

for Sustainable Environment
ACI Waste Treatment Machines



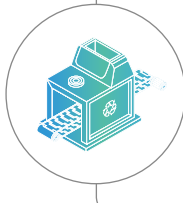


Sustainability Created by What We Do



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Recycling System Brand, ACI ENTECH is surveying, consulting, manufacturing, installing, operating the waste treatment equipments, ACI ENTECH is the best partner in this field.



MRF Material Recovery Facility

MRF is the plant where we separate the mixed recyclable wastes into individual categories for reuse and recycle. With the help of the mechanical sorting, we get PET, PE, PP, PS, Paper, Metal and Glass Bottle. The sorted and baled recycle materials are sold for the material recycling.



MBT Mechanical Biological Treatment Facility

MBT Facility has the combined system of mechanical and biological treatment of Municipal Solid Waste (MSW). With mechanical system, we shred and sort MSW into Recyclables, Inerts and SRF, and digest the biological parts of sorted MSW to reduce the methane and CO₂ emission into the atmosphere.



WEEE Waste of Electrical and Electronic Equipment Treatment Facility

WEEE Facility is the plant where we shred and sort the Electrical and Electronic wastes into valuable Plastics and Metals. We will get the plastics like ABS, PS, PP, PE and the metals like Gold, Silver, Copper and Stainless Steel.



SRF Solid Refuse Fuel Facility

SRF Facility is to produce Solid Refuse Fuel (SRF) from non-recyclable and combustible wastes by shredding, sorting, drying and baling. SRF is consumed in the combustion plant to make steam and electricity, and the cement kiln. SRF is also gasified for burning and liquidified after purification to make methane.



BWT Biological Waste Treatment Facility

After milling and separating the biological wastes including food garbage, BWT facility produces biogas, steam, electricity and compost with the various technologies like Aerobic Digestion and Anaerobic Digestion. The same technologies are used for bio-drying of MSW with high contents of biological waste.



Bio SRF Bio Solid Refuse Fuel Facility

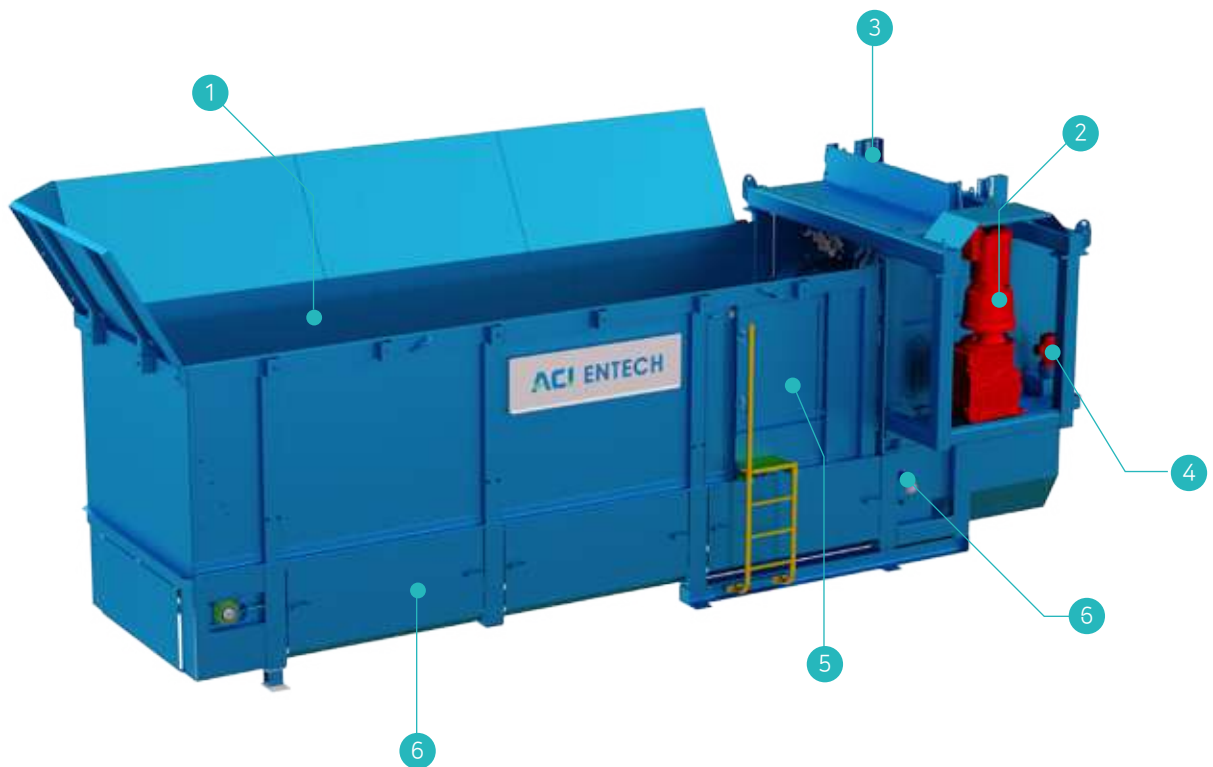
From the waste wood, bio SRF facility produces bio SRF such as wood chip and wood pellet by milling, shredding, sorting, drying and pelletizing. Bio SRF is the major source of renewable energy.

01 Bag Splitter

Machine for waste bag splitting and continuous feeding

Various sizes of waste bags to be split

ACI ENTECH Bag Splitter is to split the collected waste bags fed by wheel-loader with several rotating knives mounted on the rotor and make the materials broken into proper sizes for sorting. The bag splitters are often installed in the waste feeding section of MRF (Material Recovery Facility) to split the waste bags and supply them to the sorting machines continuously and evenly. It facilitates the smooth process flow of the sorting line.



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|--------------------|---------------|-------------------|
| 1 Bunker | 3 Fixed Knife | 5 Inspection Door |
| 2 Main Drive Motor | 4 Rotor | 6 Chain Conveyor |

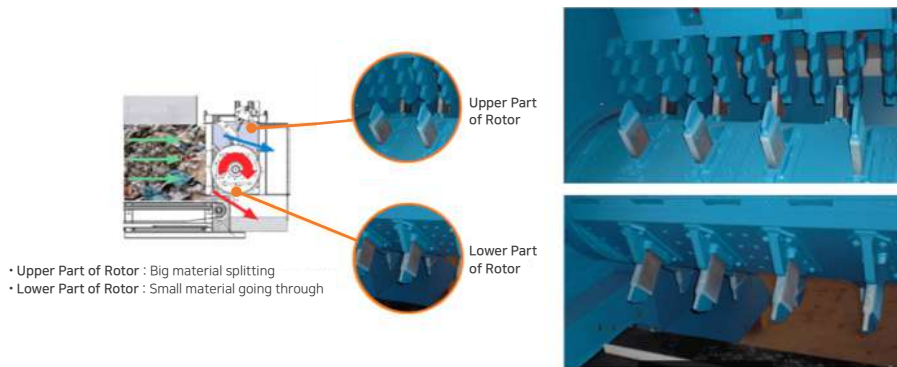
Applications

- MRF (Material Recovery Facility)
- Facility which needs bag splitting, shredding and evenly supplying the waste materials (MRF's Waste Feeding Section)
- Feeding Controller at waste wood recovery facility

Features & Advantages

- Bag split rate at around 95%, Overload protection system
- High splitting rate of plastic bags inside plastic bags
- Light weight packaging containers and household wastes
- Large hopper and controlled volume discharge with high efficiency splitting system
- Jamming protection by string, wire, long film

Working Principle



Height-adjustable fixed knife

- Increased bag splitting ratio due to height adjustable fixed knife located at upper part
- Fixed knife and Rotation knife made out of special material guarantee the long lifetime
- Minimum shutdown rate with easily replaceable knife

Shock absorber for Impact

- Installed at the fixed knife body relieves the impact from the shredder
- Damage prevention from mechanical impact
- Cost reduction through nitrogen filling repair method

Retractable Rotation Knife

- Knife pushes out at waste bunker part
- Knife retracts at the back of the bunker part

Various Capacities and Models

- High capacity bunker applies to low density waste
- Automatic cleaning device applies to polluted waste

Technical Data

	SR IV K IV 1800/2000	SR III K IV 1250/1500	SR III K III 1250/1500
Throughput	10-50t/h	10-25t/h	10-13t/h
Bag Splitting Rate	96%	96%	96%
Electric Power	380-400V, 50/60Hz		
Electricity Consumption	25/30kW	17/18kW	15/18kW
Bunker Capacity	21m ³ - 40m ³	21m ³ - 40m ³	1.5m ³ - 50m ³
Operation Range	1,800/2,000 mm	1,250/1,500 mm	1,250/1,500 mm
Rotor Type	SR IV	SR III	SR III
Cutting Comb Type	KIV	KIV	KIII
Waste Type	• recycle waste • household waste • industrial waste • paper/cardboard • municipal solid waste		
Density	40-400kg/m ³	40-300kg/m ³	60-80kg/m ³

* Standard Density: 0.06ton/m³

* Depending on properties and bulk densities of input materials, the abovementioned capacity may vary

* The specifications can be modified for the quality improvement

02

Ballistic Separator

Multi-Sorting System Separating Mixed Wastes into Three(3) Categories Separation Technology for Various Physical Characteristics

ACI ENTECH Ballistic Separator is designed to separate mixed wastes into flat materials(2D) by the gradability and rolling materials(3D) by the ballistic movement. Through various screen hole sizes, the machine sorts fine fractions efficiently as well. The adjustable inclination angle and long sorting paddles help to achieve high efficiency in sorting. The durable crankshafts and the replaceable paddle parts ensure the low operation cost and easy maintenance.



- | | | |
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| 1 Ballistic Casing | 3 Booster Fan | 5 Auto Central Lubrication System(Optional) |
| 2 Paddle Screen | 4 Paddle Drive Motor | 6 Maintenance and Inspection Door |

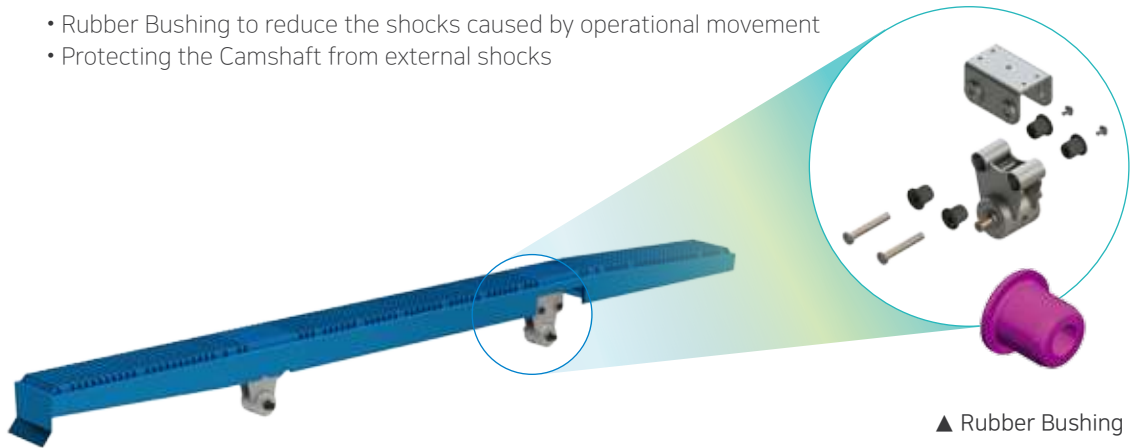
Applications

- Material Recovery Facility(Separating Plastic Container(3D) from Plastic Film and Paper(2D))
- Paper Sorting Facility(Separating Cardboard from Paper)
- Wood Waste Sorting Facility(Separating flat wood from others)

