



Damon has long been dedicated to the research and development of leading edge technology in the area of intelligent logistics delivery and sorting systems. Damon combines integrated system planning, product development, product manufacturing and project services to improve the competitiveness for our customer's logistics systems. Solutions and products are widely used in e-commerce, express delivery, shoes and clothing, pharmaceutical, intelligent manufacturing and associated supporting industries.

Damon Sorter Products

Catalogue

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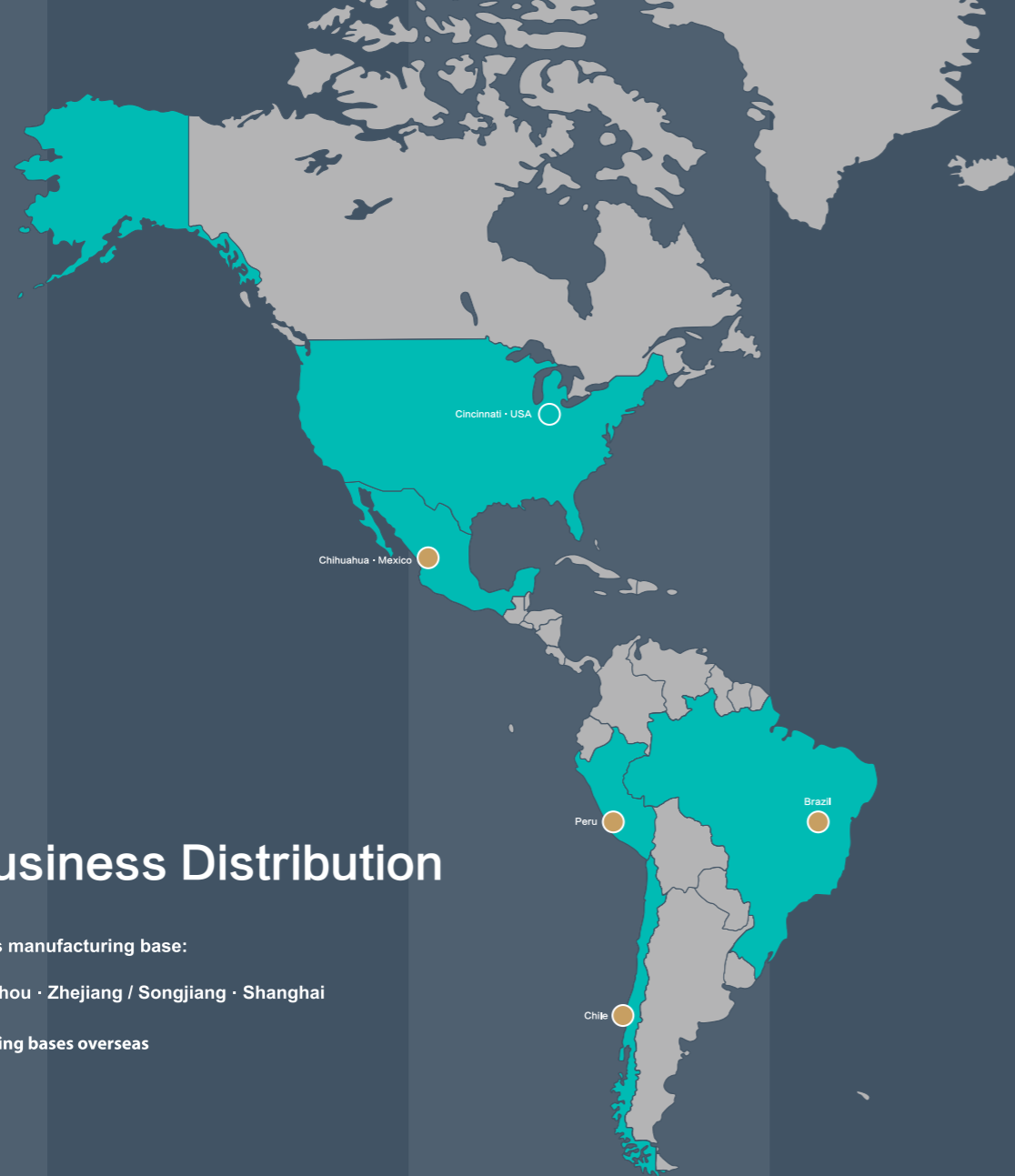
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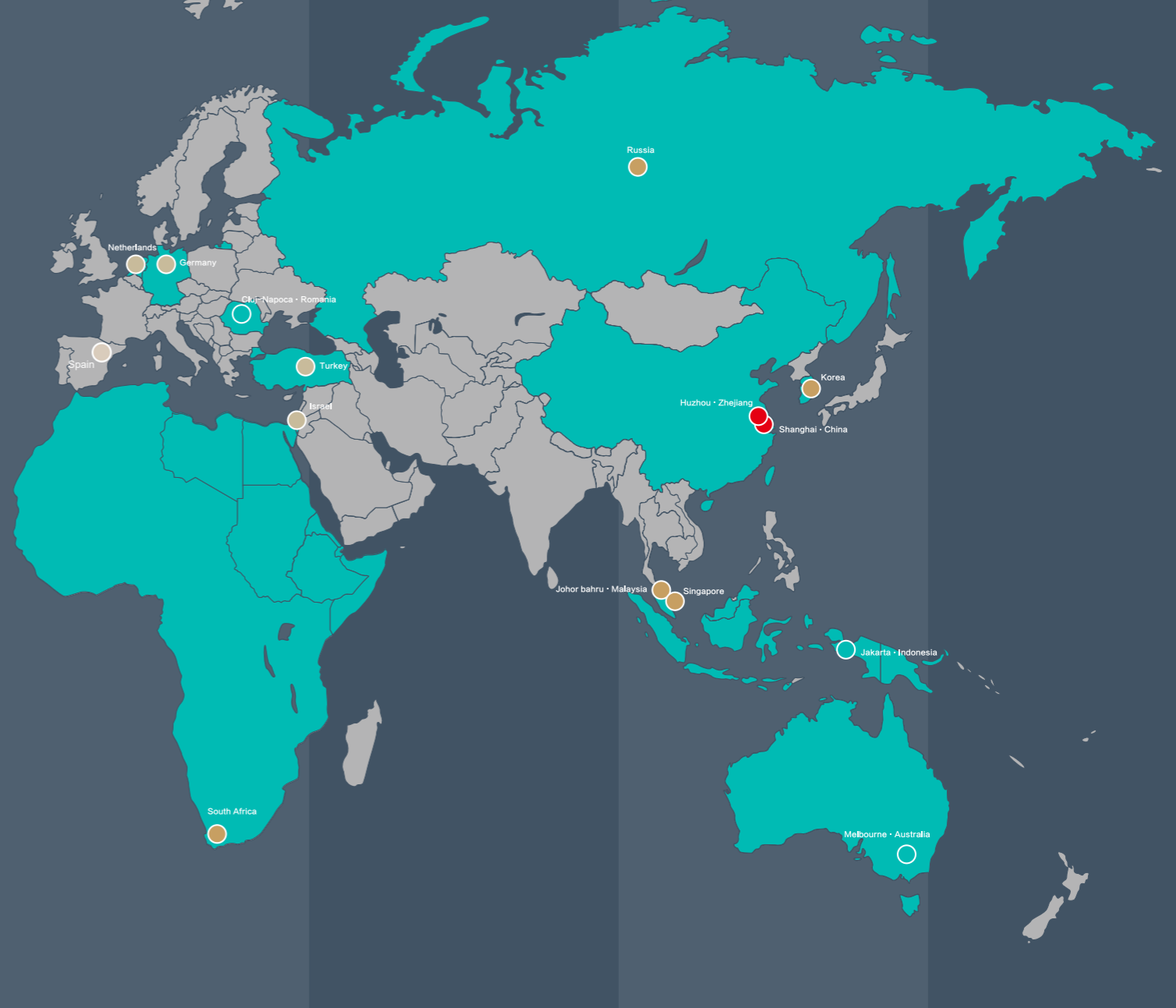
2020 V1.0





Damon Business Distribution

- Damon HQ & China's manufacturing base:
Shanghai · China, Huzhou · Zhejiang / Songjiang · Shanghai
- Assembly manufacturing bases overseas
- Global partner



About Damon

The leading provider of intelligent logistics system solution and key equipment

1000+
EMPLOYEES

7
GLOBAL
SUBSIDIARIES

150 Million
USD
TURNOVER
150 Million USD

169
Number of R&D personnel: 169,
(15.17% of total personnel 2019)

Strong R & D Capability

According to the latest statistics in 2019, the company has 169 R & D engineers, accounting for 15.17% of the total number of employees within the company. The team is from famous universities in China and has rich experience in product design, program planning, software engineering.

