

# OUR MSW RECOVERY PROCESS

because the bags can block our access to the material down the line and also bind up the machinery.

## 5. MachineEx OCC

Screen - Cardboard recovery. Cardboard is directed into a dedicated baler. A dedicated picking station helps ensure product quality.



## 6. Second Stage Fines Remover and Glass Breaker

- This station is one of three ways that food waste is removed from our process.



## 7. Sherbrooke OEM Fiber Screen

- pushes the paper to the top where it is directed into a hopper and dedicated baler.



## 8. BloApCo fiber suction system by Air-Craftsman

- Provides bell housing suction in-feeds so paper that escapes the fiber screen gets redirected and harvested.



9. Main Sort Table - Where strategically placed drop chutes are placed over custom designed storage bunkers. Overhead the BloApCo suction system maximizes paper and plastic bag recovery. The strength of this process is the negative sort design. We are not using manual labor to do the work of machinery we are enhancing the recovery process by removing material that may have slipped through the cracks.



## 10. Eriez Ferrous Metal Magnet

- Redirects steel, tin and other ferrous metals to bunkers below.



## 11. Sapphire Optical Sorter

- Capable of recovering three grades of plastic faster than the eye can see. The other four plastic grades are harvested on the main sort table.



## 12. Dings Eddy Current

- pulls aluminum from the stream and is combined with a third BloApCo system to further enhance aluminum recovery.



The recovery process begins at receiving where our team harvests large bulky metal material and large rigid plastics. They also remove items such as fire extinguishers, propane tanks, and lead acid batteries.

## 1. Infeed belt

- Material is pushed onto the infeed belt where it starts its ascent onto the machinery.



## 2. Presort

- Continues to remove bulky and awkward items like garden hoses, microwaves, paint cans and extension cords.



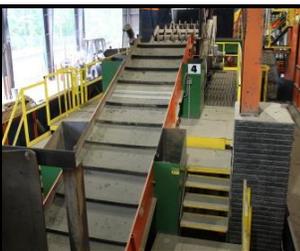
## 3. McClosky bag breaker

- Nicknamed "Jaws" because no bag escapes unopened. Also provides removal of 1<sup>st</sup> stage fines.



## 4. Post-sort

- follows with the single focus of removing the broken bags from the process. This is an important step



**13. Endless Loop Recirculation Capability -**

Sets us apart in our industry. Other facilities have only ‘one-pass’ capability. The conveyor leg brings material back to the intake side of the system so if an aluminum can slips through or a plastic bottle escapes undetected, we will be able to capture it the 2<sup>nd</sup> or 3<sup>rd</sup> time around. This distinctive feature gives us control of the recovery rate. This is a game changer.



**14. Aluminum Silo -**

Custom designed in-house, to store product until it is ready to be dumped on the product belt for baling.



**15. Custom designed storage bunkers -**

Are significant because of their ability to drop material directly onto the product belt without disrupting or slowing the recovery process.



**16. Product belt -** material is emptied from the bunkers and is fed directly into the Marathon baler at the end of the belt.



**17. BloApCo Film Suction System -**

Used to remove plastic film from the system. This is important because film covers material inhibiting recovery.



**18. Marathon 2 Ram Baler -** This critical piece of machinery receives material directly from the product belt and bails it for market.



**19. Harris Horizontal Baler -** bales paper from a dedicated hopper fed by the fiber screen, as well as, material redirected from the BloApCo suction system.



**20. Marathon 1475 Compactor -** Any residual material that remains in our system goes onto a residual belt that feeds into the compactor and trailer.



**21. Product Control and Loading Dock -** Like farmers, it is very important to us that we ensure that everything we bale meets the quality standards of our purchasers. Strategic picking stations help ensure this, as well as, a quality check before loading. Anything that does not meet the standards gets reprocessed.

# VAN DER LINDE RECYCLING



**MSW**  
(Municipal Solid Waste)

## Material Recovery Facility

Custom designed to process  
both co-mingled recyclables  
and “all in one” can

73 Hunters Branch Road Troy, VA  
434-589-1948