



CASE STUDY

ASHBURN 7700EP

OVERVIEW

A manufacturing facility was experiencing difficulties in maintaining the correct and consistent concentration levels of their two-part coolant system across 18 pieces of machinery. The improper concentration levels led to the formation of fungus and soaps in the Heller cell and reclamation system, posing safety concerns and causing clogs in filters, resulting in unplanned downtime.

CHALLENGE

Ashburn was brought in to consult with the customer and learn more about their challenges with the competitive fluids. After successful testing of Ashburn's 7700EP Semi-Synthetic coolant, the customer decided to change coolants due to the troublesome performance of the previous coolant system, potential for cost savings, the desire for improved reliability and performance, and the opportunity to leverage expert guidance through a coolant management program.

SOLUTION

These factors collectively drove the customer to transition to Ashburn's more efficient and effective coolant solution that would address their specific challenges and deliver long-term benefits. Additionally, they implemented a coolant management program in collaboration with Fluid Service Technologies (FST), beginning in November 2022.

RESULT

To assess the financial impact of the corrective action, a comparison was made between the average monthly costs incurred with the competitive coolant system (January to August 2022) and the new Ashburn Coolant system (November 2022 to April 2023).

The implementation of the Ashburn 7700EP Semi-Synthetic 1-part coolant system, along with the coolant management program, resulted in significant financial savings for the manufacturing facility. By switching to the Ashburn coolant, the facility was able to reduce their average monthly coolant costs from \$28,934 to \$19,196, resulting in an average monthly savings of \$9,738.

ASHBURN's APEX 7700EP with FST coolant management saves money, reduces downtime and increases profitability.

THE WIN

Ashburn's APEX 7700EP resulted in a monthly savings of nearly \$10,000.

Additionally, an important improvement resulting from the corrective action was the elimination of downtime hours due to the Ashburn coolant. The previous coolant system had caused clogs in filters and unplanned downtime, whereas the Ashburn coolant system demonstrated better performance and reliability, resulting in zero downtime hours.

The case study demonstrates the positive impact of replacing the troublesome two-part coolant system with the Ashburn 7700EP Semi-Synthetic 1-part coolant system and implementing a coolant management program. The facility not only achieved significant cost savings, with a breakeven point reached in just nine months, but also eliminated downtime hours associated with coolant-related issues. This case study highlights the importance of effective coolant selection and management for enhancing operational efficiency and reducing costs in manufacturing processes.

The successful implementation of the Ashburn 7700EP Semi-Synthetic coolant system and the coolant management program in the manufacturing facility presents several benefits to customers in the same industry:

- **Improved Product Quality:** By eliminating the formation of fungus and soaps in the coolant system, the Ashburn coolant ensures a cleaner and more stable machining environment. This translates to better product quality, as the coolant plays a crucial role in maintaining consistent cutting performance and reducing the risk of defects or surface imperfections.
- **Enhanced Equipment Reliability:** The elimination of clogs in filters and unplanned downtime associated with the previous coolant system directly contributes to increased equipment reliability. Customers using the Ashburn coolant can expect reduced machine breakdowns, resulting in higher productivity and reduced maintenance costs.
- **Cost Savings:** The significant monthly cost savings achieved by the manufacturing facility can be extended to other customers experiencing similar challenges. By adopting the same solution, they can reduce their coolant expenses, contributing to overall cost optimization and improved profitability.
- **Safety Assurance:** The presence of fungus in the coolant system poses safety concerns in manufacturing environments. By switching to the Ashburn coolant, customers can mitigate such risks, ensuring a safer workplace for their employees. This promotes compliance with safety regulations and fosters a positive working environment.
- **Efficiency and Operational Stability:** The Ashburn coolant system, coupled with FST's coolant management program, provides better control and consistency in maintaining the correct concentration levels resulting in improved process stability, reduced variations and enhanced operational efficiency. Customers can benefit from smoother production processes, optimized tool life and minimized disruptions.
- **Industry Best Practices:** The successful case study of the manufacturing facility serves as a reference and best practice for other customers in the same industry. They can learn from the facility's experience and take proactive steps to address coolant-related issues, emphasizing the importance of selecting the right coolant and implementing proper management practices.



The switch to Ashburn coolant and implementation of the FST coolant management program greatly improved the customer's product quality, equipment reliability, cost-effectiveness, safety standards, operational efficiency, increasing company revenue.