143
Number of patents: 117 patents,
21 invention patents.
9 invention patents pending (2019)

Scientific and Technological Innovation

Since our establishment, Damon has successfully applied for 117 patents in core components, key equipment, system integration and other aspects. With industry leading technology and a number of core patents, our products are sold all over the world.

26
Number of software copyrights:
26 valid software copyrights (2019)

Software Innovation

Damon not only invests in hardware, but also considers the importance of software. Damon develops software inhouse and currently holds 26 valid software copyrights.

5 Million
USD
R & D investment: 5 million USD,
accounting for 5.37% of
annual revenue (2019)

Significant Research and Development Investment

R & D investment: 5 million USD, accounting for 5.37% of annual revenue (2019)

1997
ESTABLISHED

200,000 Square
Meters
PLANT SIZE

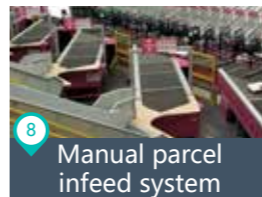
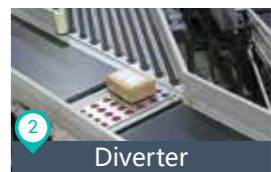
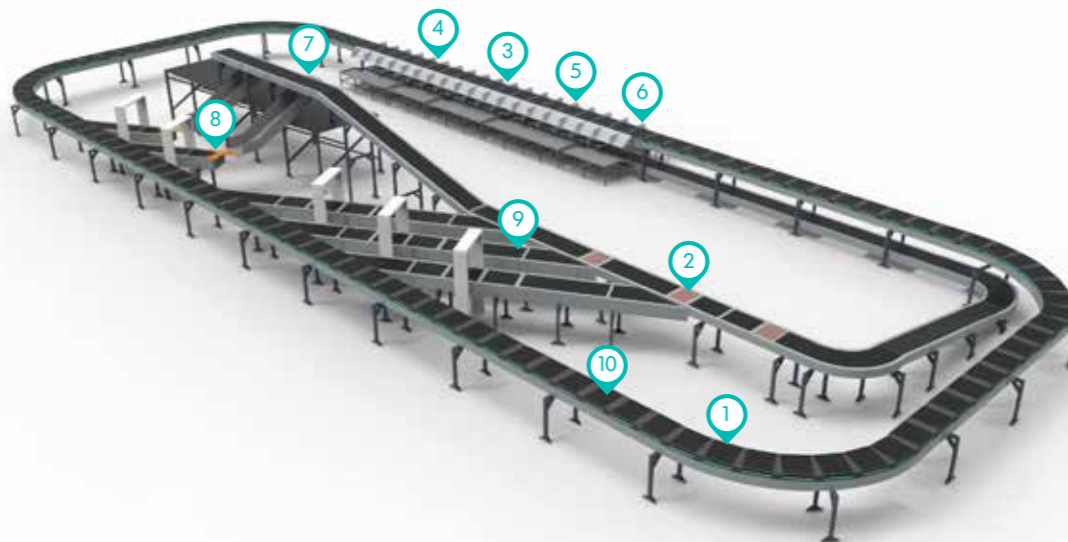
2500+
PROJECTS
DELIVERED

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System Components



DARE Series - Loop Cross Belt Sorter

Dare Cross Belt Sorter Introduction

The cross belt sorter is a closed loop conveying and sorting system consisting of sortation carriers which sort product perpendicular to the main direction of travel. The sortation carriers run at high speed in a fixed rail to carry and sort items. The number of sortation carriers can vary greatly from dozens to hundreds of carts. It can be used for sorting and handling a variety of items including parcels, express mail, cartons, boxes, totes, clothes and other items (excluding fragile products). It is a high speed, highly efficient sorting system which may be used in industries such as express delivery, e-commerce, clothing, logistics, etc.

The system is comprised of four main elements: the infeed system, sorting host, discharge outfeed system and control system. Under command from the control system, the goods are fed from the infeed system to the sorting host for sorting. The sorter discharges the goods to the outfeed system according to the classification of goods and physical sorting position to complete the sorting function.

The cross belt sorter is available in two general arrangements including single layer and double layer carts. The double layer cross belt sortation carts are arranged with two belts, one mounted directly above the other optimizing the footprint of the cross belt sorter, improving the sorting efficiency and meets the requirements for more sorting destinations. The upper and lower sortation belts can operate synchronously or independently.

Infeed system:

The infeed system provides efficient and accurate positioning of goods onto the sorter host. It's function is to automatically identify and measure the physical parameters of the goods to be sorted to ensure the goods are accurately inducted onto the high speed sorting carts. Damon's cross belt sorting system can be customized for each customer to provide a fully automatic, semi-automatic or manual infeed system according to the working environment.

Sorting host:

The sorter host is the main system component to achieve sortation with the function of delivering items to the correct sorting outfeed locations according to the item's identification information. The Damon cross belt sorter system adopts servo direct drive technology providing instant start in milliseconds to ensure items locate in the center of the cart during loading as well as reducing sorter error rates.

Outfeed system:

The outfeed system is the final stage of the sorting system. It temporarily stores the items delivered by the sorter host. At the same time, it will capture and display the related identification information of items and transmit this information to the master control system. Different types of outfeeds are available to match the diverse range of items that can be handled. Items can be directly sorted to outfeeds such as chutes, bag racks, roll cages etc. based on the size and shapes of the items to be sorted.

Control system:

The control system is the brains of the entire sorting system. It integrates mobile power supply technology, mobile communication technology, field bus, OPC communication, Industrial Ethernet communication, PLC servo and frequency conversion technology. The control system not only controls the function of each module but also exchanges data and management policies with the upper level management system. Through this exchange, the sorting system becomes an integral part of the total logistics management system.

Model	DCBS-S					
	One Carriers With Two Belts		One Carriers With One Belt			
Specification	CBSD-800×P1100	CBSD-800×P1200	CBSS-700×P600	CBSS-850×P750	CBSS-1200×P800	CBSS-1200×P900
Cross Belt Dimensions	800×410mm×2	800×440mm×2	700×440mm	850×590mm	1200×590mm	1200×680mm
Cart Pitch	1100mm	1200mm	600mm	750mm	800mm	900mm
Maximum Size of Goods	L750×W750×H600	L750×W750×H600	L600×W400×H400	L800×W550×H500	L1100×W600×H500	L1100×W700×H600
Minimum Size of Goods	L100×W100×H10 (mm,Standard) / ±L100×W100×H1 (mm,Customized)					
Running Speed	V max 2.5m/ s					
Mechanical Throughput	13090pcs/h/Cart	12000pcs/h/Cart	12000pcs/h/Cart	9600pcs/h/Cart	9000pcs/h/Cart	8000pcs/h/Cart
Sorting Error Rate	Based on running speed of 2m/s					
Weight of Goods	≤0.01%					
Infeed Capacity	0.05-30kg					
Infeed Method	3000pcs/h/parcel infeed unit					
Incline Angle	Semi-automatic/fully automatic					
Main Line Drive	±8° / ±10°					
Cart Conveyor Drive	Asynchronous linear motor (LSM) / Synchronous linear motor (LSM)					
Cart Conveyor Power Supply	48V servo electric roller					
Running Noise	Sliding contact (standard configuration) / Non-contact (premium configuration)					
Cart Layer Configuration	≤68db(excluding environmental and steel platform vibration noise)					
	Single layer / Double layers					

Advantages of

DARE Series Loop Cross Belt Sorter

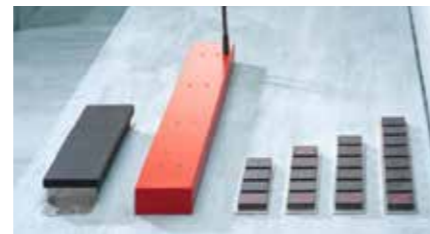
1.Low energy consumption main loop drive technology (Synchronous & asynchronous linear motor):

a)Asynchronous linear motor:

- High efficiency line group.
- Fine wheel clearance guided double sided electromagnetic drive.
- High thermal conductivity aluminum alloy heat dissipation material.
- High density thermal flow heat dissipation technology.
- Integrated module technology.

b)Synchronous linear motor:

- High thermal efficiency coil.
- Maximum 200% overload force.
- Field installed frequency converter, shorter cable and avoids EMC interference.
- Low driving resistance, no friction drive.
- High performance series, basic module technology.



