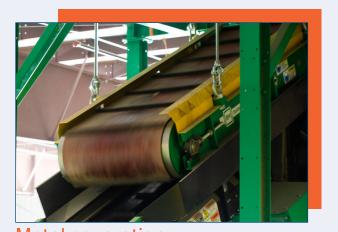
## PROVEN RESULTS



Magnets and Eddy currents target ferrous and non-ferrous metals.



Online, real-time analysis in the production of substitute fuels.



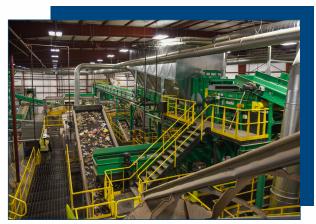
Secondary shredders for final sizing and preparation.



Santa Barbara, CA



Grupo CIP Puebla, Mexico



Fulcrum BioEnergy Sparks, Nevada



### LIFETIME PARTS & SERVICE SUPPORT, GUARANTEED.

Our work does not stop at the sale. We provide extensive start-up support and operator training. Our service team provides after-sale service from locations throughout North America.

Over 60% of our employees are dedicated to service, parts, or technical support. All of our systems include lifetime phone support, which is available after hours and on weekends.

We stock every part for every core piece of equipment we sell in our Norwalk, CT warehouse with an inventory of spare parts exceeding \$20 million. Parts are available for same-day shipping 365 days a year.



203.967.1100 | vdrs.com | info@vdrs.com

# **MUNICIPAL SOLID WASTE**

Separate recyclables, organics, and fuel to divert waste from landfill.



Density separation Separate good feedstock materials by density.

### **OUR TECHNOLOGIES**

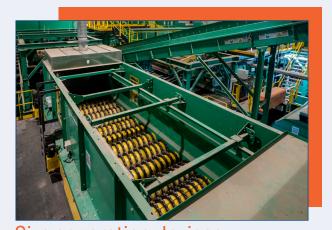


Size reducers Initial coarse shredding, bag liberating, and sizing.



**3D Trommel Screens** For true 3D sizing, our patented trommel eliminates





Full lineup of screens to remove oversized material, fines and organics.



2D/3D separation Skim off 2D materials while screening out minus materials. No-wrap, no-star design.

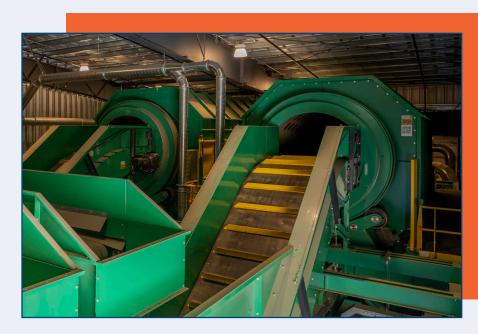


Optical sorting Separate containers by grade and sort plastics to make fuel products.

# SIZE SEPARATION

with patented screen designs

#### **3D TROMMEL SCREEN**



Heavy duty and precise screening component

Robust design and extra thick walls handle

Effective long-parts separator to prevent ownstream jams

### **GÜNTHER SPLITTER®**



Remove fines while preparing material for downstream sorting

Screen is highly adjustable by speed, length, angle, and screen gap

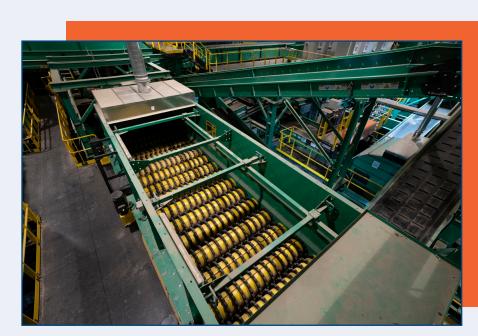
Low maintenance (no stars, no wrapping, selfcleaning and wear resistant)

Easy to install

Cheen Sizes			
10DEL	LENGTH	WIDTH	
25	13' 2"	8' 2"	
25	16' 5"	8' 2"	
25	19' 8"	8' 2"	

FRACTION SIZES	
COARSE SPLITTER	8" - 12" minus
MIDDLE SPLITTER	5" - 6" minus
FINE SPLITTER	1.5" - 4" minus

### **ANTI-WRAPPING SCREEN**



emove oversized materials and screen out fines while processing at a high throughput p to 50tph)

