Quincy Recycle Case Study: MSI Express

Recycling Solutions

Quincy Recycle and MSI Express each recognize that sustainability drives innovation, enhances brand value and reputation, contributes to a healthier workplace, and overall is simply good business. MSI is committed to the environment and recycling to keep waste out of landfills. Quincy Recycle is helping MSI meet their commitment.

Most companies shy away from trying to recycle mixed materials such as plastics laminated with foil with the mentality of "there's nothing we can do." But, that was not the case for MSI Express. Instead, they held firm to their commitment to reducing landfill waste and partnered with a tenacious Quincy Recycle to provide an innovative solution after countless attempts by other companies.



A GREENER OUTLOOK

& REVENUE GENERATION

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msiexpress.com

MEET QUINCY RECYCLE

As a leading industrial recycling company, Quincy Recycle has been solving waste stream problems for manufacturers and other industrial suppliers across the country for nearly 50 years. Quincy Recycle helps companies establish sustainability procedures through comprehensive waste audits to identify current sources of waste generation, discover areas for improvement, provide opportunities for more sustainable materials. and create potential revenue streams. With in-house logistics, equipment distribution, and food waste processing, Quincy Recycle is a one-stop shop to help partners maximize their financial and sustainability goals through custom waste solutions.



quincyrecycle.com





MEET MSI EXPRESS

MSI Express is a strategic, innovative contract manufacturing and packaging company. Our growing breadth of capabilities and trusted team of problem solvers are a perfect match for the challenges of today's CPG world. MSI served more than 100 global brands in 2023 and is one of the fastest growing companies in the Midwest. The company is focused on driving better energy efficiency and reducing their carbon footprint by reducing landfill waste to zero. MSI is also moving toward 100% recyclable material use to enable their customers to meet their sustainability goals. MSI's goal is to be the sustainability leader in the contract manufacturing industry.



THE PRIORITY

MSI Express wanted to recycle a mixed material without having to separate it.

MSI is one of only a few packaging companies to employ the Hassia machine, which is a large form, fill and seal machine. For several years, MSI Express had been searching for a way to recycle a mixed material of polystyrene and foil leftover from lids created on the Hassia. The lids are sealed on products such as plastic juice cups, which are formed on the machine from flat stock.

The high-impact polystyrene from the cups is easier to recycle than the lidding material that includes both lacquer and foil. The remaining mixed material around the lid punch-outs or "skeletons" were difficult to separate and created a recycling challenge.

MSI worked with various vendors to attempt to recycle the lid material with no success.

Most vendors recommended that MSI separate the materials, which was not time or cost efficient. At one point, a vendor sent an engineer in-house to develop an unwinding device to separate the materials. However, the materials kept tearing, resulting in machine stops, scrapping more cups, and lost product.

Frustrated but determined, MSI continued looking for a partner to recycle the "body stock" combination of materials without having to take the material apart and separate it.

In 2018, MSI and Quincy Recycle began partnering to recycle MSI's high volume of cardboard and drums. When Bretton Knuuttila was promoted to plant manager at MSI's Rosendale and Ripon locations in Wisconsin in 2022, he made recycling the mixed material from the lids a priority. Because of the strong trust MSI had with the Quincy Recycle team, Brett asked them to find a way to recycle the material.

These materials made up a huge portion of waste stream from the plant. The goal was to avoid sending these materials to the landfill in alignment with MSI's sustainability commitment.

THE SOLUTION

Finding a new market for the mixed materials.

Quincy Recycle rose to the challenge and found a solution. The Quincy Recycle team, led by Brian Sixsmith, a seasoned sales representative from the Alsip, Illinois, location, worked closely with MSI to understand their challenges and identify opportunities.

After a year of tireless research, networking, and drive to find an innovative solution, Quincy Recycle and MSI not only created an efficient recycling process at the Rosendale plant, but they also uncovered a market for the recycled punch-out skeletons without the need to separate the mixed materials.

It was a double win. MSI enjoyed both cost savings from landfill diversion as well as revenue generation from selling the recycled materials through Quincy Recycle.

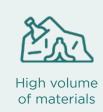
"I was happy that Quincy Recycle accepted the body stock challenge," Brett says. "I've been at the plant for 10 years working with the Hassia and scrap and all that goes with it. We end up hauling a lot of garbage out of here. Being able to recycle the body stock cut outs was an instant win for the plant. Many before me had worked on this project with other vendors. When Quincy Recycle found a solution, we were so excited."





PLANT CHALLENGES









Before

Before finding a solution, Quincy Recycle conducted a waste audit and listened carefully to MSI's needs. The team also identified challenges and offered ideas that ultimately paved a smoother path for the new recycling process.

The first step was to optimize every square foot of MSI's Rosendale small plant. Before the new recycling process began, bales of cardboard were stacked up outside. The lid cutouts went into a compactor or two open-top dumpsters. This was not a clean, attractive solution and took up valuable space. In addition, the forklifts needed to move the materials would often get stuck during Wisconsin's snowy winters.

Before the mixed material recycling process was established, Quincy Recycle had been hauling away drums and cardboard for recycling. It was difficult for the trucks to keep up with the volume so Quincy Recycle adjusted to meet the needs.

After

In partnership, they determined where to set Gaylords for collection and what to do with them when they were filled. Through the new recycling process, Quincy Recycle leaves a drop trailer onsite and collects all the drums, lid cutouts, and baled cardboard to make it more efficient leaving the plant. The Gaylords are loaded directly on the trailer and Quincy Recycle removes a truck a day. The reduced compactor usage also means MSI was able to eliminate a full pick up a week. In addition, the plant only requires one open-top dumpster onsite now instead of two.