2.Cross belt servo electric roller direct drive technology:

- Pulse technology replaces the traditional time synchronous drive to ensure more accurate alignment of goods.
- Servo electric roller drive makes the loading and unloading of packages with different weights more accurate.
- The cart conveyor starts in milliseconds providing fast response and higher efficiency.
- Simple cart construction saves space, reduced weight, reduces energy consumption and easy to install and maintain.

3.High speed with low noise:

The ultra light aluminum alloy optimized cart body is perfectly combined with the low running noise mechanism. The main line running noise is below 68dB.

4.Modular quick disassembly for maintenance:

The industrial modular construction and the introduction of rapid disassembly technology reduces the time to change a cross belt cart to only 5 minutes. The whole cart is replaced online and parts replaced offline, making it very convenient to maintain.

5.Double layer arrangement:

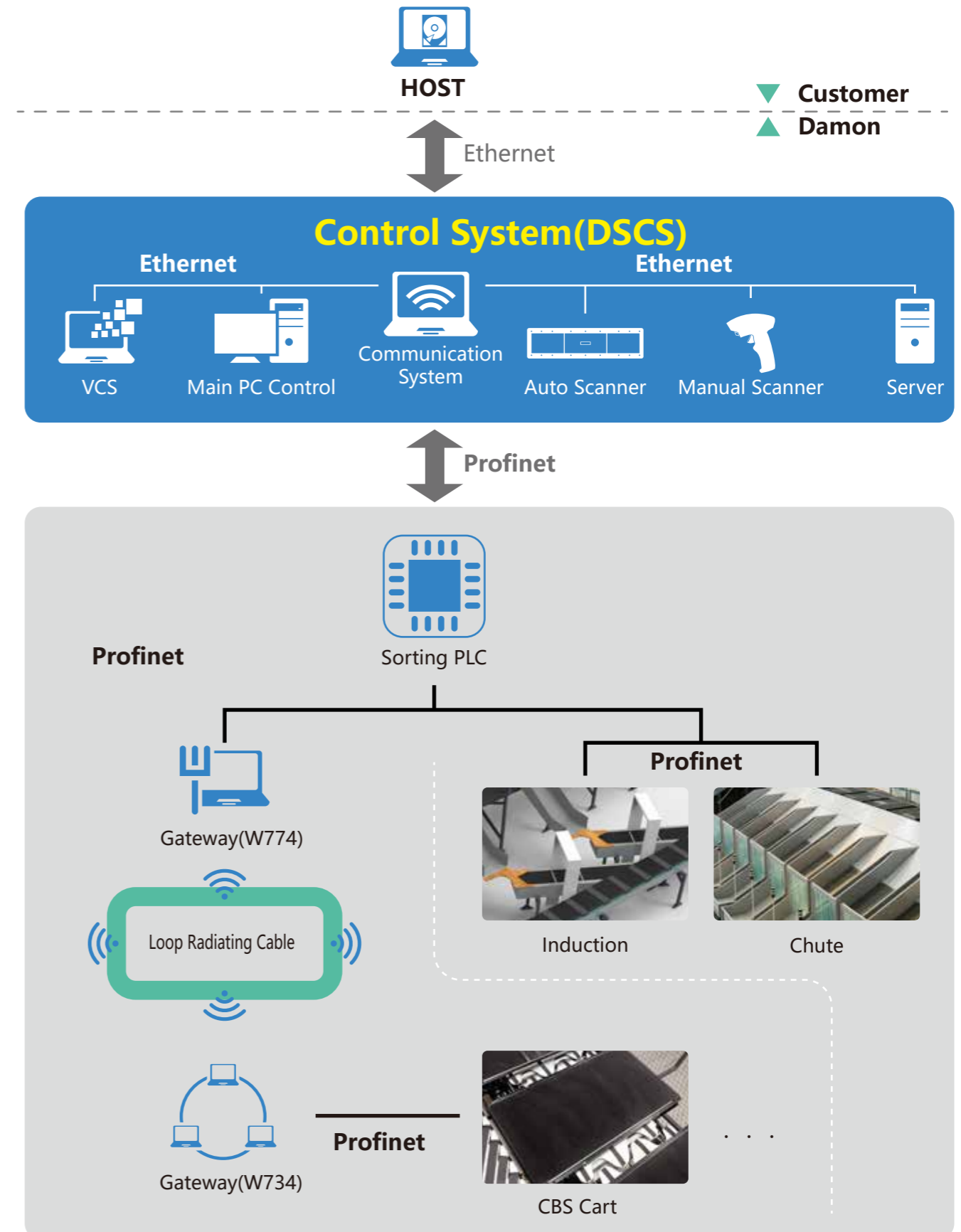
Double layer sorting line can be adopted to make full use of the vertical space and reduce the sorter footprint on site. The double layer sorter can be operated synchronously or independently which can meet different sorting requirements with high sorting efficiency.

6.Customized outfeed:

According to the needs of different customers, a selection different discharging chutes are available such as upper and lower independent discharge chutes, two in one discharge chutes all of which can meet the requirements to arrange a greater number of discharge chutes reducing the space occupied and adding flexibility to set the discharge chutes on upper and lower level sorters.

7.Intelligent communication control technology:

Using distributed leaky wave wireless communication and fast roaming technology, it can achieve instant communication and precise control of all carts no matter how long the loop is. The control system uses intelligent communication methods such as Profinet, TCP/ IP and RS485. To complete the communication between the computer and sort system, Prodrive technology and OPC technology is used to provide remote intelligent fault diagnosis and maintenance.





DAWN Series - Vertical Cross Belt Sorter

Dawn System Components

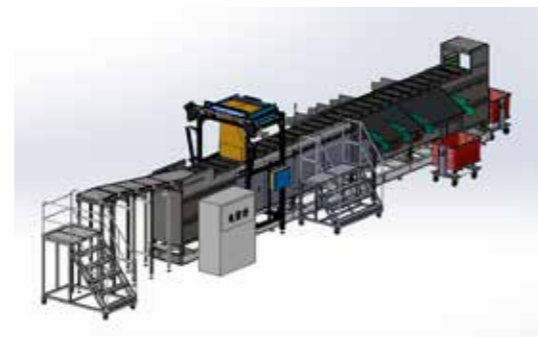
The vertical cross belt sorter system is consisting of the infeed system, sorting host, barcode scanner and outfeed chutes. The system is controlled by the electronic control system. Items are inducted onto the sorter via the infeed system which is available in different options. It is then automatically scanned by the barcode scanner to obtain the item's sortation destination. The sorting host conveys the goods and sorts them to the corresponding outfeed chutes. The vertical cross belt sorter is arranged in a straight line comprised of a group of carts and conveyors formed in a closed vertical loop.

The vertical cross belt sorter has a small footprint and is highly adaptable to sort and process items such as satchels, express mail, cartons, boxes, totes and clothes. The vertical cross belt sorter is key component for sorting and processing items in distribution centers, express delivery and e-commerce industries and is particularly well suited for smaller scale operations.