Features & Advantages

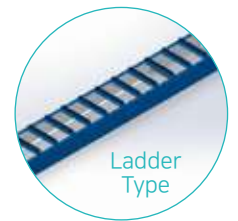
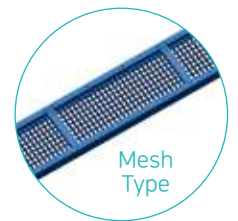
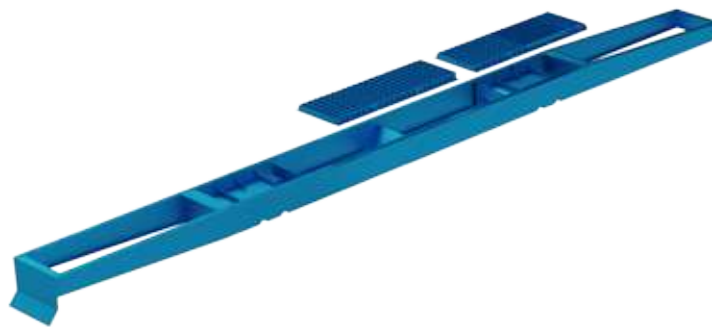
Anti-Shock Device – Improving Machine’s Durability and Lifetime

- Rubber Bushing to reduce the shocks caused by operational movement
- Protecting the Camshaft from external shocks



Replaceable Grating Screen – Low Maintenance Cost and Easy Maintenance

- Modular System Design for the Screen and the paddle
- Replaceable Screen with various hole sizes and types(Mesh and Ladder)



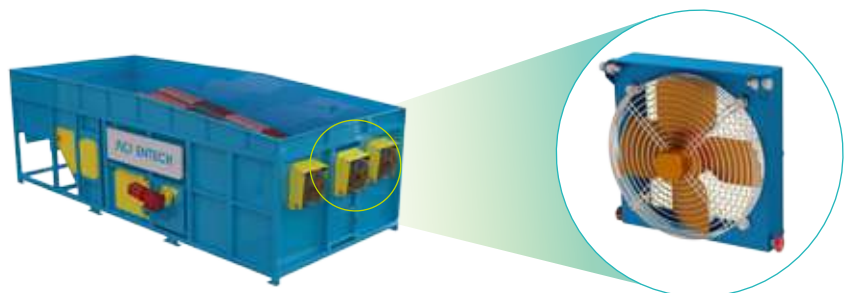
Automatic Central Lubrication System(Optional) – Easy and Low Maintenance

- Central Lubrication System integrated with Automatic Control
- Supplying grease to camshaft bearings

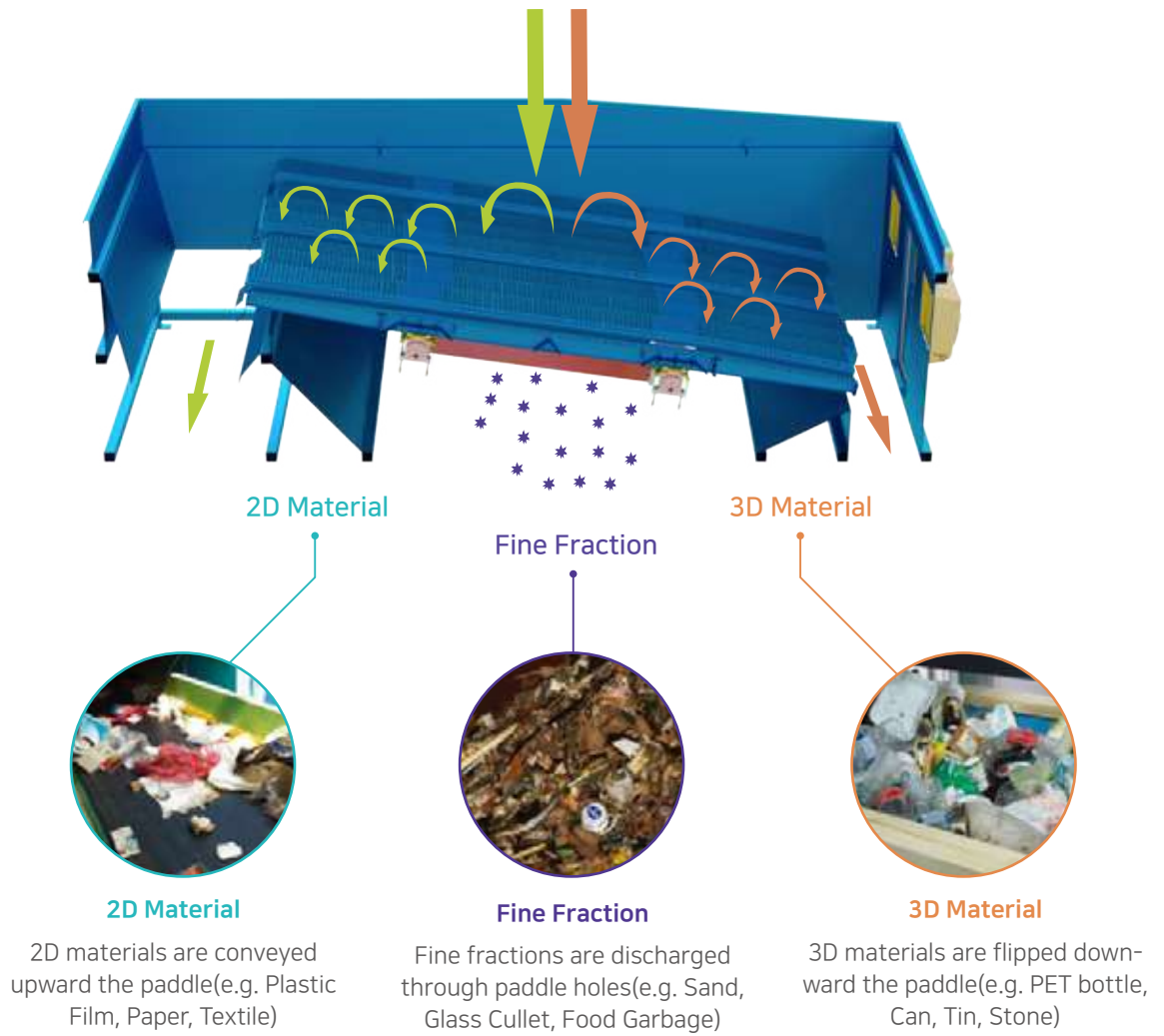


Booster Fan – High Separation Efficiency

- Improving Separation Efficiency by blowing the Light Material further on the paddle



Working Principle



Technical Data

	ACI-BC-40	ACI-BC-60	ACI-BC-80	ACI-BC-120
Capacity	60m ³ /hr 3.6ton/hr	90m ³ /hr 5.3ton/hr	120m ³ /hr 7.1ton/hr	180m ³ /hr 10.7ton/hr
Power Consumption	5.5kW	7.5kW	11.0kW	
Paddle Length	5.5m			
Paddle Q'ty	4EA	6EA	8EA	12EA
Power Supply	380-400V, 50/60Hz			
Dimension W x L x H	2,260 x 7,955 x 2,600mm	3,050 x 7,955 x 2,600mm	3,440 x 7,955 x 2,600mm	4,625 x 7,955 x 2,600mm

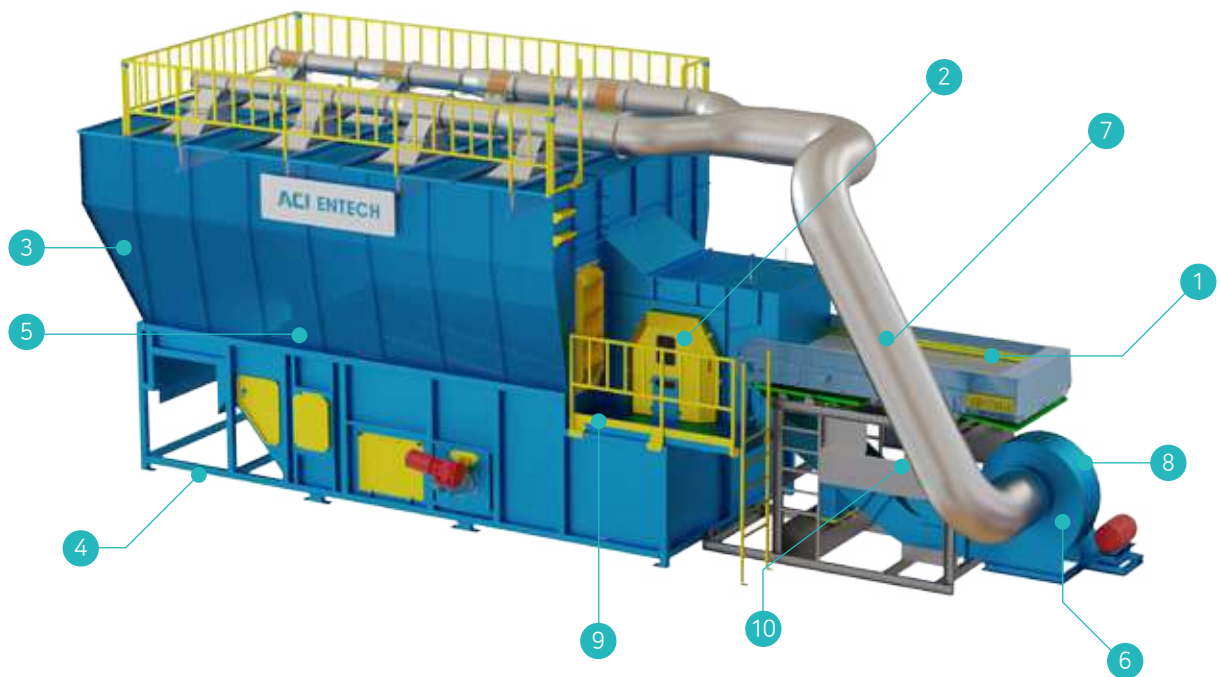
* Standard Density: 0.06ton/m³

* Depending on properties and bulk densities of input materials, the abovementioned capacity may vary*
* The specifications can be modified for the quality improvement

03 Air Ballistic Separator

Multi-Sorting System Separating Mixed Wastes into Five(5) Categories Great Combination of Air Shifter and Ballistic Separator

ACI ENTECH Air Ballistic Separator is a hybrid machine that combines Air Shifter and Ballistic Separator. Thanks to the great combination, the machine can separate many kinds of wastes into various shapes in one machine; Heavy Material / 3D Material / 2D Material / Fine Fraction. In addition, the bag filter purifies dusts efficiently, and the air recirculation device minimizes the dust emission.



