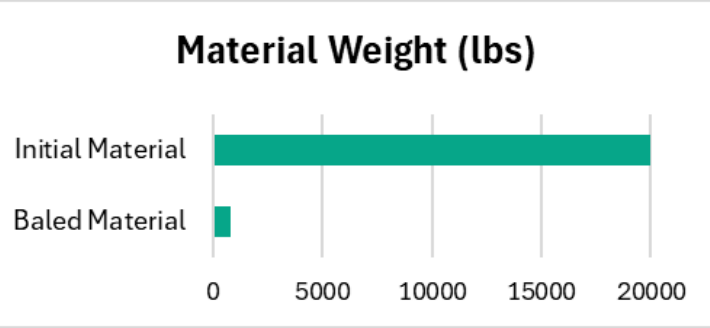
Case Study
XCycler - IV Bags

Why Dewatering?

Baling industrial waste allows producers to significantly reduce the weight of their waste, allowing for major cost savings in shipping and disposal. Additionally, the Association of Plastic Recyclers (APR) sets guidelines for product destruction, requiring bales to contain no more than 5% of the bale's weight in moisture content. If a bale exceeds these thresholds, the value will be reduced. Additionally, producers have a responsibility to the public to ensure their practices are safe. The XCycler assists in this process by ensuring compliance to industry regulations and supporting a higher ESG score.



Client Overview:

- Medical Product Manufacturer
- Requires total destruction of excess IV bags
- Destruction eliminates risk of unauthorized sales
- Client complies with Extended Producer Responsibility (EPR) guidelines, vital for medical industry

Objective:

Ensure complete destruction of each IV Bag while minimizing bale density and maintaining a bale moisture content below 5%.

Materials:

- 21 pallets of materials were received as test material
- Each bag weighed 2lbs
- Each pallet weighed 950lbs
- The pallets consisted of 19,950lbs of total material

Results:

- Material filled bale to 68% of capacity (800lbs)
- Achieved a 25:1 reduction
- Moisture content of bale was 1.02% after processing

Conclusion:

To ensure complete destruction of all IV bags, we added a perforator and a custom conveyor. The perforator punctures each bag with stainless steel teeth, ensuring total destruction. The custom conveyor efficiently transports the IV bags through the perforator and meters the flow, ensuring that only a few bags can drop at a time. Using this technology allows for precise destruction of each bag.

SEBRIGHT PRODUCTS