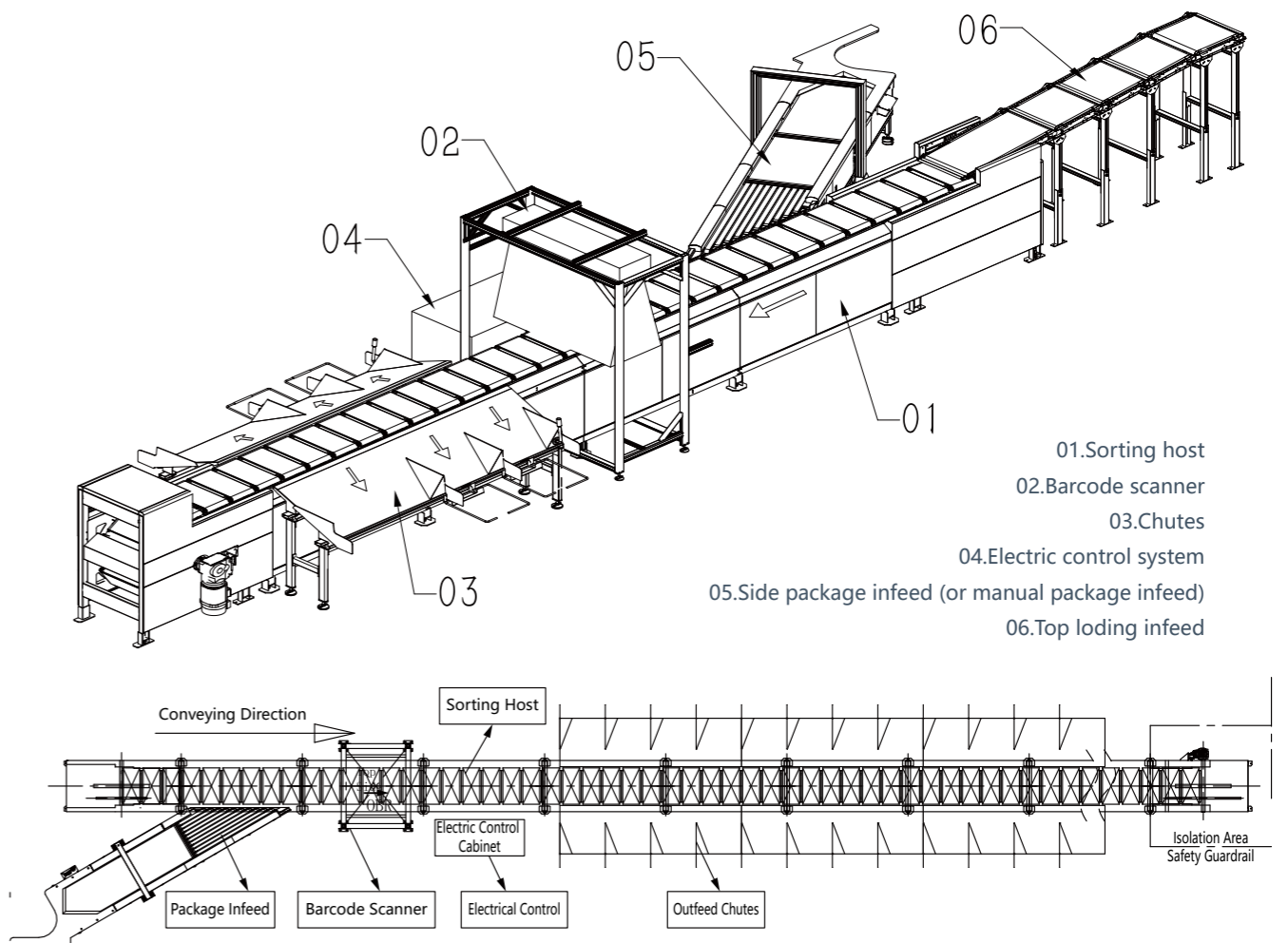
The package infeed system is available with semi-automatic manual package infeed, manual package infeed and top package infeed.

Product Features

- Direct drive cross belt servo electric roller;
 - High running speed and high sorting efficiency;
 - Modular design allows for easy disassembly and maintenance;
 - Small footprint and widely applicable. Especially suitable for small distribution centers and outlets;
 - Flexible rubber drive, low noise running mechanism providing low noise operation;
- The modular industrial design frame is attractive in appearance;



System Structure



Specifications

Model	DCBS-V		
Specification	One cart with one belt		
	DVCS-600×P330	DVCS-700×P500	DVCS-700×P600
Cross Belt Dimensions	L280×W600mm	L440×W700mm	L540×W700mm
Cart Pitch	330mm	500mm	600mm
Height of Belt Surface	1500mm	1970mm	2260mm
Maximum Size of Goods	L500×W300×H300(Occupy one trolley),L600×W500×H400 (Occupy two trolleys)	L600×W400×H400	L600×W500×H400
Minimum Size of Goods	L100×W100×H10mm(Standard)/±L100×W100×H1mm(Customized)		
Running Speed	1-2 m/s		
Mechanical Throughput	Max 16000 pcs / h	Max 12000 pcs / h	Max 10000 pcs / h
Sorting Error Rate	Based on 2m/s running speed		
Weight of Goods	≤0.01%		
Main Line Drive	0.05-30kg		
Cart Conveyor Drive	Gear motor		
Cart Conveyor Power Supply	48V servo electric roller		
Cart Communication	Cart line/non-contact power supply		
Running Noise	RCoax Cable		
Cart Layer Configuration	≤72dB (excluding environmental and steel platform vibration noise)		
	≤80 m/set		

Product Advantages

1. Cross belt servo electric roller direct drive technology:

- Pulse technology replaces the traditional time synchronous drive to ensure more accurate alignment of goods.
- Servo electric roller drive makes the loading and unloading of packages with different weights more accurate.
- The cart conveyor starts in milliseconds providing fast response and higher efficiency.
- Simple cart construction saves space, reduced weight, reduces energy consumption and easy to install and maintain.



2. Motor + rubber chain drive technology:

- Driven by high efficiency and energy-saving three-phase AC motor (SEW).
- Flexible rubber chain drive provides smooth turning operation, low running noise and the rubber chain can be spliced.
- The motor + rubber chain drives the carts to run in a closed vertical loop.



3. High speed with low noise:

The ultra light aluminum alloy optimized cart body is perfectly combined with the low running noise mechanism. The main line running noise is below 72dB.



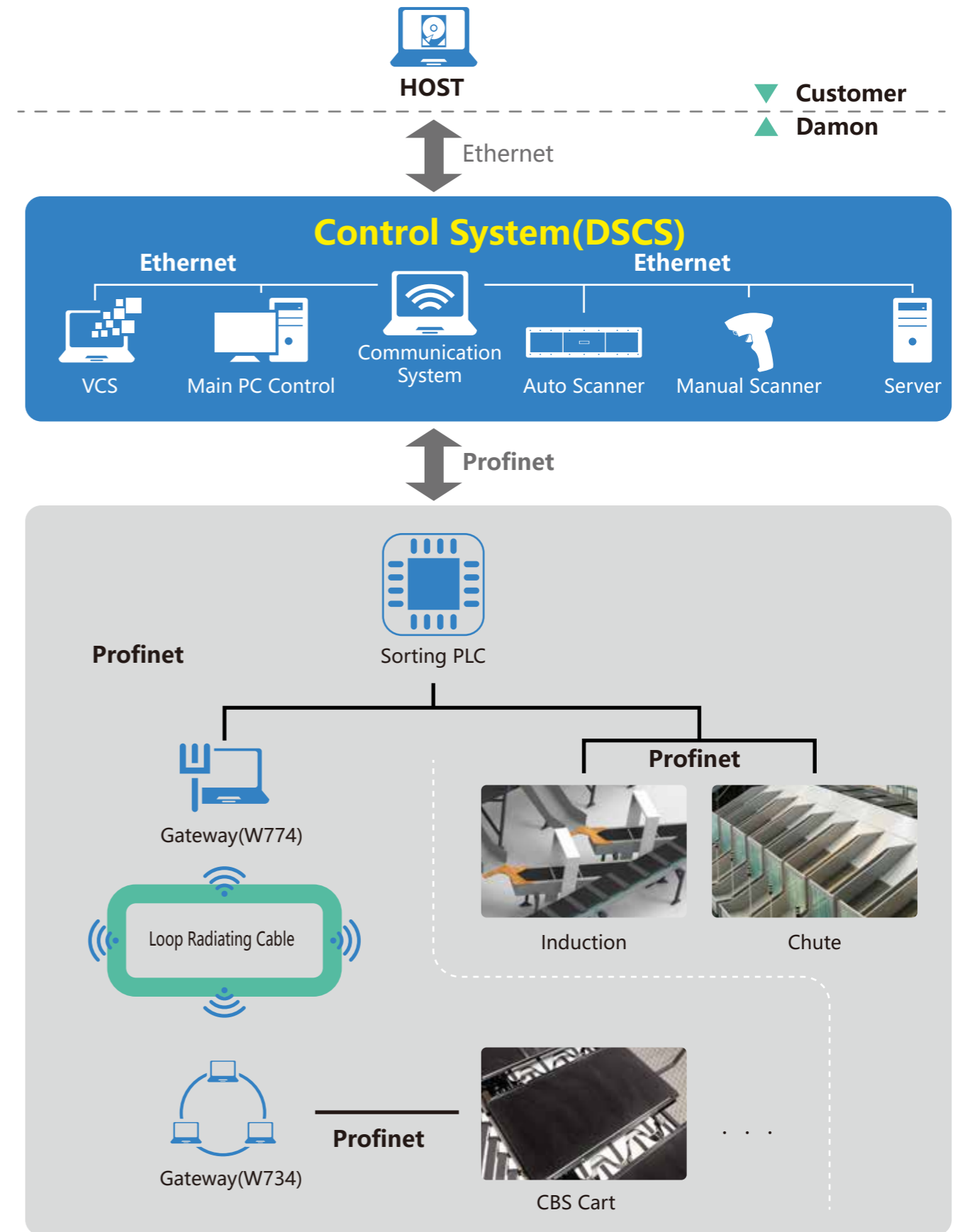
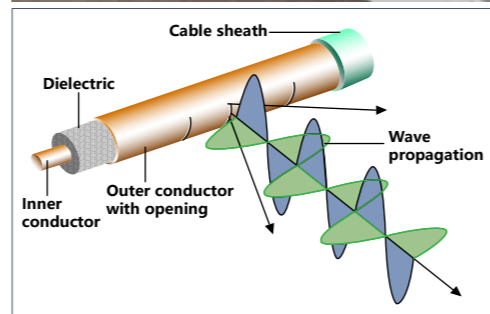
4. Modular quick disassembly for maintenance:

The industrial modular construction and the introduction of rapid disassembly technology reduces the time to change a cross belt cart to only 5 minutes. The whole cart is replaced online and parts replaced offline, making it very convenient to maintain.



5. Intelligent communication control technology:

Using distributed leaky wave wireless communication and fast roaming technology, it can achieve instant communication and precise control of all carts no matter how long the loop is. The control system uses intelligent communication methods such as Profinet, TCP/ IP and RS485. To complete the communication between the computer and sort system, Prodrive technology and OPC technology is used to provide remote intelligent fault diagnosis and maintenance.





DASH Series - Sliding Shoe Sorter

Dash SSS-III Dash SSS-III system components

Damon has been dedicated to the ongoing development of the high speed sliding shoe sorter for many years. The third generation of the high speed sliding shoe sorter is the realization of Damon's focus on sorting technology. With the perfect combination of speed and reliability, the Dash-SSS-III is a perfect example of our new generation intelligent sorting systems. Regardless of the weight, size and shape of the goods, the unique sliding shoe sorter will provide accurate, flexible and fast sorting operations. The system boasts a super high speed switching capability and is suitable for sorting applications in many fields.

Full body industrial design

The perfect combination of industrial design and technology of the entire machine. Component parts are made of high strength plastic materials, aluminum alloys and other high tech materials. The Dash-SSS-III sliding shoe sorter has both modern aesthetics and high end quality.

Dash SSS-III product features

1. Electromagnetic high speed switching technology

The speed and sortation function are perfectly combined by adopting the latest electromagnetic driven high speed switch technology. Millisecond switching capability and unique fork vibration elimination technology are safe, reliable and maintenance free.

2. High speed sorting rate

The sorter host can run at an operating line speed of 2.5m/s. The single side sorting rate can achieve 8,000 pieces per hour. Items may also be simultaneously sorted to both sides.

3. Modular unit integration technology

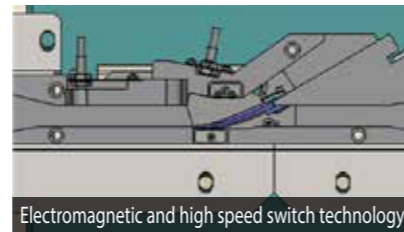
By utilising modular unit integration technology, the construction is simple and convenient for maintenance. Removing and replacing a sliding shoe can be completed in only 2 minutes.

4. Low noise

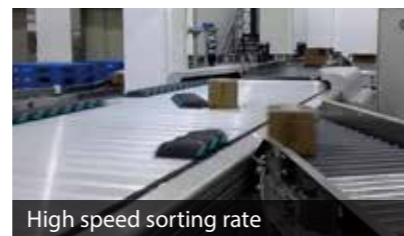
The use of the latest high tech materials has lowered the running noise creating a more comfortable working environment. The operating noise of the main line is less than 70db.

5. Dual motor synchronous drive technology

Using two low power technology drive motors instead of a single large power motor to drive the main line provides higher control precision and a more stable and easily configured system.



Electromagnetic and high speed switch technology



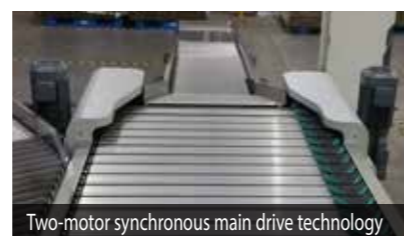
High speed sorting rate



Modular unit integration technology



Low noise



Two-motor synchronous main drive technology

Dash SSS-III main performance parameter



The Damon Dash SSS-III sliding shoe sorter features high speed, high efficiency, stability and reliability. Its electromagnetic high-speed switch technology, modular unit integration technology and low-noise running mechanism have reached advanced international standards and leading domestic standards. With a sorting capacity of 8,000 pieces per hour, it is the preferred choice by E-commerce, courier and apparel industries in China for intelligent sorting equipment.

Content	Specification	Note
Sorter Type	Sliding shoe sorter	
Items to be Handled	Carton, tote, bag, long and slim item, thin items etc	
Dimension	L1500x W900x H700mm L150x WL100x H20mm	1017 Series
Weight	0.5-30Kg	
Rate	8000pcs/h	Depends on items length, gap, sorting method, conveyor speed etc
Speed	Vmax=150 m/min	
Back to Back Width	817 mm, 1017mm	Optional
Quantity of Divert	80pcs/Double side	Determined by the biggest items to be sorted
Sorting Direction	Single side or double sides	
Conveying Surface	Aluminum sliding plate	
Noise	≤75db	Main line of sliding shoe sorter



Split Tray Sorter

Specifications

Capacity:
5-28,800 tray/h

Speed:
0.6-1.2 m/s

Weight:
0.15-10 kg/tray

Noise:<69 dBA

Items supplying mode:
Manual induction and automatic induction.

Pattern of items to be handled:
Suitable for items that are difficult to be handled
(e.g. irregular shape/ round item/ item not packaged/
soft item/ item non-conveyable).



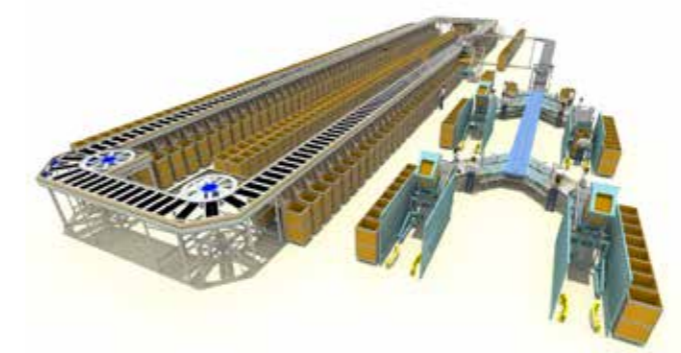
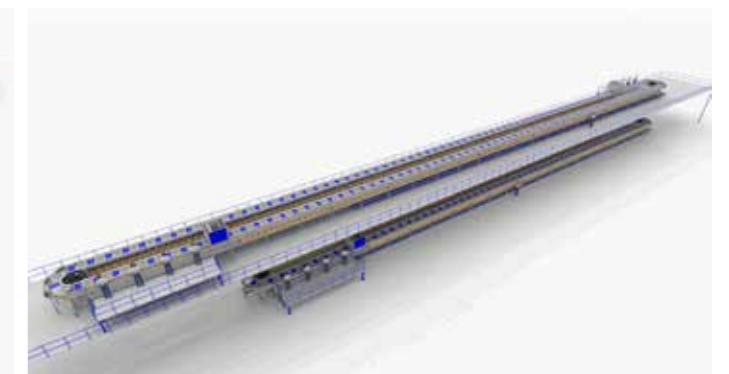
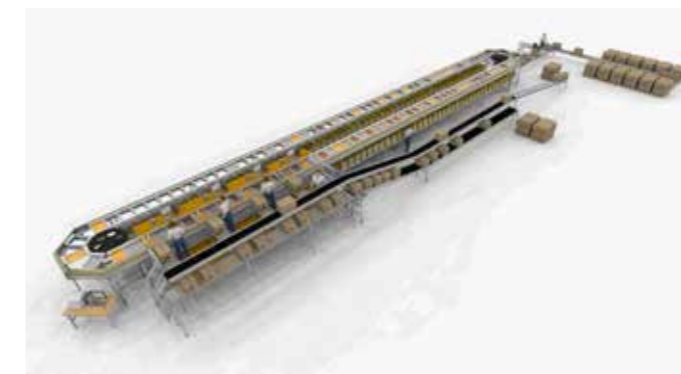
Split Tray Sorter