- 1 Input Conveyor
- 2 Separation Drum
- 3 Expansion Chamber
- 4 Substructure
- 5 Ballistic Paddle
- 6 Air Circulation Blower
- 7 Air Circulation Duct
- 8 Bag Filter
- 9 Maintenance Platform
- 10 Control Panel

Applications

- Material Recovery Facility (Heavy Material, 3D Material, 2D Material and Fine Fraction)
- Mixed Waste Sorting Facility (Construction and Demolition Waste)

Features & Advantages

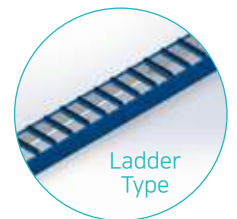
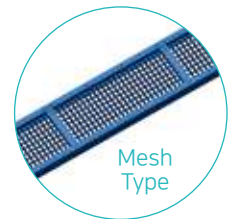
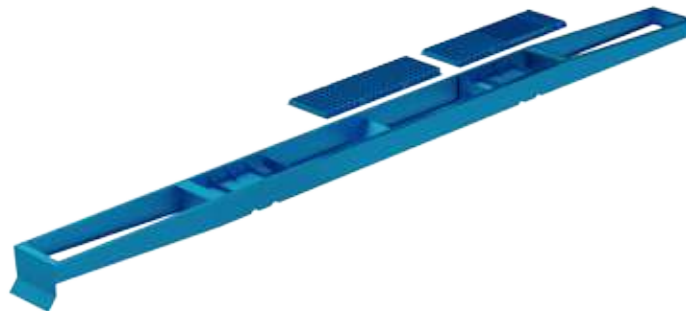
Combination of Air Shifter and Ballistic Separator – One Stop Separator

- Capacity increase by 50% compared to the conventional Ballistic Separator
- Classifying Mixed Wastes into Five(5) Categories ; Heavy Material, 3D Material, 2D Material, Fine Fraction and Dust
- Adjustable Inclination Angle(0~18°)
- Improving Efficiency of Subsequent Processes



Replaceable Grating Screen – Low Maintenance Cost and Easy Maintenance

- Modular System Design for screen and paddle
- Replaceable screen with various hole sizes and types(Mesh and Ladder)



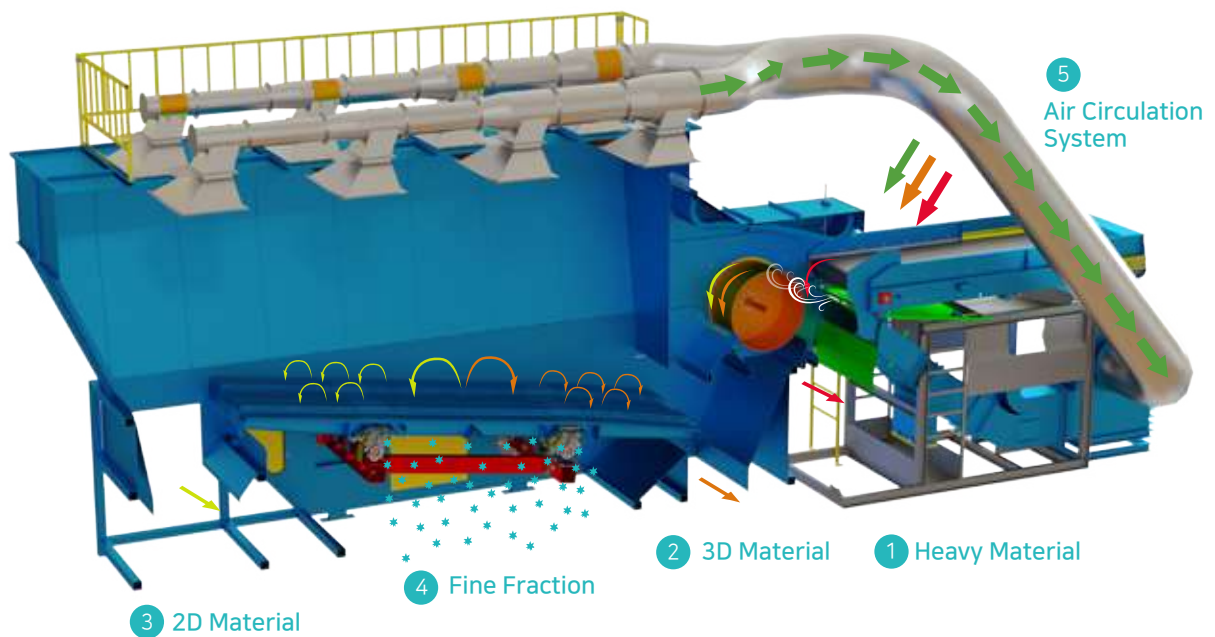
Air Circulation System – Dust Free Operation

- Minimized Dust Emission
- Discharge air purified by Bag Filter

Easy to Clean Duct – Hatch for Duct Cleaning

- No Dust Accumulation
- Securing circulation air speed & volume

Working Principle



- ① **Heavy Material** : Heavy Materials are sorted by Air Separation(e.g. Glass bottle, CSP, Metal piece)
- ② **3D Material** : Flipped downward Paddle(e.g. PET bottle, Tin, Stone)
- ③ **2D Material** : Conveyed upward Paddle(e.g. Plastic film, Paper, Textile)
- ④ **Fine Fraction** : Discharged through Paddle Holes(e.g. Sand, Glass cullet, Food waste)
- ⑤ **Air Circulation System** : Minimizing Dust Emission

Technical Data

	ACI-ASB-40	ACI-ASB-60	ACI-ASB-80	ACI-ASB-120
Capacity	80m ³ /hr 8.0ton/hr	115m ³ /hr 11.5ton/hr	161m ³ /hr 16.1ton/hr	230m ³ /hr 23.0ton/hr
Power Consumption	22.5kW	30.2kW	52.0kW	76.2kW
Power Supply	380-400V, 50/60Hz			
Dimension W x L x H	2,500 x 12,755 x 5,340mm	3,050 x 12,755 x 5,340mm	3,880 x 12,755 x 5,340mm	5,500 x 12,755 x 5,340mm

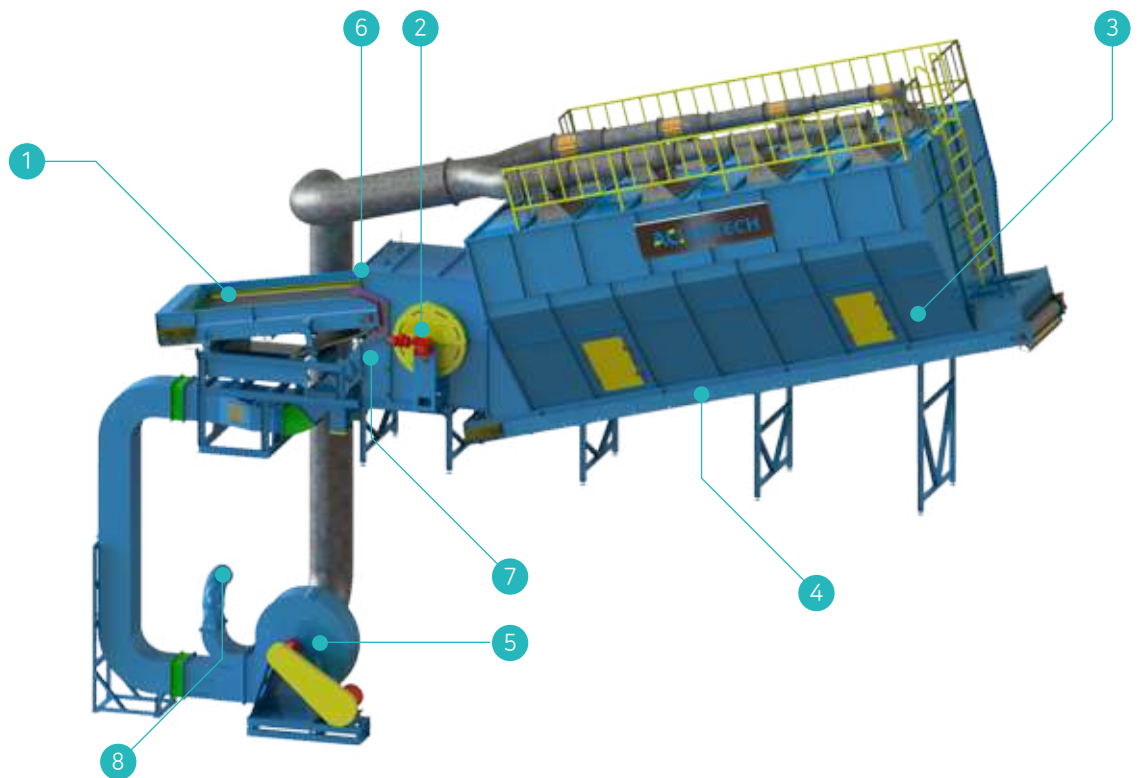
* Standard Density: 0.06ton/m³

* Depending on properties and bulk densities of input materials, the abovementioned capacity may vary
* The specifications can be modified for the quality improvement

04 Air Shifter

Air Blowing System to Separate Light Material from Heavy Material Successful Separation achieved by Controllable Air Blowing System

ACI ENTECH Air Shifter is to separate Light Material from Heavy Material by the Air Blowing System. Thanks to the air volume and speed control, the separator can achieve the high separation efficiency. The Bag filter purifies the sorting air before discharging it from the system. Moreover, the air circulation device not only minimizes the dust emission but also save energy by returning the used air stream into the blower.



- | | | |
|---------------------|-------------------------------------|----------------------|
| ① Input Conveyor | ④ Light Material Discharge Conveyor | ⑦ Air Blowing Nozzle |
| ② Separation Drum | ⑤ Air Circulation Blower | ⑧ Bag Filter |
| ③ Expansion Chamber | ⑥ Air Circulation Duct | |

Applications

- Material Recovery Facility(MRF)
- Mechanical Biological Treatment Facility(MBT)
- Wood Waste Sorting Facility and Paper Sorting Facility
- SRF Second Sorting Facility(Cement Kiln and SRF Combustor)

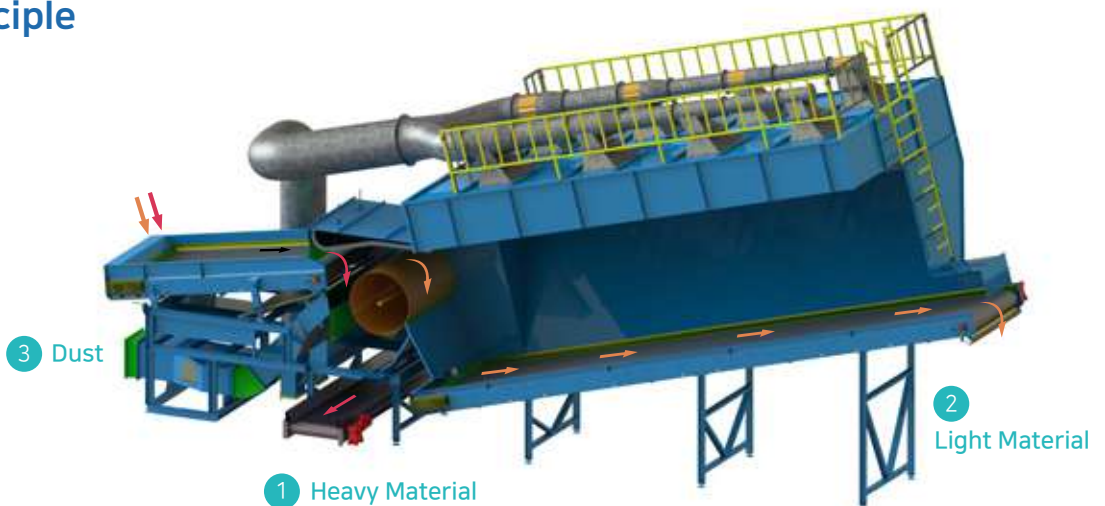
Features & Advantages

Air Circulation System – Dust Free Operation

- Minimized Dust Emission
- Discharged air purified by Bag Filter



Working Principle



- ① **Heavy Material** - Sorted by air separation(e.g. Glass bottle, Pottery, Metal piece)
- ② **Light Material** - Sorted by air separation(e.g. Plastic film, Paper, Textile)
- ③ **Dust** - Bag Filter purifies the air before discharging

Technical Data

		ACI-AS-700	ACI-AS-1000	ACI-AS-1200	ACI-AS-1400	ACI-AS-1600	ACI-AS-1800	ACI-AS-2000
		* Standard Density: 0.06ton/m ³						
Capacity		80m ³ /hr 8.0ton/hr	115m ³ /hr 11.5ton/hr	138m ³ /hr 13.8ton/hr	161m ³ /hr 16.1ton/hr	184m ³ /hr 18.4ton/hr	207m ³ /hr 20.7ton/hr	230m ³ /hr 23.0ton/hr
Power Consumption		16.75kW	22.7kW	31.5kW	41.0kW	51.0kW	65.2kW	
Power Supply		380-400V, 50/60Hz						
Dimension	W	2,500mm	3,050mm		3,880mm		4,380mm	
	L x H	12,755 x 5,340mm						