Quincy Recycle worked closely with the MSI team to determine what operational changes were needed based on the large volume of materials collected. Quincy Recycle also coordinated logistics and made sure the process was executed properly. That meant ensuring materials leave the plant in a timely manner so they were not accumulating on the dock.

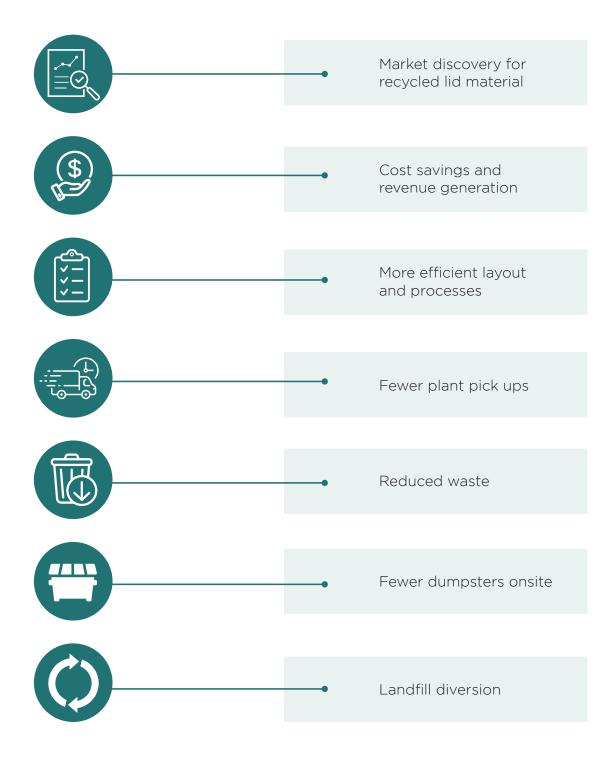
"We are nimble and flexible as we create innovative solutions. We pivot to fit what will work for our client's facility. That's one of our core values and is entrenched in our culture. We might not have an answer today, but we will get there. We are tenacious when it comes to creating a solution for our customers."

Brian Sixsmith,
Quincy Recycle Sales
Representative

The new process also alleviated stress on the plant overall and reduced the amount of waste going into the compactor.

Building on this success, Quincy Recycle applies its experience and expertise to replicate innovative solutions to benefit other customers.

OVERALL RESULTS



SUSTAINABLE BENEFITS

A Cost-Saving Partnership

Before 2022, MSI had been using separate companies for barrel hauling, and for recycling cardboard, garbage, and metals. Once Quincy Recycle found a solution to the mixed material lid recycling, MSI was able to streamline all recycling through the company.

The efficiencies have paid off in time and costs—and have created new revenue streams for MSI after Quincy Recycle found a market to sell the recycled materials.

"By centralizing recycling with Quincy Recycle, the Rosendale waste streaming is more efficient and has saved the plant money every month—that's a huge win," Brett says. "After all the unsuccessful recycling trials over the years, I was starting to doubt we could recycle the mixed material. The day I found out we could recycle it was huge—plus we could sell the product and make money. We were all celebrating in the plant."

Revenue Generation

With an innovative approach and a vast network of partners, Quincy Recycle is dedicated to developing outlets for materials so they can be used for other purposes when possible. Because the recycling market is ever-changing, Quincy Recycle finds multiple options on the quest to find the best price on behalf of customers. The team is poised to pivot with every project.

MSI benefited from this expertise when Quincy Recycle found a market for the lid mixed materials. MSI saved money by diverting materials from the landfill and also generated revenue by selling the materials. "The benefits are two-fold: we're saving money by diverting material from the landfill and we're generating revenue by reselling the recycled materials. This is the first project I've seen that has had this kind of impact on the plant."

— Brett Knuuttila, MSI Express Plant Manager Rosendale and Ripon locations in Wisconsin

A Sustainability Mindset

Buoyed by the success of recycling the mixed materials, MSI has launched a Trash to Treasure program focused on sustainability.

"This recycling solution was a huge boost to team morale, knowing we're getting waste out of landfills," Brett says. "It was the highlight of last year to make that happen and has opened the door to other possibilities. Our commitment goes beyond this plant. All our plants are working toward expanded recycling for a better future."

The Trash to Treasure program makes recycling and waste reduction part of MSI's production process now and has increased recycling by 37% from 2021-2023. From 2022 and 2023, MSI increased the tonnage of recycled materials, and divert 59% of their production waste from the landfill.

In February 2023, MSI acquired the Ripon facility, which already had a strong recycling

program in place. Today, the Rosendale and Ripon plants are sharing resources as the teams determine the potential of other materials to recycle. This project was possible because of the commitment and partnership of Quincy Recycle and MSI.

"The Rosendale plant got the ball rolling on the whole initiative and sparked new ideas for recycling opportunities," Brett says. "The success of recycling the mixed materials lids has been a game changer. There has been an overall culture shift in the plant with more focus on green initiatives rather than throwing things away. It's creating a new mindset. It's sparking questions and ideas from people on the floor and the management team about ways to recycle other materials. They are engaged in finding solutions. Rather than sending these materials to the landfill and burying them, we are making use of them. We're reducing our environmental footprint while benefiting from cost savings and revenue generation."



