



# MCDONALD'S REVOLUTIONIZING WORLD-RENOWNED REFRESHMENT

CASE STUDY





## Chapter 1: A Community Hub Meets Modern Demands

It's Saturday morning in Corinth, MS. At the Gamble family's McDonald's, the drive-thru line wraps around the building. Locals wait, not just for burgers, but for that perfectly fizzy Coke they expect every time. Jeff and Tyler Gamble, father-son owners, know their neighbors count on it. However, until recently, keeping up with demand had become increasingly difficult.

Quick-service restaurants face increasing challenges with CO<sub>2</sub> supply and delivery. Shortages, higher costs, delays, and waste from leaks disrupt operations and cut into profits in the competitive foodservice industry. Regular cylinder swaps boost labor demands, cause downtime, and increase safety risks, while compliance adds complexity and costs. Outages reduce revenue and harm the customer experience, and inconsistent syrup ratios can impact product quality and customer loyalty. Besides reliability issues, transporting and using CO<sub>2</sub> also produce emissions, making traditional delivery methods less sustainable.

This case study demonstrates how Gast's innovative beverage dispensing technology transformed operations at this family-owned franchise, providing a model for other quick-service restaurants to emulate.

## Chapter 2: Beverage Operations in Crisis

The Gamble family franchise faced challenges with beverage operations from multiple angles. High demand for drinks (a vital revenue source) required quick and dependable service during peak hours. CO<sub>2</sub> shortages, worsened by COVID-19 supply chain disruptions, threatened the ability to serve carbonated beverages consistently. The real trouble was moisture sneaking into the lines. When that happens, carbonation equipment fails, and suddenly, there's no soda. Customers are disappointed, lines come to a standstill, and revenue suffers. Manual processes and constant cylinder changeovers overwhelmed a limited staff already stretched thin.

Gretchen Crump, the General Manager, said, "Manual work? We don't have time for that anymore." The urgent need for dry air, automation, and reliable CO<sub>2</sub> reduction became essential to maintain beverage quality and operational stability across their high-volume QSR environment.



**“Without CO<sub>2</sub>, our business grinds to a halt.”**

**AMY KESLER,**  
McDonald's Area Supervisor

## The Challenge:

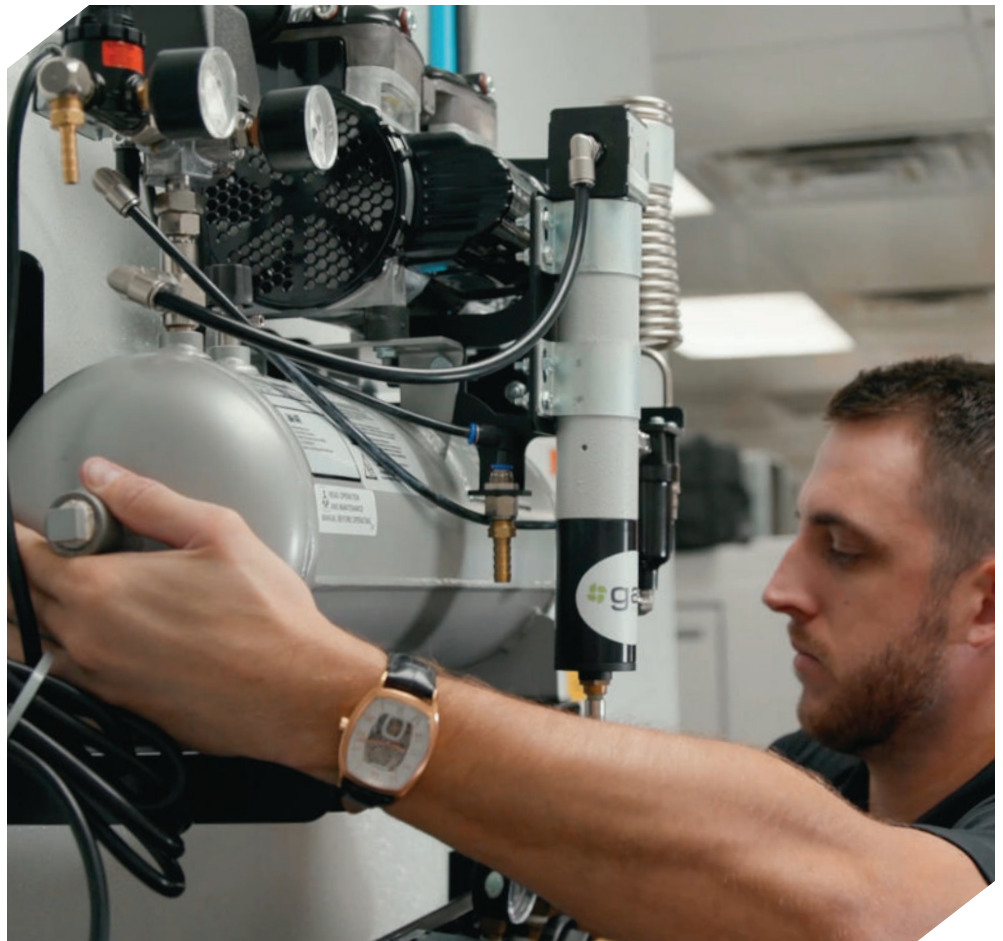
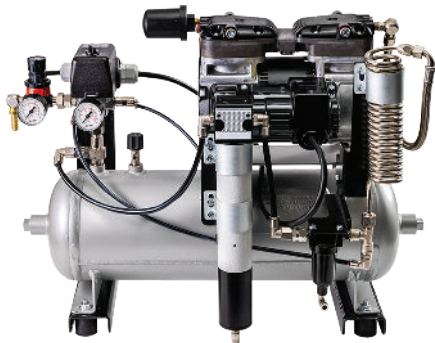
- **Supply & Cost Volatility:** Unpredictable CO<sub>2</sub> deliveries, higher fees, and leak loss led to downtime and eroded margins.
- **Operational Drag:** Constant cylinder swaps, storage constraints, and compliance complexity strained staff and increased operational risk.
- **Quality Issues:** Unstable pressures caused syrup-ratio drift and inconsistent pours, damaging the guest experience.
- **Sustainability Pressure:** CO<sub>2</sub> transportation and exhaust contributed to emissions amid growing environmental expectations.