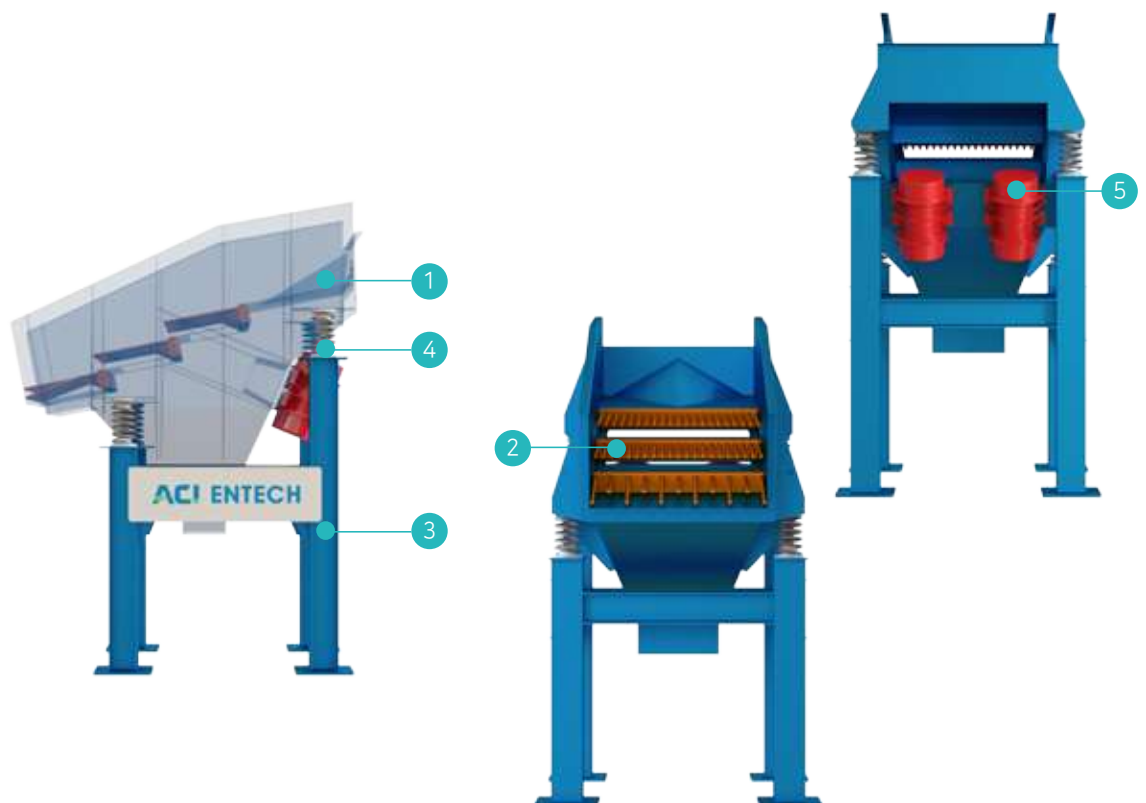
* Depending on properties and bulk densities of input materials, the abovementioned capacity may vary
 * The specifications can be modified for the quality improvement

05 Bar Vibrator

Vibrator with Bar Screen or Flat Plate

Effective Separation and Continuous Feeding at the same time

ACI ENTECH Bar Vibrator is an equipment to separate Fine Fractions with the Vibrating Bars. While Fine Fractions fall through the clear space among bars. The vibrator feeds the recyclables evenly and sorts out the inerts. There are various types of vibrators with Bar, Flat Plate, and Bar and Grate Screens.



- ① Feeding Plate
- ② Bar Screen

- ③ Frame
- ④ Spring

- ⑤ Vibration Motor

Applications

- Material Recovery Facility(MRF)
- Mechanical Biological Treatment Facility(MBT)
- Construction and Demolition Waste Sorting Facility

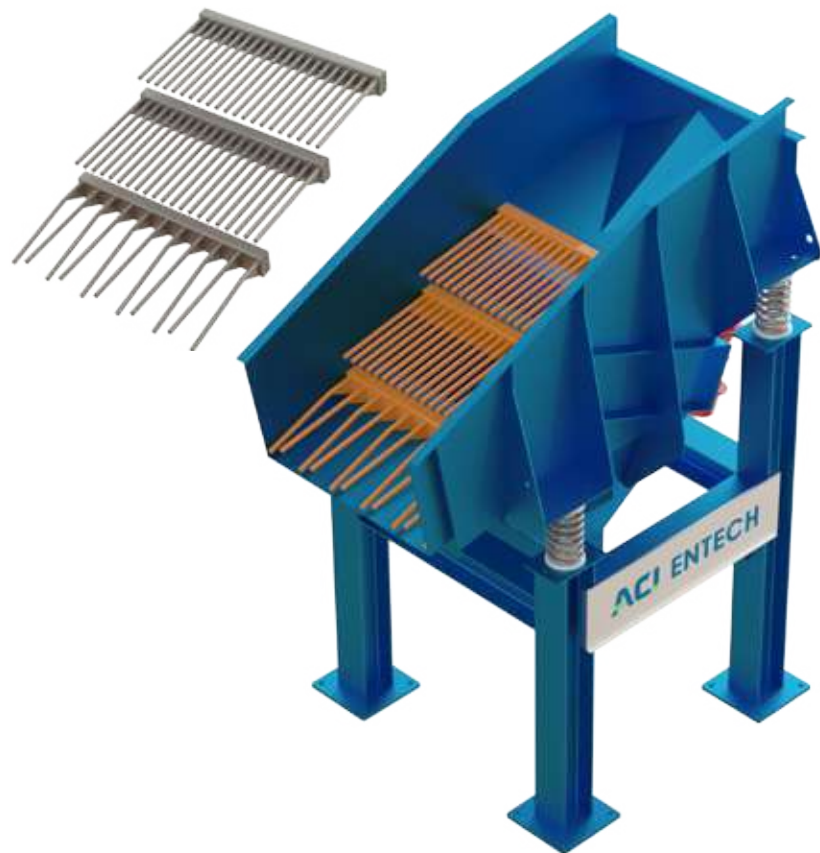
Features & Advantages

Vibrating Bar Screen – High Performance and Easy Maintenance

- Minimized Clogging Problem
- Easy Cleaning
- High Efficiency Separation

Replaceable Bar Screen – Low Maintenance Cost and High Availability

- Easy to replace with bolt fixture
- Various types of bar screens



Technical Data

	ACI-BV-800	ACI-BV-1200	ACI-BV-1600	ACI-BV-2000
Capacity	2.5ton/hr	3.7ton/hr	4.9ton/hr	7.3ton/hr
Working Width	800mm	1,200mm	1,600mm	2,000mm
Power Consumption	0.4kW x 2pcs	0.4kW x 2pcs	1.1kW x 2pcs	1.5kW x 2pcs
Power Supply	380-400V, 50/60Hz			
Dimension W x L x H	700 x 1,800 x 1,000mm	1,000 x 1,800 x 1,000mm	1,400 x 2,000 x 1,200mm	1,800 x 2,400 x 1,300mm

* Standard Density: 0.06ton/m³

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 * The specifications can be modified for the quality improvement

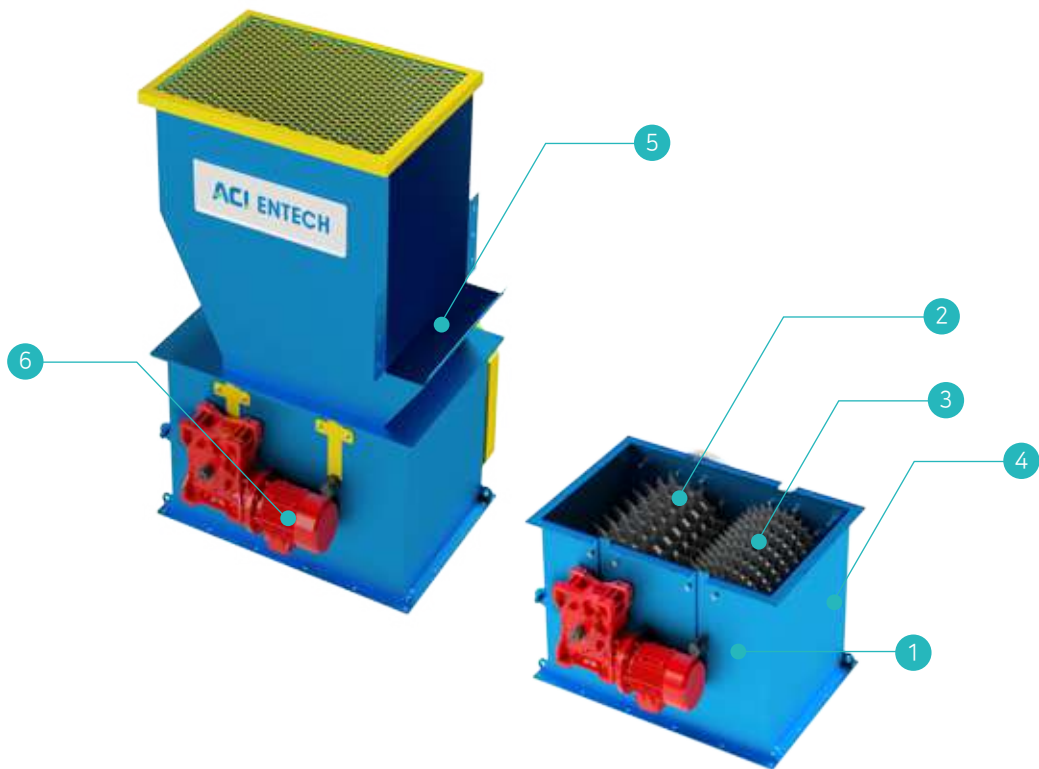
06

PET Bottle Piercer

Machine to Pierce PET Bottle with Two Rotors

Simple + Safe + Cost Saving

ACI ENTECH PET Bottle Piercer is to perforate PET bottle with the rotating knives. The holding and the cutting knives from special steel pierce the PET bottles of different sizes efficiently. The speed of the two rotors are different for high efficiency. The knives are replaceable to save the maintenance cost. The big diameter shafts minimize clogging and jamming problems, and it is easy for operators to do the maintenance through two hatches located on both sides of the machine. The safety sensors will stop the machine for hatch opening.



1 Machine Casing
2 Rotor 1

3 Rotor 2
4 Safety Sensor

5 Feeding Hopper
6 Drive Motor

Applications

- PET bottle Sorting and Compacting Facility
- Facility for Draining Expired Beverage Bottle

Features & Advantages

Drum Shaft Knives

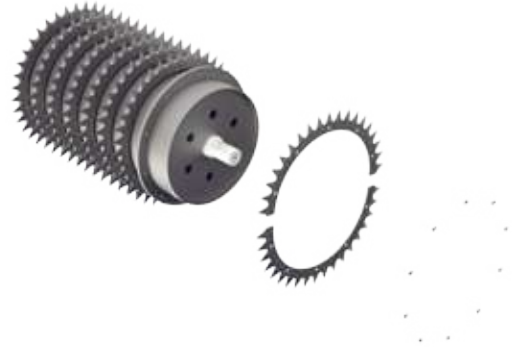
– High Efficient Cutting and Big Capacity

- Ideal combination of Cutting Knives and Holding Knives
- No jamming and clogging problems
- Strong knives from wear resistant steel



Replaceable Knives – Low Maintenance Cost and Easy Maintenance

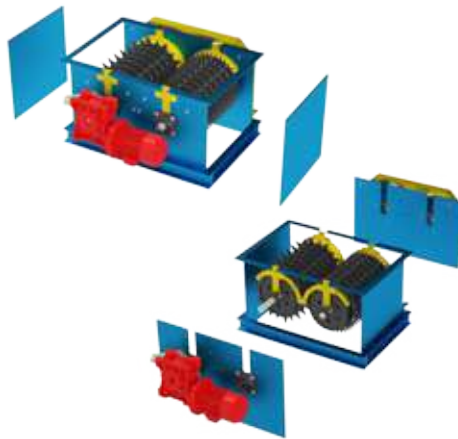
- Easy to replace the damaged knife
- Replaceable knives



Inspection and Maintenance Hatches

– Easy Maintenance

- Inspection and Maintenance Hatches located on both sides
- Easy Access for Maintenance and Unclogging



