block provides services across the larger eastern Virginia commercial sector.



Tidewater Block

### INDUSTRY

→ Manufacturing

### SEGMENT

→ Private

### REGION

→ NAMER

## THE CHALLENGE

### Seeking machinery maintenance optimization

Brick and block making machinery must function in harsh environments, including being exposed to sand, gravel, and rain. These environments can result in higher than average wear and tear on the machinery, including different degrees of loosening and corrosion, which in turn negatively affects performance and can even lead to downtime.

To avoid the economic liability of underperforming machinery, plant operators must adhere to a strict maintenance schedule to keep block making machinery in top condition. For every minute a machine in a block making plant is down, approximately 50 employees are at a standstill. To optimize productivity, preventative maintenance windows must be short, timely, and effective.

## THE SOLUTION

### Increasing productivity and proactive maintenance with machine learning monitoring and alerts

CloudHesive planned and deployed Amazon Monitron, an end-to-end system that uses machine learning (ML) to detect abnormal conditions in industrial equipment and enable predictive maintenance. It uses sensors to capture vibration and temperature data from equipment and a gateway device to securely transfer data to Amazon Web Services (AWS) and then to a companion mobile app. This enables the operations team to receive reports on operating behavior as well as alerts to avoid potential failures in the monitored machinery.

Amazon Monitron uses ML to analyze Tidewater Block's data for abnormal machine patterns and helps the company to proactively schedule repairs and avoid system downtime and failures.

## THE BENEFITS

### Reducing unplanned downtime with Amazon Monitron

Tidewater Block now enjoys 24/7 monitoring of its industrial manufacturing equipment, enabling its IT team to predict maintenance issues before they arise, maximizing equipment uptime and reducing equipment failure rates. Alerts and notifications enable proactive maintenance and ensure maximum uptime.

## Services that Drive Success

### DEVOPS

- Deployment of Amazon Monitron to detect abnormal conditions and enable predictive maintenance

## Customer benefit summary

- Maximized equipment uptime and minimized equipment failures
- Optimized equipment performance and increased productivity
- Actionable insights from 24/7 monitoring and alerting

## AWS technologies used

- Amazon Monitron



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