## Chapter 3: The Gast Solution – Efficiency Up, CO<sub>2</sub> Down

To tackle these increasing challenges, McDonald's collaborated closely with Coca-Cola and Gast to create a comprehensive solution. They implemented Gast's BevG5D, an air-powered dispensing system designed specifically for high-demand QSR and convenience settings where speed, consistency, and efficiency are crucial.

### The BevG5D

The Gast BevG5D (Model 1994001) is a fast-install, high-capacity air system that replaces non-essential CO<sub>2</sub> with clean compressed air to power BIB (bag-in-box) pumps. This innovative approach dramatically reduces CO<sub>2</sub> usage and operational costs while maintaining the beverage quality McDonald's customers expect.



## Key Features:



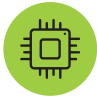
### High-Capacity Output

Powers up to 5 BIB pumps continuously with an integrated dryer, supporting peak-demand service with fast, uninterrupted dispensing.



### Capacity

Supports over 3,000 gallons of syrup dispensing, ideal for high-volume QSR operations.



### Advanced Automation

Features automation technology for intelligent operation and reliability.



### Fast Plug-and-Play Installation

Pre-configured with a dedicated pressure regulator; connects and starts serving in under an hour.



### Low Maintenance, Maximum Uptime

Built for long life with a compressor engineered for 20,000+ hours of reliable operation. Auto-drain technology eliminates manual draining, and annual pre-filter replacement keeps performance smooth.



### Efficient Performance

60 Hz operation with a 1/2 HP motor delivering 2.5 CFM at 116 PSI maximum pressure.



### Compact Footprint

Dimensions of 23.41" (L) x 12.11" (W) x 18.16" (H) allow flexible mounting on walls, floors, or shelves with no redesign required.



### Quiet Operations

65 dB(A) sound level at 51 PSI maintains a comfortable environment for staff and customers.



### Lightweight Design

At 120 lbs., the system is easy to install and relocate. No redesign required.



### Optimal Tank Capacity

5.7-gallon air receiver (87R / 2.6-GAL equivalent) provides stable pressure delivery.



### Compliance-Ready

cULus- and NSF-certified systems reduce cylinder-handling risks and meet foodservice safety standards.



### Service & Warranty

2-year service coverage with 5-year tank warranty for long-term reliability.

The BevG5D's integrated air dryer delivers moisture-free air, enhancing reliability and preventing carbonation failures that previously disrupted operations. With installation times as quick as 60 minutes (50% faster than traditional systems), the BevG5D integrates seamlessly into existing fountain setups without interrupting daily operations.



## Chapter 4: Transformative Results

The results were dramatic and measurable across all operational areas:

### Operational Efficiency

Automation reduced labor requirements and freed staff to focus on customer-facing tasks. Area Supervisor Amy Kesler noted, “It takes way less manpower.” Reliable systems cut downtime to near zero, and the elimination of frequent cylinder changeovers streamlined back-of-house operations.

The stable pressure delivery to all 5 BIB pumps, supporting over 3,000 gallons of syrup annually, meant consistent, quality pours during even the busiest rush periods.



### Cost Savings

The financial impact exceeded expectations:

- 50% reduction in CO<sub>2</sub> costs through elimination of non-essential CO<sub>2</sub> usage.
- 40% decrease in overall operational costs related to beverage dispensing.
- \$1,000 annual savings per location on CO<sub>2</sub> and delivery expenses.
- Reduced capital needs by minimizing reliance on large CO<sub>2</sub> tanks, lowering upfront investment and freeing valuable storage space.
- Lower repair expenses due to increased equipment longevity and reliability.

50%

\$1k

### Beverage Quality

Consistent carbonation and stable syrup ratios reinforced McDonald's legendary drink reputation. Michelina Koance, General Manager, raves, “Our Coke's got that perfect bubble taste!”