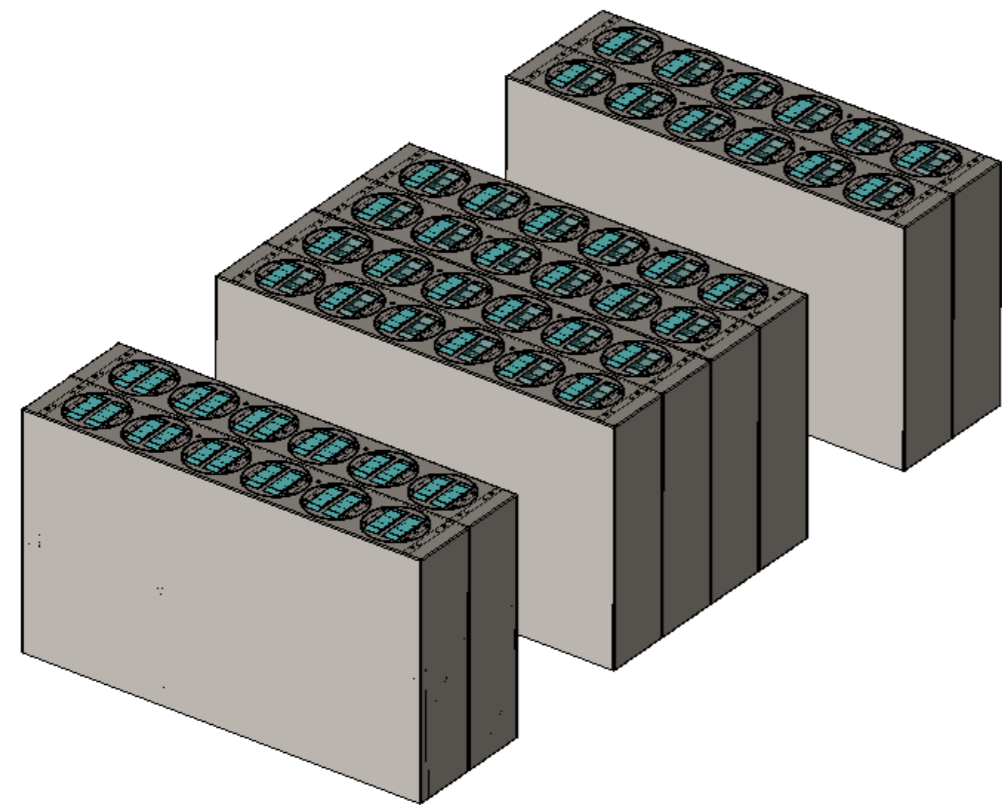
Eurosort flat sorters meet requirements for high volume single item sorting for distribution in many industries. By connecting to the used WCS (warehouse control system), goods to be sorted are lead to the sorter by conveying equipment, automatically or manually fed by an operator. Sorter control is through software, which sorts goods to a given exit by free fall or chute to the corresponding shipping item (carton, tote). Through continuous innovation, the Eurosort flat sorter can achieve rates of 5,000~28,800p/h. Components are designed for an optimized, easy to operate system which is cost effective with simple installation and easy maintenance.



Product Advantage

- Directly sort into carton or tote, minimum ground space needed, relative low input.
- Simple and reliable, easy maintenance leading to low total cost of ownership.
- Suitable for garments, books, pharmaceutical, postal/express (parcel, package),E-commerce industries etc.





High Speed Swivel Wheel Sorter

PRODUCT OVERVIEW

The high speed swivel wheel sorter is a belt type steerable sorting device. The motor transmits power through the belts to provide high speed conveying of goods. A servo motor drives the swivel unit to achieve high speed sorting of articles.

The high speed swivel wheel sorter delivers high speed, high efficiency, heavy load capacity, reliable conveying and sorting to meet the higher demands of the market. It is capable of sorting a wide range of items including cartons, boxes, parcels, clothing and other items and is especially suitable for sorting small parcels and soft packages. It is generally used in e-commerce, express delivery, pharmaceutical, clothing, books and other automated logistics warehouses.

Features

- Up to 8000 pcs/ h (based on L600 x W400mm) sorting capacity at a minimum running speed ≤ 150 m/ min;
- Heavy load capacity of 50kg for conveying and sorting. Impact resistant;
- Suitable for a wide range of goods. Especially suited for sorting small parcels and soft bags;
- Modular construction. Single row independent drive system. Easy to disassemble and maintain;
- Independent control of conveying and sorting reduces the spacing required between items to improve sorting efficiency;
- Servo driven sorting and steering provides fast response times and accurate control of the steering angle. Bi-directional 30° and 45° sorting;
- The sorter has the flexibility to be installed at any point in the conveyor sorting line and can be integrated with different types of conveyors;
- Low running noise, ≤ 74 db

High Speed Swivel Wheel Sorter

Specifications

Sorting speed: ≤ 150 m/min;	Series:600/700/800/1000/1200
Sorting capacity: ≤ 8000 pcs/h;	Swivel rows: 4 rows, 6 rows
Sorting direction: Single side or double sides	Equipment length: 600mm
Sorting angle: 30°, 45°	Equipment height: 600mm
Loading weight: $0.05\text{kg} \leq W \leq 50\text{kg}$	Running noise: ≤ 74 db
Goods types: A variety of cartons, boxes, parcels, clothes, small parcels and soft bags.	

Goods specifications: Min: 100(L)x100(W)x10(H)mm

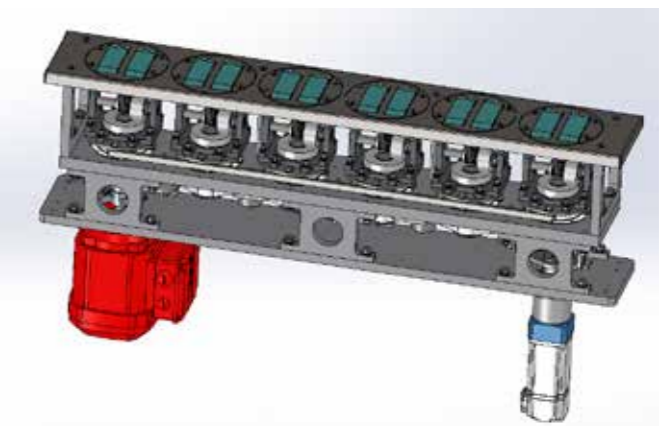
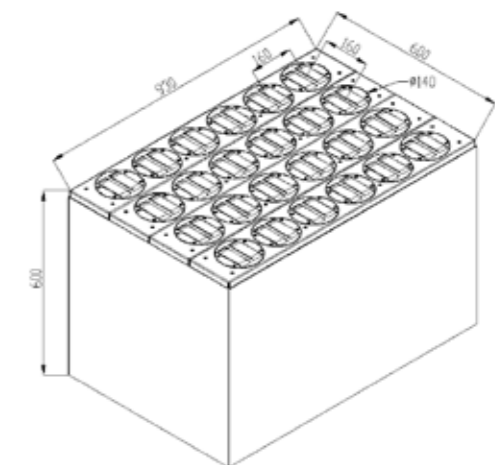
Max: 800series:900x700x650

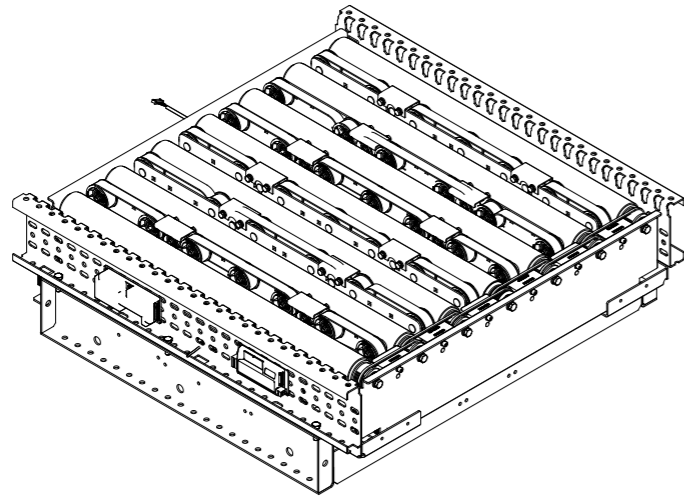
1000series:1100x900x750

1200series:1300x1100x850

Product advantages:

1. Electromagnetic drive, superior transmission technology
 - Electromagnetic drive technology. Frictionless contact. Reliable operation with low noise;
 - Superior transmission technology, reliable transmission, large transmission load, high speed heavy load operation;
 - Unique conveying and sorting unit. Belt conveying and sorting. Flexible contact with the bottom of goods. Large contact area. Smooth conveying and sorting;
2. Modular design, single row independent drive
 - Modular construction. Single row independent drive system. Easy disassembly and maintenance;
 - Each row has independent conveying and steering drives making it convenient for expanding the design;
 - The conveying unit is an independent module which can be easily disassembled and separated from the transmission element which is convenient for disassembly and maintenance.
3. Precise sorting angle control technology
 - Servo driven sorting and steering provides fast response times and accurate control of the steering angle. Bi-directional, multi angle sorting 30 ° and 45 ° sorting.





24V DC Electric Roller Transfer

The 24V DC Electric Roller Transfer module is driven by three embedded electric rollers to control the lift, roller drive and belt drive. The roller conveyor mechanism and belt conveyor mechanism are interactively lifted to complete the right angle transfer function.

It is used to transfer goods at 90 degrees and change the conveying path.

Standard specifications:

Max. load: ≤30kg/Model
Belt speed: 30,50,60 (mm)
Roller speed: 40,50,60 (mm)
Ambient temperature: 0°C~40°C
Ambient humidity: ≤90% (without condensation)
Roller:
Roller type: Damon 2250 series
Roller diameter: Φ50.6x t1.5 (mm)
Tube material: Galvanized pipe with PVC flexible glue outside
PNP/NPN: PNP,NPN
Running direction: Belt conveyor, Roller transfer

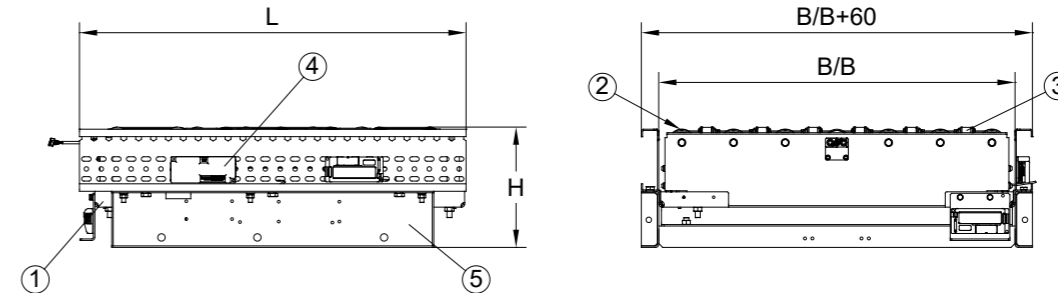
Drive:

Drive type: Damon brushless electrical roller
Drive Voltage: DC 24V
Drive power: 0.04kW×3
Control: W417,W517,With EZQube-P×3 W617,W717,With EZQube-P×2+EZ-24HTB×1

Installation:

Floor mount: G5001 Light single layer double legs. G5003Light duplex double legs.
Ceiling mount: G5003 hanger (G5003 hanger The height from roller surface to the ground should> 2125mm)
Connector: G5-FL-01
Floor levels: The floor is level, error < ±0.5°
Two-way conveyance (Yes/No): Yes

24V DC Electric Roller Transfer Specifications



① Up/Down Base ② Roller Transfer Section ③ Belt Transfer Section ④ Driver ⑤ Mount

B/B	Inner width of the frame: 417、517、617、717
	Outer width of the frame: B/B+60
	Rack cross section: H125×W35×t2.5
L	Module length: 780
RP	Roller pitch: 105
	Belt center distance: 109
	Transfer angle: 90°
H1	Installation height: ≥242
PGR	Optional Guardrail: PGR,AGR-A

*Unit: mm

Table 1: Unit weight (kg) (Excluding legs)

Width(mm):	417	517	617	717
Weight(kg):	73	84	95	103

Color:

- The color of frame and support is RAL7016 highlight
- The color of PVC side plate is Pantone3262C
- The color of plastic guard rail is RAL7040
- The zinc-coated parts are silver zinc; The aluminium alloy parts are aluminum anodized.



Scope of supply: (please pay attention)

- The module is completely assembled but not wired in the factory.
- Each transfer module is fitted with 2 proximity switches.
- Supports/hangers, guard rails and end stops are optional.

*The combination of parameters is not always available. Please contact Damon technicians if any questions!



Swivel Wheel Sorter

Specifications

B/B	Inner width of the frame (mm): 517,617,717,817,917
	Sorting direction: Single side or double sides sorting
	Outer width of the frame(mm): B/B+70mm
	Rack cross section: H400×W35×t3.0(mm)
	Sorting angle(°): 30°,45°
L	Module length (mm) 500,660,720(mm)
P	Swivel wheel pitch(mm): L80×W100(mm)
	Installation height(mm): ≥500mm
PGR	Optional Guardrail: PGR,AGR-A

*Unit: mm

Swivel Wheel Sorter

The Swivel Wheel Sorter is fitted with two motors. One motor is used to drive the rollers and rotate the swivel wheels. The second servo motor is used to drive the connecting rod to change the direction of the swivel wheel to sort items.

The Swivel Wheel Sorter operates as an independent module. The Swivel Wheel Sorter can be installed at any position in the belt or roller conveyor.

It is suitable for diverting and sorting cartons, totes and boxes.

Product performance:

Max. load: 0.5kg to 30kg
Conveying Speed: 36-100m/min
The conveying speed is 1.1-1.2 times of that of main conveying line.
Sorting efficiency: ≤5000pcs/h
Ambient temperature: -5°C - +40°C
Ambient humidity: ≤90% (without condensation)

Drive(Conveying):

Drive type: Gear motor
Rated Voltage(V): AC380V/3Ph/50Hz
Drive power(kw): 0.2kW
Control: PLC
Drive mode: Synchronous belt +O belt

Swivel wheel:

Wheel type: Swivel wheel
Wheel diameter (mm) : Φ55mm
Wheel material : PU rubber wheel

Drive(Diverting):

Drive type: Servo motor
Rated Voltage(V): DC 48V/AC 220V
Drive power(kw): L500 and L660 is single drive 0.4kw; L720 is double drive 0.4kw×2;
Control: Servo motor driver
Drive mode: Connecting rod

Installation:

Floor mount: G5001 Light single layer double legs. G5003Light duplex double legs.
Ceiling mount: G5003 hanger(The height from roller surface to the ground should> 2125mm)
Floor levels(°): The floor is level, error < ±0.5°