Proximity Sensor – Safety

- Small Proximity Sensor mounted on the machine body
- Emergency Stop activated by proximity sensor for safety



Technical Data

	ACI-PM-N8	ACI-PM-N14
Capacity	0.5ton/hr	0.9ton/hr
Power Consumption	2.2kW	3.0kW
Power Supply	380-400V, 50/60Hz	
Dimension (W x L x H)	1,100 x 1,200 x 1,000mm	1,500 x 1,200 x 1,000mm

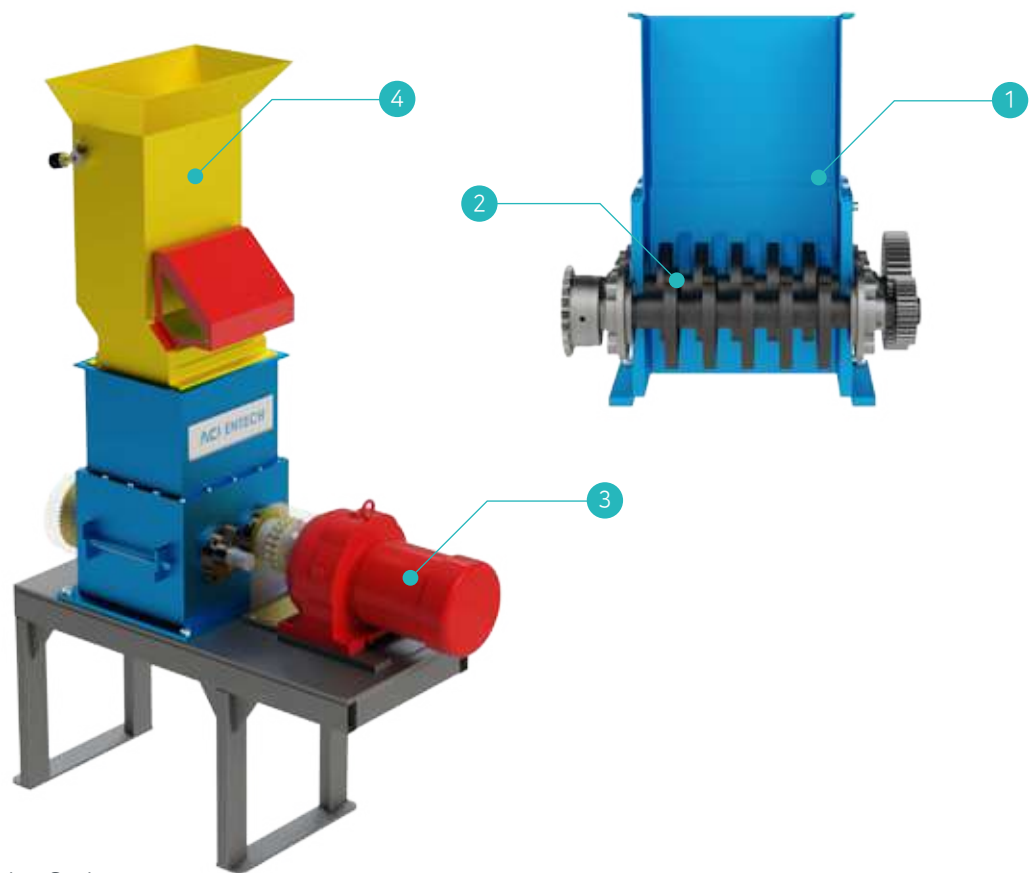
* Standard Density: 0.06ton/m³

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07 Gas Can Crusher

Machine to crush Gas Can to remove Residual Gas The Only Solution to Handle Gas Can Safely

ACI ENTECH Gas Can Crusher is to remove the residual gas from the metal can by crushing and blowing the gas out. The powerful knives crush all kinds of metal cans, and the blowing fan discharges residual gas outside efficiently. The backfire prevention gate installed in the feeding chute protects the operator and the facility, and the powder fire extinguisher works automatically in case of fire.



- ① Machine Casing
- ② Knife Shaft
- ③ Drive Motor
- ④ Feeding Chute

- ### Applications
- Gas Can Sorting and Compacting Facility
 - Applicable Can: Insect Spray, Hair Spray and Gas Cans

Features & Advantages

High Strength Knives

- Highly Efficient Performance

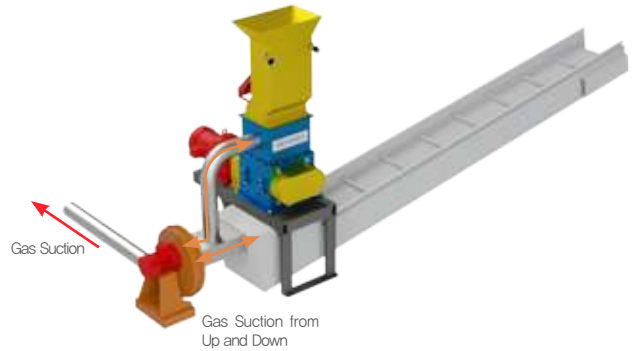
- Twin Shaft Knives designed for challenging metal cans
- Solid and Strong Knives made of wear resistant steel



Residual Gas Exhaustion System

- One Step Fire Prevention

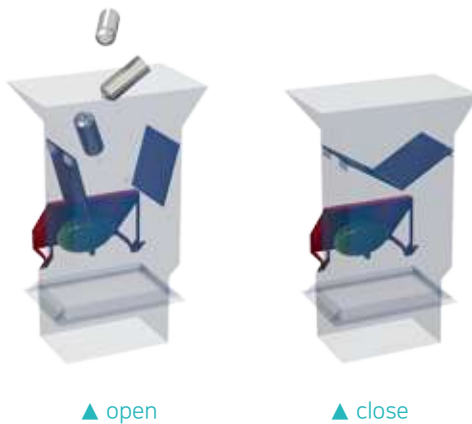
- Blowing FAN discharging residual gas generated from crushed gas cans
- Fire prevention and deodorization for operators and facility safety



Backfire Prevention Gate

- Two Step Fire Prevention

- Prevention of Gas Backflow and Backfire



Powder Fire Extinguisher equipped with Flame Detector

- Three Step Fire Prevention

- Powder Fire Extinguisher working automatically in case of fire



Technical Data

	ACI-GC-N8
Capacity	0.1ton/hr
Power Consumption	4.1kW
Power Supply	380-400V, 50/60Hz
Blowing Fan Specifications	10m ³ /min, 285mmAq

* Standard Density: 0.06ton/m³

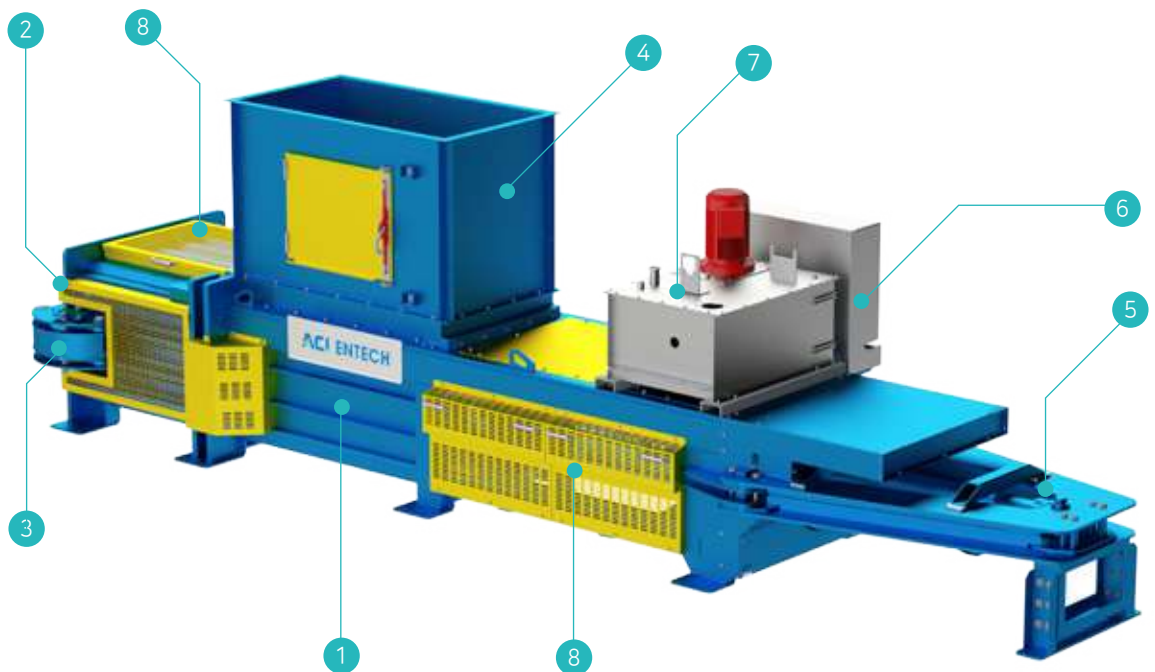
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* The specifications can be modified for the quality improvement

08 Semi-Automatic Baler

Semi Auto Baler with optional Cross Binding High Efficiency with One Wire Connection system

ACI ENTECH Semi-Automatic Baler is to compress various materials into square bale automatically. The bale bindings are done manually by the operator with the vertical and/or cross tying method. Thanks to the guide-tube, the operator can finish the tying work very quickly. The Level Sensors integrated in the feeding hopper help to control the pressing cycle efficiently.



- | | | |
|---------------|------------------|------------------|
| 1 Baler Frame | 4 Feeding Hopper | 7 Hydraulic Unit |
| 2 Door | 5 Cylinder | 8 Safety Cover |
| 3 Door Lock | 6 Control Panel | |

- ### Applications
- Material Recovery Facility(MRF)
 - Mechanical Biological Treatment Facility(MBT)
 - Waste Paper Compacting Facility
 - Plastic Film Compacting Facility

Features & Advantages

Guide Tube – One Stop Tying System

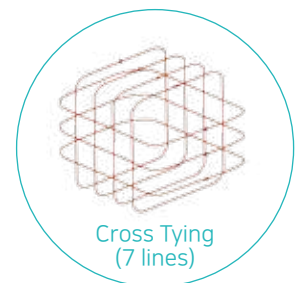
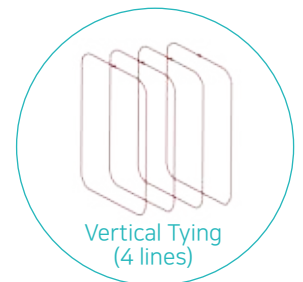
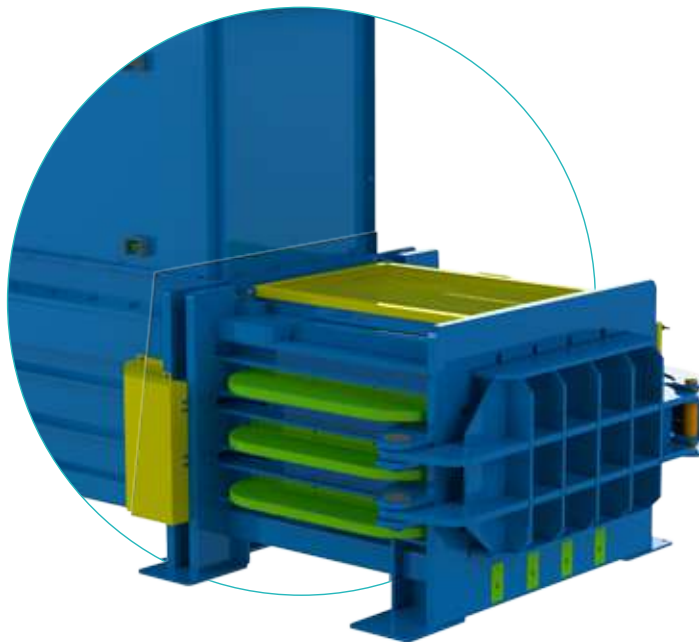
- Possible for Operator to finish Tying Work quickly without position change
- Efficient Tying with once tying wire

