

# Conover MRF



# Conover MRF Facts:

Originally opened in November 1990

Converted to Residential Single Stream 2013-2014

Cranked up the new system March 17, 2014

Currently we are 55% Residential 45% Commercial/Industrial.  
Approximately 11 hours per day and 4200 tons per month  
Average Glass per month 550

Before we were 30% Residential 70 % Commercial/Industrial  
Approximately 20 hours per day and 2900 tons per month  
Average Glass per month 216

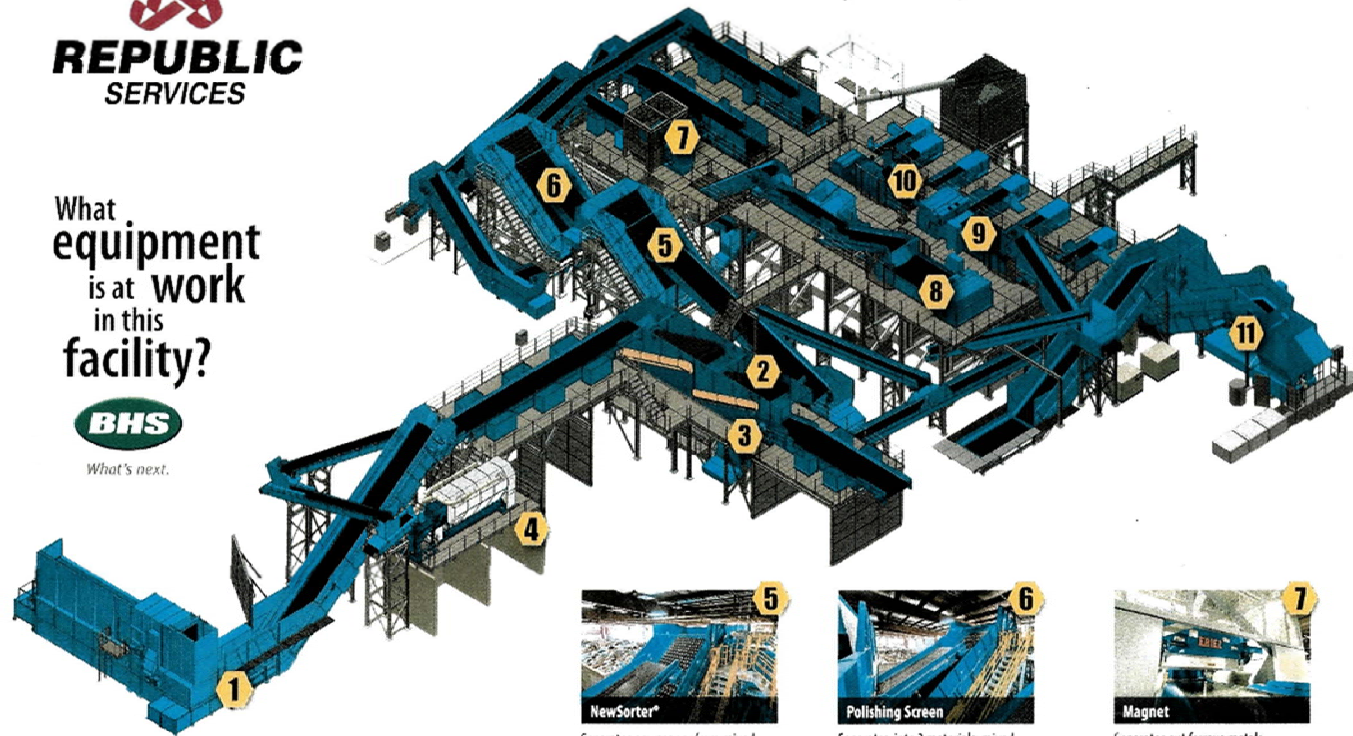
Added 15 positions once converted

Recycling has seen many changes in 25 years



## Republic Services Conover, North Carolina Materials Recovery Facility

What  
equipment  
is at work  
in this  
facility?



**Metering Bin**

Provides an even, steady flow of material into the system.



**OCC Separator**

Separates cardboard from paper, containers and fines



**Debris Roll Screen** (under OCC Separator)

Separates fines, including glass, from paper and containers



**Nihot Single Drum Separator**

Separates glass from fiber fines



**NRT Optical Sorter #1**

Uses near-infrared technology to separate PET plastics



**NewSorter**

Separates newspaper from mixed paper and containers



**Polishing Screen**

Separates into 3 materials: mixed paper, containers, fines



**Magnet**

Separates out ferrous metals



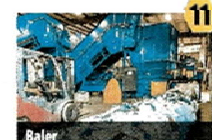
**NRT Optical Sorter #2**

Uses near-infrared technology to separate HDPE plastics



**Eddy Current Separator**

Separates aluminum cans from material stream



**Baler**

Compresses final products into bales

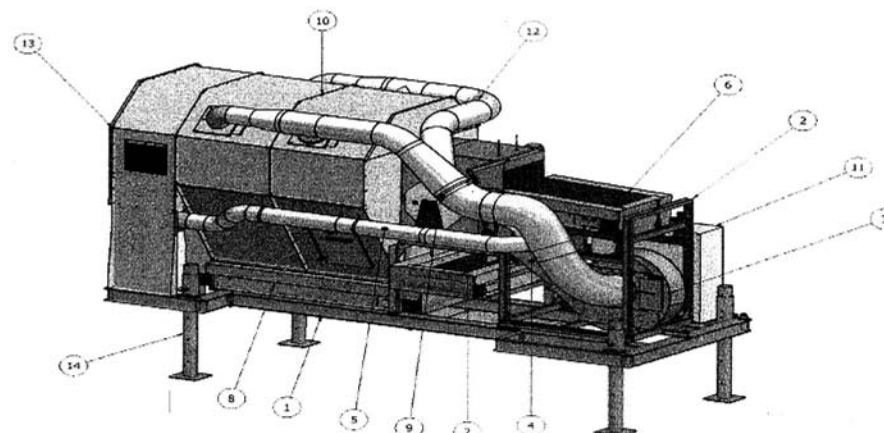
### 3.4 INTENDED USE

The intended use of the drum separator is to separate the light materials from the material as described in section 3.3 "Input material to be proceed".

Any use other than the one for which the drum separator was designed is to be considered improper and therefore ABSOLUTELY PROHIBITED.

The manufacturer declines all responsibility for any harm to things and/or people or for lost production time resulting from use of the crane in these conditions.

### 3.5 DESCRIPTION OF THE MAIN COMPONENTS



The drum separator is made up of the following components:

1. Main frame
2. Sub frame
3. Recirculation fan
4. Blow nozzle/control valve unit
5. Ducting to dust filter
6. Product Input Conveyor
7. Heavy Weight Conveyor
8. Light Weight Conveyor
9. Drum system
10. Expansion room
11. Electrical cabinet
12. Air return ducting
13. Filter section (Integrated in expansion room)
14. Adjustable studs







## Close up of fines



# Drum





# Nihot infeed belts









## Talking points:

- *Initial costs just for the glass clean up system (Nihot and associated parts). In excess of 1 million dollars.*
- *Since start up we have changed the glass infeed belts more frequent than any other belts on the system:*
  - belt feeding the drum 7 times*
  - belt inside chamber 2 times*
  - Belt feeding the short belt to the drum 2 times*
- *A high percent of our repair costs to date and downtime has been associated with glass.*
- *The glass has eaten holes in the walls of the Nihot and the cardboard separator.*
- *Glass eats the floors of the automated trucks, the conveyor walls and skirting.*



*Thank You*