

Case Study

How a Household Products Retailer Cut Costs with Sebright Product's EPS Densifier

Client Overview:

- A major electronics and household appliances retailer
- Expanding their product lines required the customer to handle over 3.5 million pounds of expanded polystyrene packaging (EPS) per year to handle the shipment of products from the manufacturer to retailer's distribution centers and stores
- Customer was previously using old hot-melt densifiers to compact the foam into recyclable blocks, which caused the following challenges, including:
 - The hot-melt densifiers required manpower to fill them with EPS, creating additional labor expenses
 - The machine's throughput wasn't fast enough in processing the materials to avoid a bottleneck in processing the volume of EPS from the retailer
 - The machine created an unpleasant odor when processing EPS through it

Objective:

To evaluate and implement a high-capacity EPS recycling solution that eliminates processing bottlenecks, reduces labor requirements, and improves workplace conditions by replacing outdated hot-melt densifiers with a more efficient system capable of handling EPS more efficiently.

Solution:

Sebright Products worked with a trusted dealer, along with the customer, to start processing their EPS with a custom Sebright Products D30 Densifier system.

Results:

- Sebright Products' D30 Densifier was able to increase throughput 8 times faster than the densifier the customer previously used.
- The D30 Densifier was able to successfully compact to a density of up to 22 pounds per cubic foot.
- The compacted foam blocks were able to fill up trucks with up to 40,000 pounds of material for deliveries to recyclers, compared to a truckload of loose foam that weighs only 2,000 pounds.
- The EPS Densifier allowed the retailer to reduce waste removal expenses, and reduce the amount of trips made per week on waste removal, from once a day to every 5-7 days at the retailer's facilities.
- Sebright Product's D30 Densifier now operates in the retailer's distribution centers and locations across the county, allowing the retailer to save on labor costs and hauling expenses for foam waste.

Conclusion:

The custom D30 EPS Densifier from Sebright Products outperformed expectations, delivering 8 times the throughput of foam improved material density for more efficient transport, and reduced both labor and hauling costs. With fewer waste removal trips required and a cleaner, safer operating environment, the retailer achieved substantial cost savings and sustainability benefits.