Level Sensors installed in Feeding Hopper – Controlling Pressing Cycle

- Able to measure the feeding level in the hopper
- Low Level Sensor to control the Press Ram
- High Level Sensor to stop the Feeding Conveyor

Two Tying Methods – Vertical and Cross Tying

- Able to choose one of Two Tying Methods according to Material Characteristics
- Vertical Tying: big size materials / Cross Tying: small size materials



Technical Data

	AVOS 141-15/50	AVOS 181-15/50
Bale Dimension(WxH)	1,100 x 750mm	
Bale Weight	660kg(Max)	
Cycle Time	42sec	54sec
Press Force	500kN	
Power Consumption	15.0kW	
Dimensions (W x L x H)	2,200 x 7,200 x 2,350mm	2,200 x 8,080 x 2,350mm

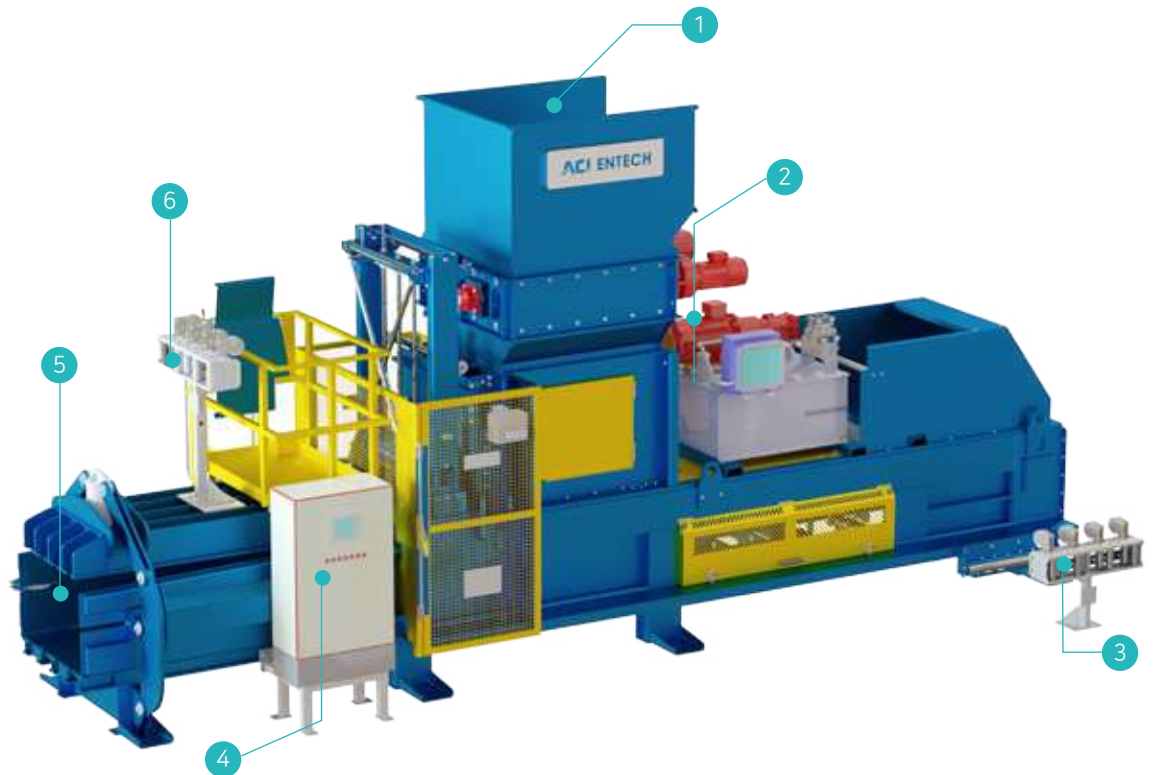
* Standard Density: 0.06ton/m³

* Depending on properties and bulk densities of input materials, the abovementioned capacity may vary
* The specifications can be modified for the quality improvement

09 Automatic Horizontal Baler

Highly stable horizontal channel baler with full automation
Best fitting for wide range of waste materials and stable operation guaranteed

ACI ENTECH horizontal channel baler makes the bales with waste and the recyclables with one stop process. With the low power consumption of 22kW, the machine has 500kN (about 50 ton) pressure force for the continuous compacting process and wire binding. The press ram travels on the rails made from reinforced steel Hardox with the hardened rollers.



- | | | |
|-------------------------------|--------------------|---------------|
| 1 Feeding Chute | 3 Wire Reel | 5 Bale Outlet |
| 2 E. Motor and Hydraulic Unit | 4 Electrical Panel | 6 Wire Binder |

Application

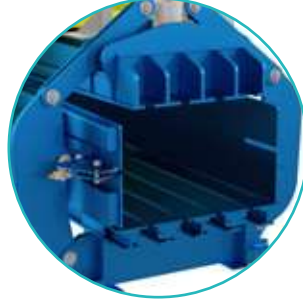
- Material Recovery Facility (Plastic Bottle and Film baling)
- Paper Sorting Facility (Card Board and Paper Sorting)

Features & Advantages

- PLC with Touch screen
- Binding Wire Monitoring sensor
- 400kg wire roll
- Bale length measuring with sensor



- Stamper Applied at top of press chamber and bottom of chute
- Stamper and Knife cut long materials



- Press Channel from Hardox 400 15mm thickness
- Long lifetime guaranteed and easy to replace



- Automatic wire binder of drill type and separate wire cutter

Technical Data

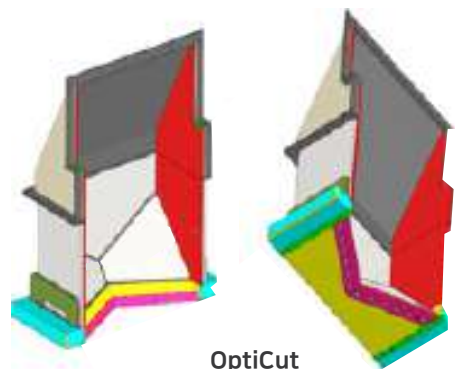
	* Standard Density: 0.06ton/m ³	
	AVOS 1,410 BRH-22/50	AVOS 1,410 BRHF-22/50
Dimensions (L x H x W)	8,610 x 3,200 x 2,300mm	8,610 x 3,200 x 2,300mm
Hopper Dimensions	1,400 x 1,000mm	1,400 x 1,000mm
Total Weight	16,000kg	17,000kg
Bale Dimension (W x H)	1,100 x 700mm	1,100 x 700mm
Bale Weight (kg)	500kg	500kg
Channel Adjustment	3-sided, automatic	3-sided, automatic
Tank Volume	500L	1,000L
Cycle Time (empty)	20s	13s
Throughput	35kg/m ³	3.8t/h
	60kg/m ³	5.1t/h
	100kg/m ³	6.5t/h
Electrical Power (kW)	22kW	22kW
Press Force (kN)	500kN	500kN

* Depending on properties and bulk densities of input materials, the abovementioned capacity may vary

* The specifications can be modified for the quality improvement

Option

OptiCut: Located at top of press chamber and bottom of chute, OptiCut replaces the stamper and increases the operation capacity by 50% (paper baling based).



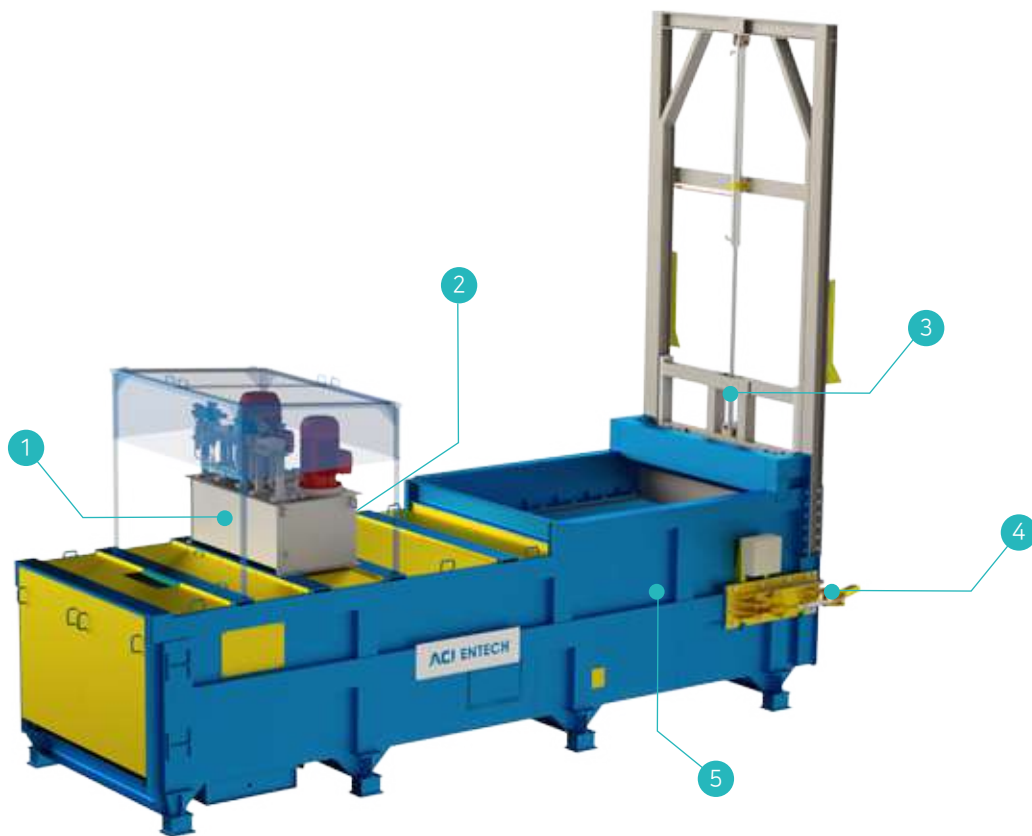
OptiCut

10 Transfer Station

Municipality Solid Waste Transfer Station

To save the transportation cost with high compaction

ACI ENTECH Transfer station is to reduce the transportation cost by compacting the Solid Waste from the small waste collection trucks to the big containers at high compaction ratio. The solid waste from small trucks is fed to the compactor through feeding chute. The compacting press pushes the waste to the big container with the rollers on the trolley. The system can be installed both indoor and outdoor. Depending on the locations and waste type, we need the additional waste water collection and dust reduction equipments.



