



WASTEWATER NETWORKS:
**SAVING COSTS
WITH INTELLIGENT
MOTOR PROTECTION**

GRUNDFOS iSOLUTIONS



ROSE CREEK

FIND OUT HOW AN INLET PUMPING STATION AT A WASTEWATER TREATMENT PLANT IN THE US IS REAPING THE REWARDS OF HIGH EQUIPMENT PROTECTION AND FAST TROUBLESHOOTING WITH GRUNDFOS

At 3am one night, maintenance supervisor Jamie Veley got a phone call from an operator at the Rose Creek Wastewater Treatment Plant in Woodstock, Georgia. Six new Grundfos submersible wastewater pumps weren't working properly. The influent level was rising, and the pumps weren't running, so the operator went to the influent station to try starting a pump. It went into alarm and shut off. The

same thing happened to a second and third pump. The alarms were coming from the pumps' MP204 motor protection units. Veley contacted Grundfos who used the Grundfos GO remote monitoring app to see the MP204's alarm was registering a "Current Asymmetry" of 12.9% – a power imbalance that would quickly destroy any pump.

**MAXIMISED
RELIABILITY**

**FAST
TROUBLE-
SHOOTING**

**IMPROVED
TOTEX**



THE SOLUTION

Grundfos had supplied the Rose Creek plant with a solution featuring the MP204 motor protection unit. The MP204 protects pump motors against under-voltage, over-voltage and other variations in power supply, ensuring steady pump performance. So when the plant experienced a power imbalance in its pumping systems, the MP204 protected the pump motors against overheating and enabled fast troubleshooting for plant operators. In the past, such a problem might have taken the plant's team all night but in this case the problem was fixed in just 20 minutes.



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OUTCOME

- **MP204 UNITS SUPPORT EQUIPMENT PROTECTION AND FAST TROUBLESHOOTING**
- **PLANT OPERATORS SAVE SIGNIFICANT TIME FINDING AND RESOLVING ALARMS**
- **FAST PROBLEM-SOLVING PREVENTS PUMP DAMAGE, DOWNTIME AND MAINTENANCE**
- **MP204 UNITS ENABLE OPERATORS TO TRACK POWER PERFORMANCE IN REAL TIME**

RESOLVING ISSUES IN MINUTES

According to Mike Venters, plant manager for the Cherokee Water and Sewerage Authority, the MP204 saved several large pumps that night. "The pump was what gave us the answer to an external power problem," he says. "Getting the MP204s with its equipment protection and troubleshooting was one of the best decisions we've made. Just the ability to troubleshoot so quickly is a cost savings."

The plant is still reaping these savings, adds Jamie Veley. Not long after the first incident, one MP204 gave an underload alarm. "That tells us right away that we're not pumping any liquid – we had our levels set too low. It took us just a minute to figure out what the issue was, where otherwise we'd be pulling pumps and trying to figure out what was going on. So again, the MP204 saved the pump, the motor, and a lot of time and maintenance."

"The biggest thing I'd say would be the maintenance cost and the reliability. And being able to see it real time as things are happening. That's a value I think anybody in the industry would want."

Mike Venters
Plant Manager,
Cherokee Water and
Sewerage Authority

