

National Coffee Retailer

CASE STUDY

Quality Inspection Verification



PROJECT BACKGROUND

A renowned national coffee retailer, celebrated for its meticulous attention to detail and consistent customer experience, recently partnered with Melink Corporation to expand their commissioning (Cx) services. Beyond the scope of ensuring optimal performance of mechanical systems, the coffee chain tasked Melink with an additional layer of quality validation and verification to uphold their rigorous brand standards.

CUSTOMER CHALLENGES

The coffee chain had a specific design for water pumps intended for all their stores to ensure consistent functionality and ease of maintenance. However, the contracted manufacturer responsible for installing and verifying water pumps deviated from the prescribed design. Instead of using the specified pumps, the manufacturer installed their proprietary equipment without notifying or obtaining approval from the coffee chain's team. This unapproved change went unnoticed until Melink's expanded scope of work revealed the discrepancy. The coffee chain, striving for uniformity across its locations, did not sanction this variation, as it contradicted their established

standards. After further inspection, it was discovered that the site's filtration system was completely bypassed. Such inconsistencies threatened not only the functionality of the affected systems but also the uniform brand experience valued by their customers.

THE CUSTOMIZED SOLUTION

To address this challenge, the coffee chain collaborated with Melink to incorporate a tailored quality assurance process into their existing Cx services. This new scope empowered Melink to go beyond mechanical system performance and focus on verifying compliance with the coffee chain's design specifications.

Melink's approach included:

Inspection and Verification: Conducting thorough reviews of installed equipment to ensure alignment with the coffee chain's specified design and operational standards.

Identification of Deviations: Pinpointing instances where general contractors or manufacturers deviated from approved designs.

Comprehensive Reporting: Providing actionable insights to the coffee chain, including percentages of compliance across their locations and recommendations for corrective action.



Multi-System Insights: Expanding the scope to inspect not only plumbing but also mechanical, electrical, and refrigerant systems, offering a holistic quality check across various operational domains.

INTERIOR OFFICE

The coffee chain quickly realized the value of Melink’s expanded services. The inspections uncovered inconsistencies in water pump installations across multiple locations, allowing the chain to take corrective measures. With Melink’s support, the coffee chain reinforced its standards, ensuring that all contractors adhered to the specified designs moving forward.

The partnership exemplified the importance of having a verification and validation process for corporations with multiple locations. By ensuring consistency in equipment, design, and operational standards, the coffee chain could provide a standardized customer experience, bolstering its reputation for quality and reliability.

PROJECT TAKEAWAYS

This case underscores the necessity for multi-site businesses to implement robust quality assurance processes to safeguard brand consistency.



Missing TMV in the workroom.

Through its tailored approach, Melink Corporation demonstrated how an additional layer of validation can mitigate risks, enhance operational efficiency, and maintain the high standards that customers expect.

For the coffee chain, the expanded scope of work solidified their confidence in the systems supporting their stores and ensured that their commitment to excellence remained uncompromised across all locations. This collaboration highlights the critical role of trusted service providers in upholding the integrity of brand standards at scale.

Figure A

Item	Equip Tag (Ref#)	Description	Corrective Action	Corrected By	Corrected Date
1	RTU-1 (11,20,21,24,25,38,43,45,46), RTU-2 (11,20,21,24,25,38,43,45,46)	The Venstar system is installed but has not yet been commissioned. Per the site superintendent, this has been delayed due to internet issues onsite. stated that the internet should be operational Friday (12/13/2024) and the Venstar system will be commissioned then.			
2	RTU-1 (50,51,52), RTU-2 (50,51,52)	The RTUs did not turn off during the smoke detector test.	A wire was not landed right. The wire was re-landed to allow proper operation.	VP Mechanical	12/11/2024
3	RTU-1 (26), RTU-2 (26)	The minimum damper positions for OA are not marked for each RTU.			
4	Plumb (22,23)	The two hand sinks in the Engine, the hand sink in the Workroom, and the hand sink in the break area are missing TMVs. The water temperatures all exceed 120 degrees currently.			
5	Plumb (3)	A small water leak was found in the RO system above the cartridges.			

Figure A shows a sample of the coffee chain’s deficiency log from their onsite Cx findings.

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PROJECT BACKGROUND

A national coffee retailer is known for placing a strong emphasis on providing a consistent customer experience across all its locations. To achieve this, ensuring the functionality and quality of equipment and infrastructure is critical. This case study explores a commissioning (Cx) review that identified significant issues related to pump installation and performance, highlighting the value of Cx in maintaining quality standards.

CUSTOMER CHALLENGES

The coffee retailer had previously provided specifications for electrical and plumbing installations in its stores. The contractors were responsible for following the provided design standards. However, inconsistencies arose because some specifications were omitted from the designs, and contractors were unaware that certain equipment was necessary. This miscommunication resulted in critical equipment being overlooked.

The Issue

During a recent inspection, Melink took the investigation to a deeper level, discovering discrepancies involving specific water pumps. The inspection revealed multiple points of failure:

- A manufacturer included a pump that did not meet the proper design specification.

- A plumber, seeing a pump on the skid, assumed it was installed and failed to install the correct pump.

As a result, the coffee retailer remained unaware that:

- Their specified pumps were not being used.
- Plumbers had occasionally omitted the installation of critical pumps.

Consequences

This oversight had several negative impacts:

- Inadequate water pressure within the system, which could impede the coffee retailer's ability to add equipment in the future.
- Affected coffee taste, which directly undermines the coffee retailer's commitment to quality and customer satisfaction.
- Residue buildup in water lines and taps, risking both performance and sanitation standards.



RO system is leaking.



THE ROLE OF CX

Commissioning provided the coffee retailer with a proactive solution to address these challenges. By engaging in a comprehensive inspection, Melink ensured that equipment such as combi ovens and exhaust systems met safety and performance expectations. This thorough review process also improved the coffee retailer's ability to maintain consistency in their store environments.

Benefits of Commissioning Through commissioning, The coffee retailer achieved several key benefits:

- **Consistency:** Ensures uniformity in taste, atmosphere, and customer experience across stores.
- **Safety and Performance:** Verified that equipment like combi ovens and exhaust systems met operational standards.
- **Accountability and Insight:** The inspection process identified areas where contractors and suppliers had deviated from specifications.

PROJECT TAKEAWAYS

A significant advantage the coffee retailer gained was access to a centralized data portal. This portal enables:

- Easy tracking of data and deficiencies.
- The ability to edit or add tags for improved reporting accuracy.
- Efficient generation of new reports with consistent data formatting.



Missing TMV in the workroom.

By leveraging commissioning services, the national coffee retailer reinforced its commitment to delivering a consistent and high-quality customer experience. The insights gained improved equipment accountability, ensured operational performance, and safeguarded the coffee retailer's brand reputation. As the coffee chain continues to prioritize customer satisfaction, investing in Cx remains an essential step in maintaining quality and consistency across its stores.

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Figure A shows a sample of the coffee chain's deficiency log from their onsite Cx findings. Some names have been censored for the customer's privacy.