1 Hydraulic Pack
2 Control Panel

3 Container Gate Opener
4 Hydraulic Docking Unit

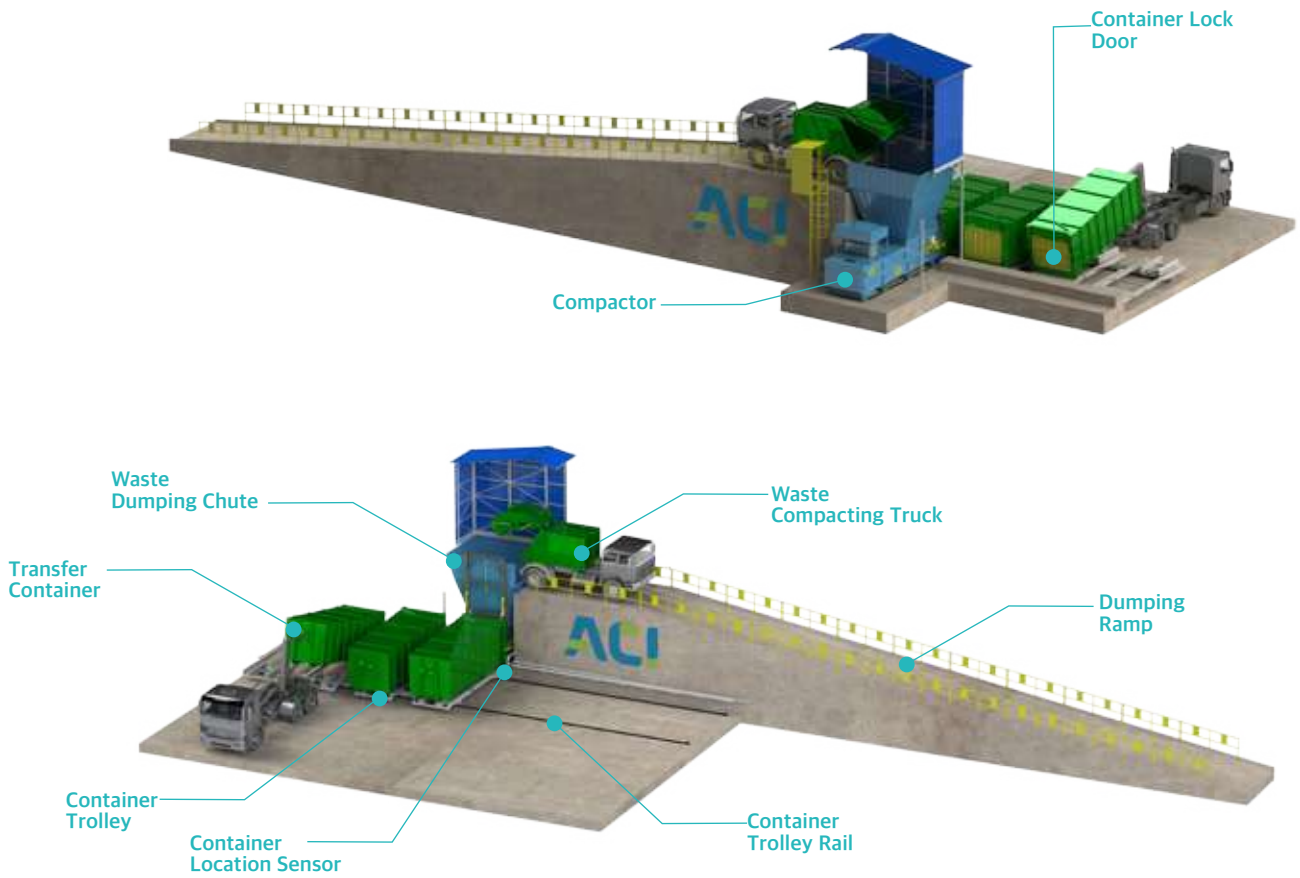
5 Press Chamber

Applications

- Municipal Solid Waste Transfer Station
- Industrial Waste Transfer Station
- Waste Paper Transfer Station

Features & Advantages

- Touch Screen with PLC system
- Failure prevention by control system
- Stamping pusher type for each decompacting
- Easy to take out leachate



Technical Data

* Standard Density: 0.06ton/m³

SP-42 High Efficiency Transfer Station System	
Press Chamber Volume	624m ³
Press Force(kN)	500kN
Max Pressure	250bar
Electrical Consumption	37kW
Electricity	3 x 380V / 60Hz
Cylinder Cycle Time	40sec
Spec(L x W x H)	6,586 x 2,960 x 5,740mm
Space before Press	
Capacity per Stroke	4.46m ³
Hydraulic Oil	400L
Compaction Rate	1 : 5

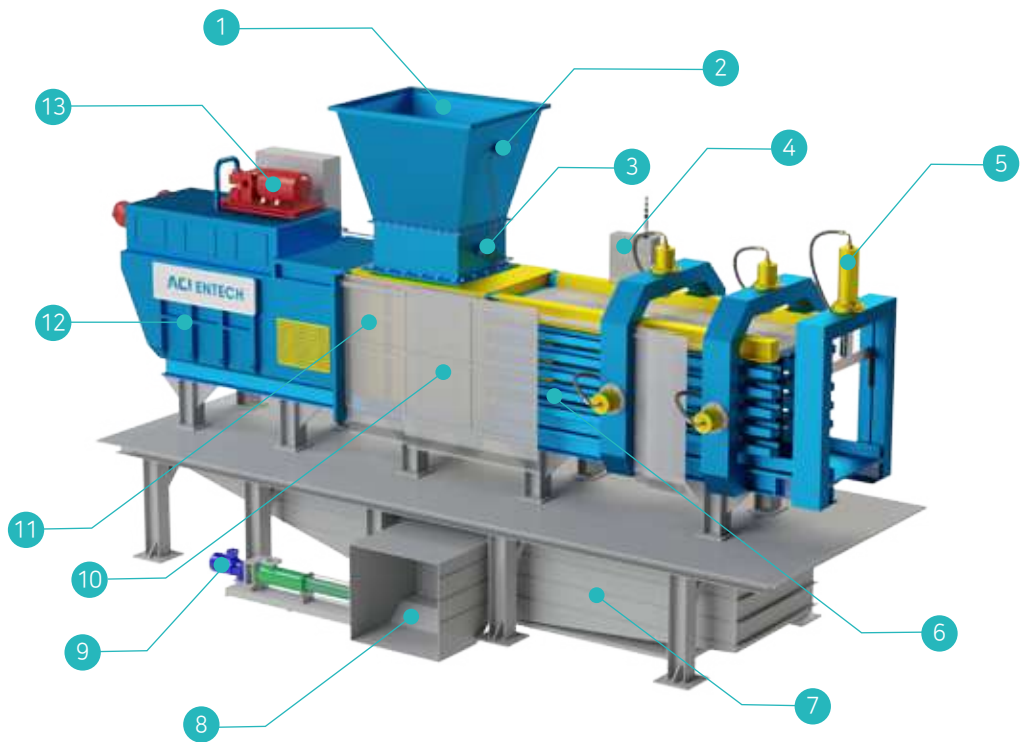
* Depending on properties and bulk densities of input materials, the abovementioned capacity may vary
 * The specifications can be modified for the quality improvement

11 Compacting Dehydrator

Dehydrator for Comingled MSW at Tropical Area and Water washed fineshred plastic film

Best applicable for wet MSW dehydration before W2E

ACI ENTECH Dehydrator is equipped with the press plate and the push cylinder powered by hydraulic unit. This squeezes the liquid out from the waste. Wastes are fed to the hopper by feeding conveyor. When a certain level of the waste is detected by the hopper level sensor, it presses the waste to make the leachate squeezed out. Leachate is gathered in the tank located at the bottom of the Dehydrator while the compacted wastes are loosened by the decompactor and move to the next process. The equipment is operated by PLC panel mounted on the side.



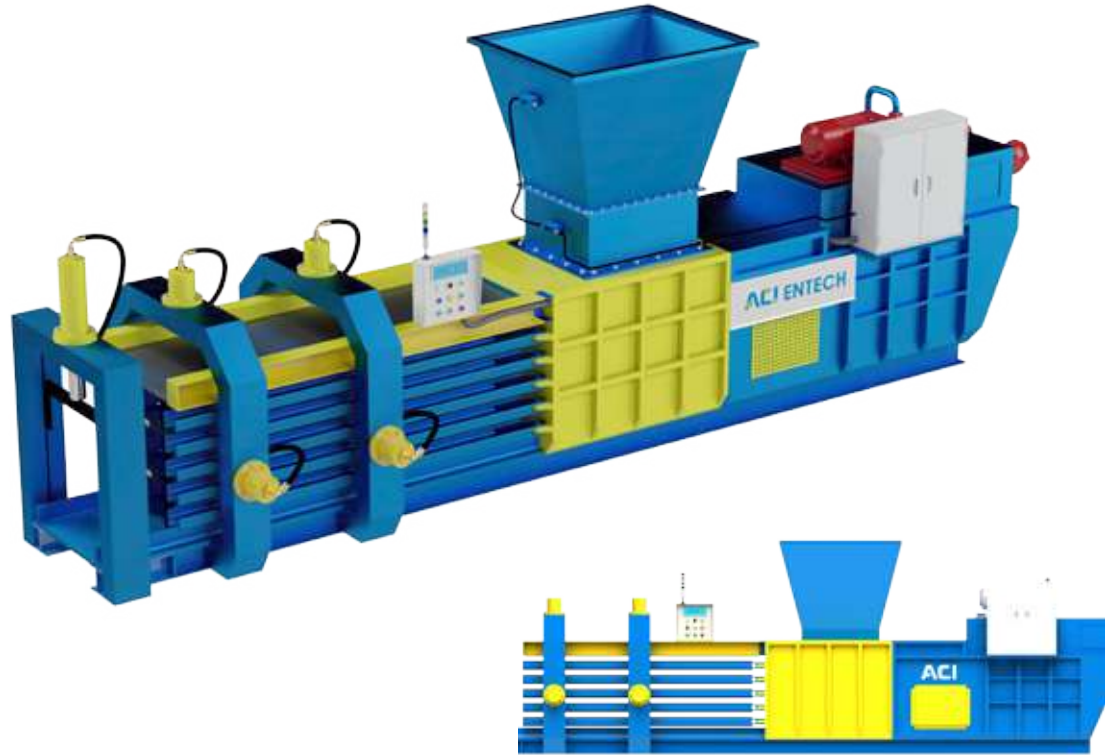
- | | | |
|---------------------|---------------------|------------------------|
| 1 Feeding Hopper | 6 Channel | 11 Press Chamber |
| 2 High Level Sensor | 7 Leachate Tank | 12 Cylinder Part |
| 3 Low Level Sensor | 8 Maintenance Hatch | 13 Hydraulic Powerpack |
| 4 Control Panel | 9 Leachate Pump | |
| 5 Decompactor | 10 Shutter | |

Application

- Comingled Municipal Solid Waste with high Moisture Content
- Paper Waste with high Moisture Content
- Pulper Sludge from Papermill
- SRF Consumer

Features & Advantages

- Touch Screen with PLC system
- Failure prevention by control system
- Stamping pusher applied for decompacting
- Easy to take out leachate
- East to clean and maintain



Technical Data

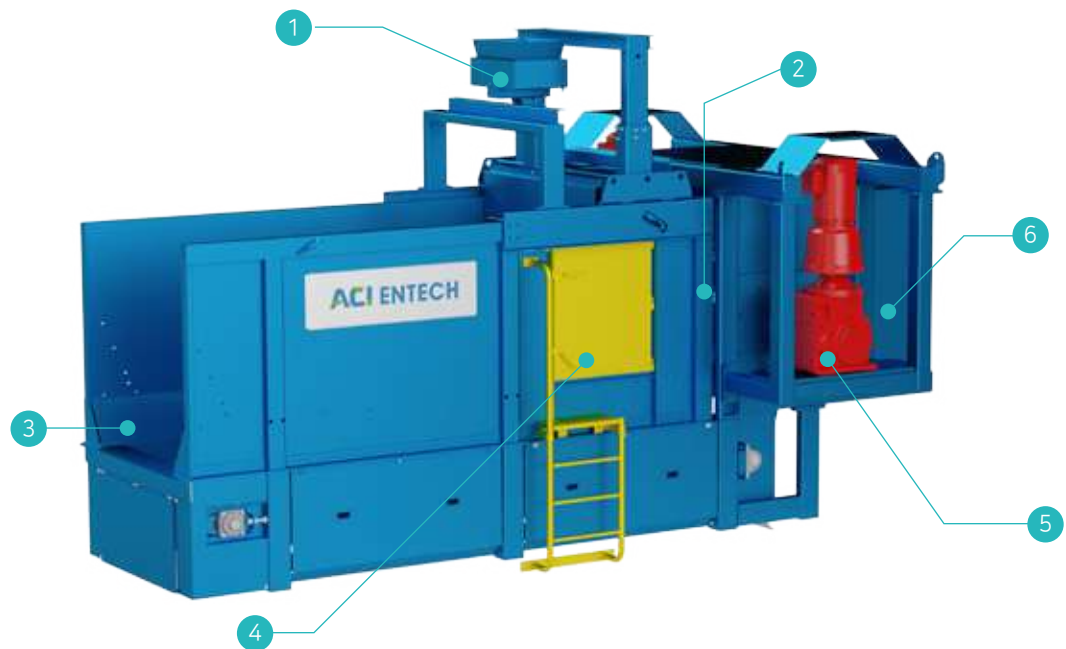
	ACI CD 150	ACI CD 100
Capacity	30tph	20tph
Electrical Power	130kW	100kW
Power Consumption	75kW x 6Ph & 55kW x 6Ph	
Pressure Force	1,200kN(Normal) / 1,500kN(Max)	850kN(Normal) / 1,100kN(Max)
Cycle Time	21sec	27sec
Pressure	230bar(Normal) / 300bar(Max)	200bar(Normal) / 270bar(Max)
Dimension(L x W x H)	9,000 x 2,420 x 2,360mm	
Hopper Size(L x W x H)	1,520 x 850 x 1,150mm	

* Standard Density: 0.06ton/m³
 * Depending on properties and bulk densities of input materials, the abovementioned capacity may vary
 * The specifications can be modified for the quality improvement

12 Bale Breaker

Loosening the materials safely from bales of different sizes Debaling done Easy and Simple with one machine

ACI ENTECH bales breaker BAIII-DD is equipped with two motors eliminating the binding wires from bales. It makes the debaling safe for workers. BAIII-DD is with 2 units of 15kW geared motor powered rotor that increases the rotating power of debaling rotor. Special designed knife tips from hardened metal enables the machine to debale the highly compacted bales without human intervention. It applied to all types of materials baled at any compaction ratio.