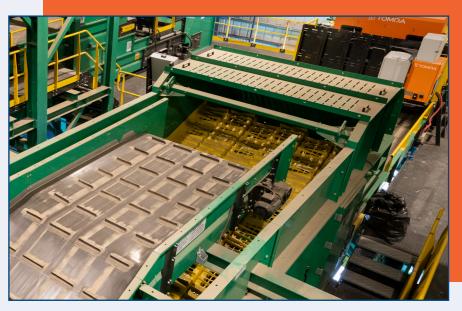
ivert 95% of <2" organic fines

Easily change screening size to increase system flexibility

Achieve high purity with aggressive agitation

Faster cleaning and fewer star changes

#### **ELLIPTICAL SCREEN**



inal removal of 2D and fine materials from

lighly accurate separation when material is roperly prepared

True 2" holes screen out remaining fines

/irtually no cleaning

NO star changes

# OPTICAL SORTERS



TOMRA AUTOSO	RT SPECS	
AUTOSORT 1000	3.3 ft wide. Up to 3 tons/hr	
AUTOSORT 1400	4.5 ft wide. Up to 5 tons/hr	

#### **Features**

- High mounted scanner and single light source
- Spray from air nozzles cannot contaminate lenses and lamps

AUTOSORT 2000 6.6 ft wide. Up to 7 tons/hr AUTOSORT 2800 9.2 ft wide. Up to 10 tons/hr

- Stable sorting performance over entire shift without cleaning
- Highest sorting accuracy
- Reliability in extreme temperatures
- Award-winning customer-friendly user interface
- Multiple tracks of the same unit can sort multiple grades simultaneously

#### **Applications**

- Recover small OCC ("browns") from fiber
- Recover fiber from containers
- PET processing/upgrading
- Mixed plastics processing
- Sorting plastics by color and grade—clear PET from colored or natural PE from pigmented
- Sorting rigid plastics by grade, including PET, HDPE, PP, PS, PVC, 3-7 mixed plastics
- Maximum recovery of #1, #2, and #5 plastics
- Sorting PE film from a waste stream
- Sorting aseptic packaging
- Sorting PP and PS by grade
- Final quality control sorting of plastics grade for high purity

#### **New Advancements**

- Deep Laiser recovers black plastics, sees virtually everything, including glass, organics, and random
- GAIN image recognition using AI technology
- Metal detection
- Ability to recognize and recover low melts and thermoforms



WIDTH (mm)	800	1200	1600	2000	2400	2800	
A	7377	7377	7377	7377	8377	8377	
В	2615	2615	2615	2615	2615	2615	
<b>6</b>	1740	2140	2540	2940	3413	3813	
0	4770	4770	4770	4770	5770	5770	
<b>6</b>	1000 ±50	1000 ±50	1000 ±50	1000 ±50	1000 ±50	1000 ±5	
WEIGHT (KG)	600	700	800	900	1000	1100	
POWER (KW)	2	2,5	2,5	3	3	3,5	
POWER SUPPLY	230 V - 50Hz SINGLE PHASE						
COMPRESSED AIR	7-8 BAR						
CONVEYOR SPEED	3 M/S						
CAPACITY (DEP. ON STREAM)	2-4 T/H	3-6 T/H	4-8 T/H	5-10 T/H	6-12 T/H	7-14 T/	
COMMUNICATION	MODBUS						
		V DISTAN	`E	-	PACTION S	175	
	EV DISTANCE			FRACTION SIZE			
STANDARD	25 mm			30-250 mm			
HIGH RESOLUTION BAR (HR)	12,5 mm			10-250 mm			
HIGH POWER BAR (HP)		12,5 mm			30-250 mm		
		SE	NSOP CON	IEIGUPATIO	ON		
NIR SENSOR	SENSOR CONFIGURATION STANDARD						
NIR AND VISIBLE SENSOR	OPTION						
INDUCTIVE SENSOR	OPTION						

# AIR SYSTEMS

2-way, 3-way, and 4-way density separators provide maximum separation of mixed waste and MSW streams at high capacities.



- Highly accurate separation due to maximum adjustability of the airstream
- Handles wide variety of material
- High-volume due to high air transport speeds
- Low maintenance costs
- No material is transported through duct lines (eliminating wear and blockages)

#### **Applications**

- Divert material streams in different densities to improve post sorting efficiency
- Eliminate shredder damage in RDF processes
- Improve performance of post sorting equipment by reducing volume
- Improve light fraction sorting (film) with over belt suction
- Improve air quality with dust extraction system