The air-powered system delivers:

- Steady gas delivery for improved accuracy.
- Reduced re-pours and waste.
- Reliable performance that keeps the signature McDonald's beverages tasting perfect every time.

### Sustainability

Environmental benefits aligned with corporate and community values:

- 40% reduction in CO<sub>2</sub> emissions supporting environmental goals.
- 80%+ reduction in CO<sub>2</sub> exhaust and leak points in the beverage system.
- 1,340 lbs. of CO<sub>2</sub> emissions eliminated annually per location—equivalent to 1,548 miles driven.
- Cut Scope 1 emissions and reduce logistics impact through fewer deliveries.

### Franchisee Satisfaction

Gast's smooth installation, responsive support, and reliable performance impressed even the toughest critics.



“My dad's picky, but he loves Gast!”

**TYLER GAMBLE**

McDonald's Owner/Operator

## Chapter 5: Impact and Future – A Model for Success

The BevG5D significantly benefited owners, employees, and customers across all 10 Gamble family franchise McDonald's locations in Mississippi and Tennessee.

### The transformation was comprehensive:

**For Customers:** Faster service fulfilled demands for speed and consistent quality. Perfect beverage taste maintained McDonald's brand reputation. Reliable availability even during peak hours and industry-wide shortages.

**For Employees:** Reduced manual labor and cylinder changeover burden. Simplified operations with plug-and-play reliability. Safer work environment with fewer leak points and compliance risks.

**For Owners:** Substantial cost savings and improved margins. Long-term reliability reduces repair and replacement expenses. Scalable solution supporting growth across multiple locations. Enhanced sustainability credentials meeting modern expectations.



“Our Coke tastes like magic every time!”

**MICHELINA KOANCE**  
**MCDONALD'S**  
**GENERAL MANAGER**

The Gamble family's journey from modest beginnings to franchise success, supported by Gast's technology, motivates other quick-service restaurants facing similar hurdles. Their network continues to utilize Gast's BevG5D for sustained savings and increased efficiency, setting a benchmark for others in the region and beyond.

During COVID-19, when CO<sub>2</sub> shortages threatened industry-wide operations, the Gast system kept drinks available and customers satisfied, proving its value as a future-ready solution for unpredictable supply chains.



## Chapter 6: A Partnership That Delivers

The BevG5D addresses the key operational challenges facing quick-service restaurants today, from CO<sub>2</sub> shortages and rising costs to labor inefficiencies and sustainability pressure. The system delivers measurable value across multiple dimensions:



**Stabilize Supply & OpEx:** Reduce dependence on cylinders to cut fees, outages, and leak-related losses.

**Simplify Operations:** Compact, quiet, low-maintenance systems install in under an hour and eliminate frequent changeovers.

**Elevate Quality & Reduce Waste:** Consistent gas delivery improves syrup accuracy and reduces re-pours.

**Protect Your Team & Planet:** Fewer cylinders mean fewer leaks, lower emissions, and safer operations.

### Built to Scale

The BevG5D air-powered dispensing system is preconfigured for fountain beverage applications, making it easy to standardize and grow across multiple locations. With its compact 23.41" x 12.11" x 18.16" footprint and support for over 3,000 gallons of syrup capacity, it's perfectly sized for high-volume QSR operations.



**“Gast’s a no-brainer for any quick-service restaurant.”**

**JEFF GAMBLE**  
**MCDONALD’S**  
**OWNER/OPERATOR**

Whether operating a single franchise or managing a regional network, Gast provides:

- **Reliable Uptime:** Consistent performance and stable pours even in high-volume, multi-pump programs.
- **Versatile Installation:** Wall, floor, shelf, or under-counter mounting options adapt to any layout.
- **Proven Performance:** Engineered for 20,000+ hours of reliable operation with minimal maintenance.
- **Quick Service Turnaround:** Fast installation and service access reduce downtime.

### Future-Ready Technology

As supply chains become more volatile and sustainability expectations increase, operators must reduce risk and protect beverage quality while still delivering a consistent guest experience. Gast’s air-powered technology represents a future-ready approach that:

- Reduces dependency on unstable CO<sub>2</sub> supply chains.
- Supports ESG (environmental, social, governance) goals.
- Adapts to evolving industry standards and regulations.
- Provides long-term cost predictability in uncertain markets.

For any restaurant owner facing rising costs and higher expectations, the Gamble family’s experience proves one thing: Gast isn’t just a smart investment; it’s a win for your bottom line, your team, and your customers.



## Learn More

### Ready to transform your beverage operation?

Visit [gastmfg.com/beverage](http://gastmfg.com/beverage) to find a distributor, explore the full BevG product lineup, or contact our sales team to get started.

#### Discover how Gast beverage solutions can help you:

- Cut CO<sub>2</sub> costs by up to 50%.
- Reduce emissions and support sustainability goals.
- Simplify operations with plug-and-play reliability.
- Maintain the beverage quality your customers expect.

Based on approximately 450 drinks per day (24 oz) or 3,000 gallons of syrup annually, with ⅔ hard ice fill. Individual results may vary based on location, volume, and usage patterns.



## Get In Touch

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