

GREIF-VELOX VeloGuard: Automated Monitoring for Minimized Downtime

Introduction

Unplanned downtime remains one of the biggest challenges in production. Modern maintenance strategies are constantly evolving, offering innovative solutions to address this issue. The VeloGuard Self-Test Function is a powerful tool that leverages condition monitoring and regular self-diagnostics to deliver key advantages:

- Minimization of operational interruptions
- Reduction of emergency repair costs
- Extended equipment lifetime

This whitepaper outlines how VeloGuard can enhance the efficiency and reliability of your production systems.

1. Maintenance Challenges

Unexpected failures can cause major disruptions, leading to both high costs and lost productivity. Additionally, long waiting times for service support and a lack of transparency in machine condition often hinder efficient troubleshooting.

Main Challenges

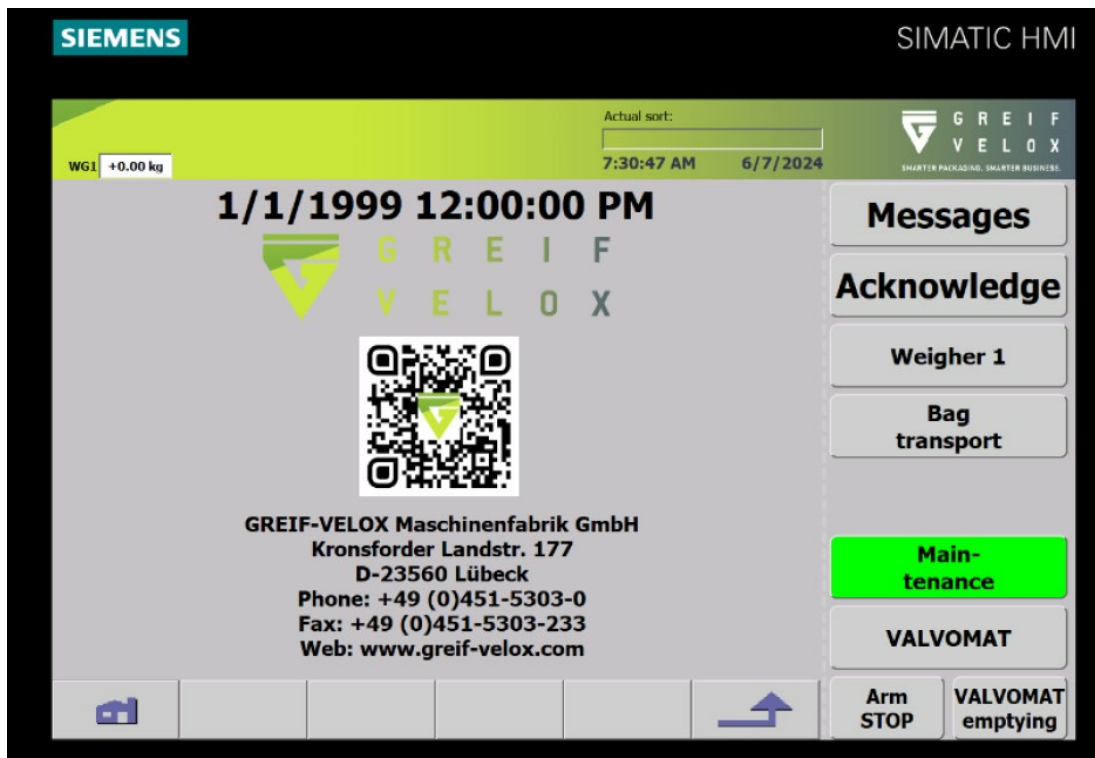
- **High costs of unplanned downtime:** Production stops directly impact revenue.
 - **Slow response times:** On-site service technicians require additional time for fault diagnosis.
 - **Lack of machine monitoring:** Insufficient data makes preventive maintenance difficult.
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2. The Solution: VeloGuard Self-Test Function

VeloGuard is an automated diagnostic feature that continuously monitors key pneumatic components, enabling early fault detection and proactive maintenance planning.

Key Features and Benefits of VeloGuard

- **Automated fault diagnostics:** Monitoring of critical components such as product inlet flaps and venting systems.
- **Preventive maintenance:** Early detection of issues helps avoid secondary damage.
- **Wear visualization:** Signs of wear are reported directly via the system's HMI interface.



Key Components Under Supervision

- **Product inlet flap:** Detects seal defects early, maintaining filling accuracy.
- **Venting system/tank venting:** Prevents air leakage that could cause malfunctions and rework.

By combining early fault detection with plain-text diagnostics, VeloGuard supports your maintenance teams and helps avoid unplanned production interruptions.

3. Economic Benefits

VeloGuard not only minimizes downtime but also delivers significant financial benefits through more efficient maintenance workflows.

Cost-Saving Highlights

- **Avoidance of production stops:** Early fault detection reduces costly restart times.
- **Reduced diagnostic workload:** Automated fault analysis saves valuable labor hours.
- **User-friendly:** Even less-experienced personnel can identify and resolve issues—no specialist knowledge required.

4. Best Practice Example

The customer **MMW Mineralmahlwerk Hamm** recognized the potential and proactively implemented the VeloGuard Self-Test Function.

The results speak for themselves:



- **Downtime reduced by 90%**
- **Maintenance personnel costs cut by 80%**
- **Sustainable productivity increase**

Objectives

- **Proactive condition monitoring:** Diagnose and replace faulty components before breakdowns occur.
- **Optimized planned downtime:** Strategically plan and minimize stoppages.
- **Long-term cost savings:** Use resources efficiently to maximize uptime.

5. Technical Implementation

Implementing VeloGuard is straightforward and can be easily integrated into existing systems.

Modifications Required

- **Visualization on control panel:** Status displays (e.g. “Open/Closed”) and activation messages are integrated.
- **Seal pressure monitoring:** Retrofit monitoring ensures that components like valves remain fully functional.



Required Components

- 1x Retrofit kit
- 1x Software upgrade
- 1x Operating manual update
- 1x Electrical plan adaptation

Conclusion

The VeloGuard Self-Test Function provides a reliable system for automatic machine monitoring. Maintenance needs are detected and communicated at an early stage, making unplanned breakdowns and costly repairs virtually a thing of the past.

Want to learn more? Get in touch with us:

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