- 1 Bale Holder
- 2 Fixed Knife

- 3 Chain Conveyor
- 4 Maintenance Door

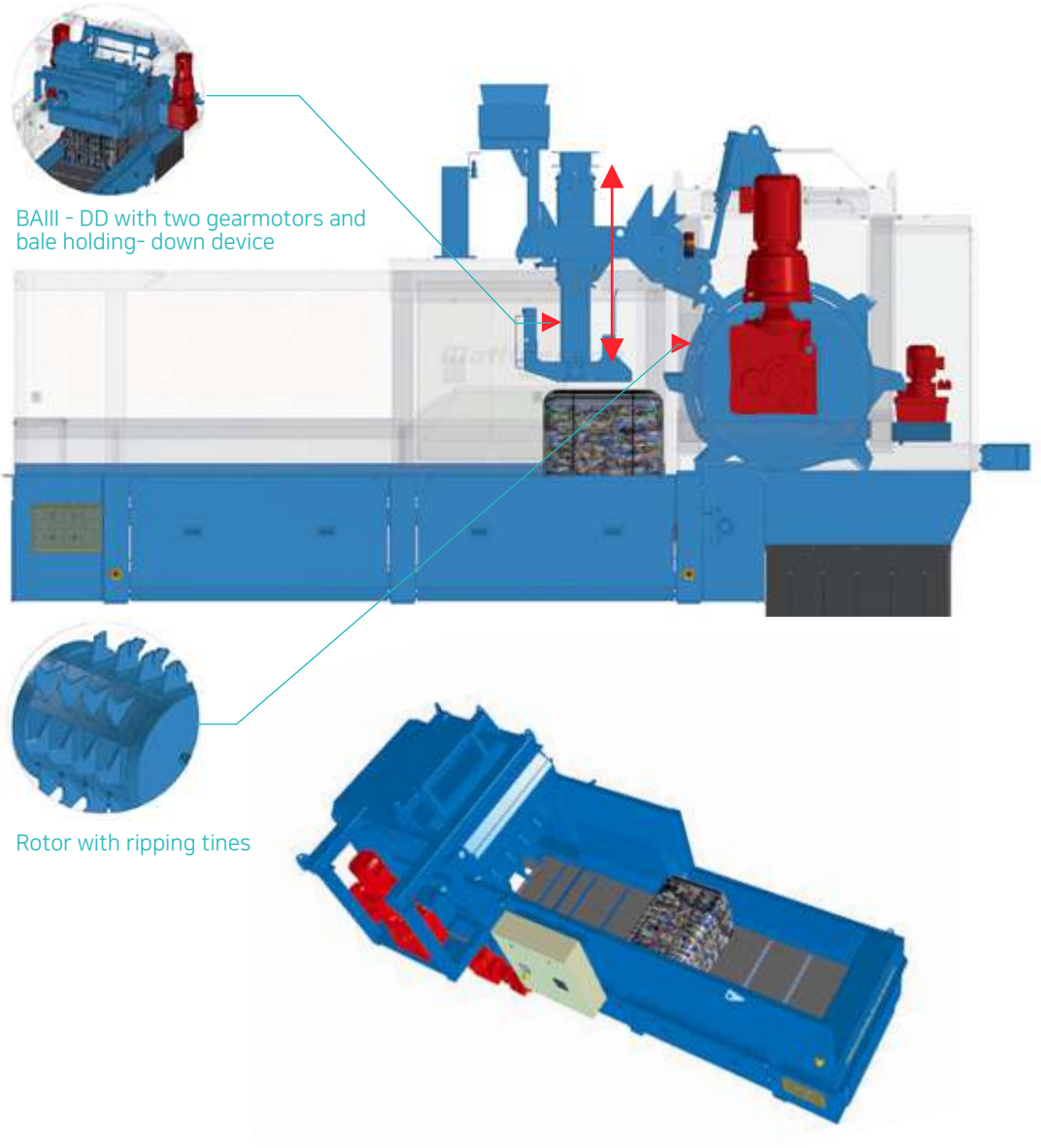
- 5 Main Power Motor
- 6 Rotating Rotor and Knife

Application • Paper, PET bottle, Mixed Waste, Plastic Film, Thatch Bales

Features & Advantages

- Ultra-Sonic sensor locates the bale height and lowers the bale holder
- Debaling knives take out the materials from bales.
- Binding wires are cut out by knives.
- Debaled materials drop on the conveyor to move out

Working Principle



BAIII - DD with two gearmotors and bale holding-down device

Rotor with ripping tines

Technical Data

	BAIII-DD 1250	BAIII-DD 1750	BAIII-DD 2000
Capacity	20t/h	25t/h	30t/h
Power Consumption	18kW	21kW	24kW
Rotor Width	1,250mm	1,750mm	2,000mm

* Standard Density: 0.06ton/m³

* Depending on properties and bulk densities of input materials, the abovementioned capacity may vary

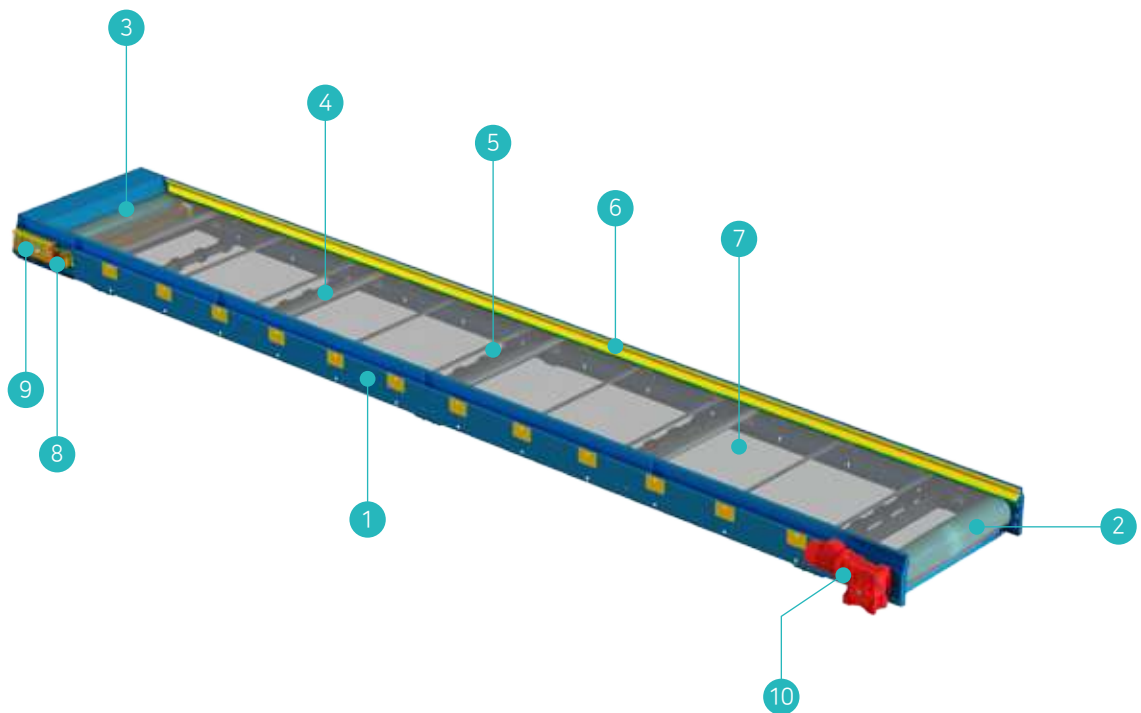
* The specifications can be modified for the quality improvement

13 Waste Transport Conveyor

Optimized to Transport Challenging Wastes

Modular design to be flexible for any specific application

ACI ENTECH Waste Transport Conveyor is specially designed to move the wastes. The conveyor is optimized to safely transport the challenging materials like bulky wastes and sharp metal pieces. Furthermore, the conveyor could be correctly integrated with other waste handling machines like Baler, Feeding Controller, and Air Shifter. The conveyor length can be extended or reduced thanks to the modular design. Various widths of conveyors give the system designer the high flexibility.



- 1 Conveyor Frame
- 2 Power Roller
- 3 Slave Roller
- 4 Carrier Roller

- 5 Idle Roller
- 6 Side Cover
- 7 Rubber Belt
- 8 Trash Channel

- 9 Safety Cover
- 10 Drive Motor

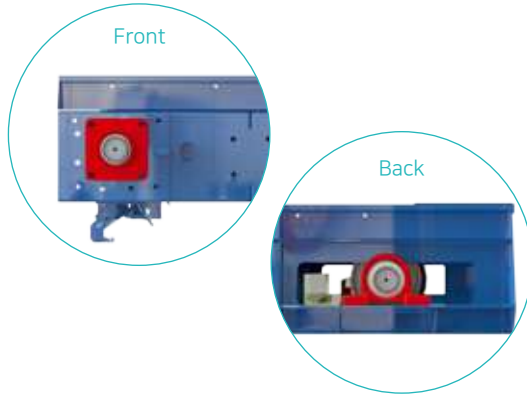
- ## Applications
- Material Recovery Facility(MRF)
 - Mechanical Biological Treatment(MBT)
 - Incineration and Power Plants
 - Biomass and Biogas Plants
 - Food Waste Disposal and Composting Facility

Features & Advantages

Belt Tension Adjusters

– Belt Siding Prevention

- Easy Belt Tension Adjustment
- Installed at Front and Rear Parts of Conveyor



Safety Covers – Exceptional Safety

- Safety Covers to prevent accidents caused by Rolling Parts and Moving Belt



Trash Channel – Belt Life Time Extension

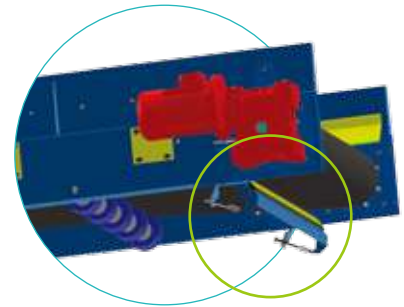
- To prevent Impurities from damaging the roller and rubber belt



Belt Scraper with Auto Tensioner

– Easy Maintenance

- To remove Foreign Materials from the belt efficiently
- Automatic Tensioner



Modular Structure – Flexible for any Application

- Easy to extend or reduce Conveyor Length
- High Flexibility in Facility Design

Reduction ▶



Extension ▶



Technical Data

	ACI-CV-400~2800
Power Consumption	0.75-7.5kW
Power Supply	380-400V, 50/60Hz
Belt Width(W)	400-2,800mm
Length	Custom made

* Standard Density: 0.06ton/m³

* The specifications can be modified for the quality improvement



Sustainability Created by What We Do

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