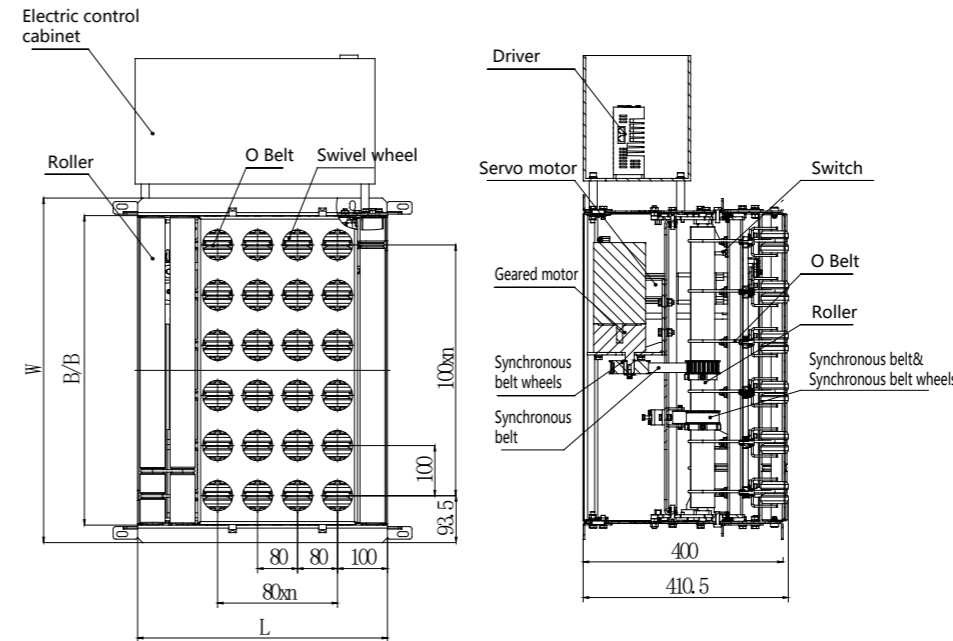
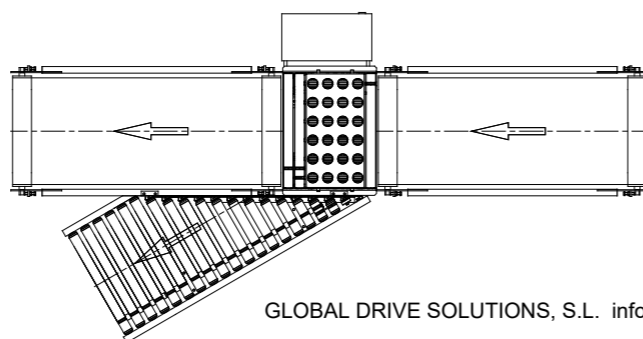


Table 1: Unit modules and unit weight (kg) (Excluding motor and legs)

Model series / mm	Weight / kg
Row 517-4	100
Row 617-4	110
Row 717-4	120
Row 817-4	130
Row 917-4	140
Row 517-6-Single drive	120
Row 617-6-Single drive	135
Row 717-6-Single drive	150
Row 817-6-Single drive	165
Row 917-6-Single drive	180
Row 517-6-Dual drive	135
Row 617-6-Dual drive	150
Row 717-6-Dual drive	165
Row 817-6-Dual drive	180
Row 917-6-Dual drive	195

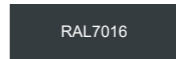
The items dimension(mm):

Width:	517	617	717	817	917
Min:	L250×W180×H10mm				
Max:	L600×W400×H350	L700×W500×H450	L800×W600×H550	L900×W700×H650	L1000×W800×H750

*Unit: mm

Configuration

- Options: outriggers / hangers, guardrails, sensor kit
- Accessories are not assembled when shipped
- The plates are fully assembled when shipped (not pre-wired)
- Standard color of frame and leg: RAL7016 Highlight
- Standard color of electric cabinet: RAL7035





Narrow Belt Sorter

Specifications

- Sorting efficiency: 1200 piece/h-3000 piece/h;
- Main line belt speed: 40-75 m/min
- Transfer roller speed: 50-90 m/min
- Loading: Maximum 35 kg/piece
- Size of conveyed goods: Minimum 150 x 150 mm, maximum 700 x 700mm;
- Sorting chute spacing: Minimum 900 mm
- Main line motor: 1.1-2.0 kW
- Transfer motor: 0.2 kW
- Transfer direction: Bi-directional
- Belt width: 32 mm
- Length of main line: Maximum 30 meters
- Main line B/B width: 510, 620, 730, 840 mm
- Total height of main line: Minimum 750 mm
- Transfer B/B width: 617, 717, 817, 917

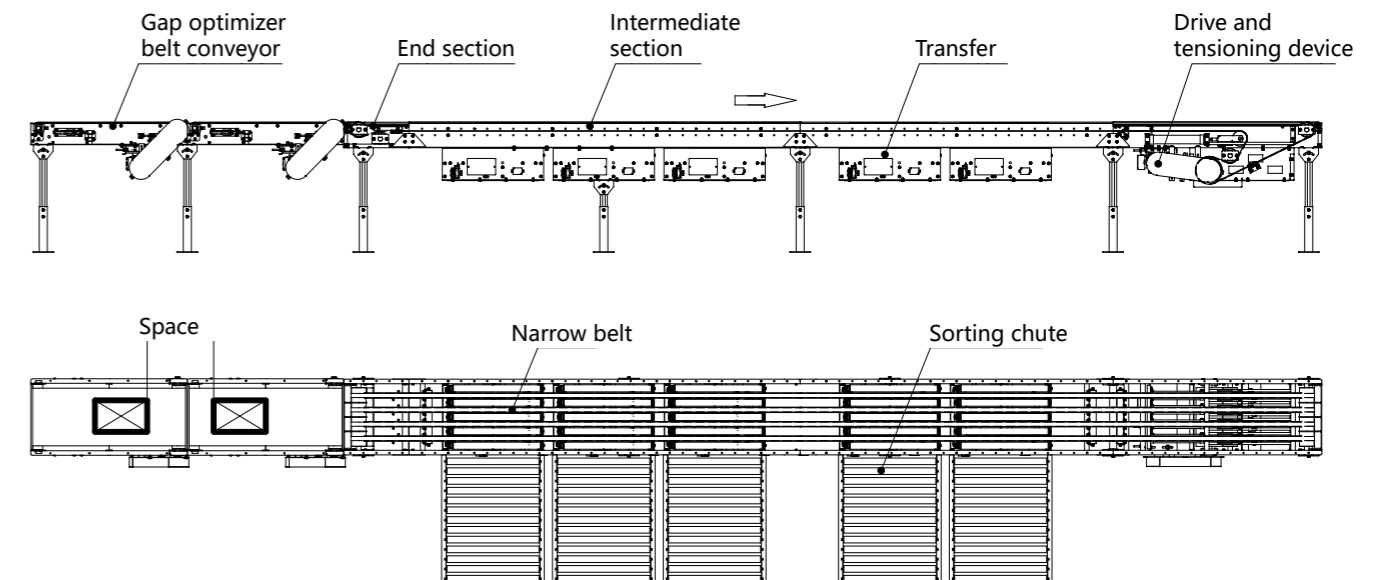
Narrow Belt Sorter

The narrow belt sorter uses multiple parallel narrow belts as the conveying surface and lifting roller transfer conveyors as the sorting device. It is suitable for conveying and sorting various types of goods to densely arranged sorting chutes, work stations, palletizing areas as well as sorting to packing areas after order picking and temporary storage areas. The construction is light, easy to maintain, cost effective with a high running speed and low noise. The narrow belt sorter is easily reconfigured for changes to sorting chute positions and modular expansion. It is capable of sorting various types of products and can be used in e-commerce, pharmaceutical, media, retail, food and beverage and manufacturing industries. The narrow belt sorter provides the best solution for automatic sortation of small and medium sized products.

Features & Benefits

- Product is continuously carried on multiple belts for smooth bump free conveying with excellent tracking accuracy.
- Belts glide along low friction, flanged UHMW guides resulting in reduced noise and eliminating requirements for belt tracking.
- Each belt is individually and automatically tensioned minimizing maintenance.
- High strength narrow belts utilize steel connectors for easy installation and replacement.
- Transfers are fitted with plastic sleeved rollers powered by a poly-v belt for a more positive drive and can transfer in bi-directions.
- Compact modular design of modules allows closer transfer lane center distances.
- Modularity and universal mounting of modules allows easy repositioning or reconfiguration in the field.
- High friction, sleeved rollers are pneumatically raised and lowered in the transfer device.
- Simple user friendly design allows ease of installation and maintenance.

Key components





Swing Arm Sorter

Matrix sorting in express sorting centers can make use of the swing arm sorter instead of manually handling products. The swing arm sorter is a high performance, high precision sorting solution which has extremely low operating failure rates. It is suitable for goods with a flat bottom such as cardboard cartons and plastic boxes and is also suitable for long term, continuous high speed sorting of light weight soft packages and irregular shaped packages. It can greatly improve the efficiency and effectiveness of your company, save production and management costs and improve the intelligence and management of your company.

Specifications:

Sorting weight: $\leq 50\text{Kg/pc}$
 Swing speed: ≤ 1 second/one way
 Swing start and stop: $\leq 0.2\text{s/interval}$
 Sorting capacity: 3000pc/h (single swing)
 Ambient temperature: $-15^{\circ}\text{C}\sim 40^{\circ}\text{C}$
 Ambient humidity: $\leq 90\%$ (without condensation)

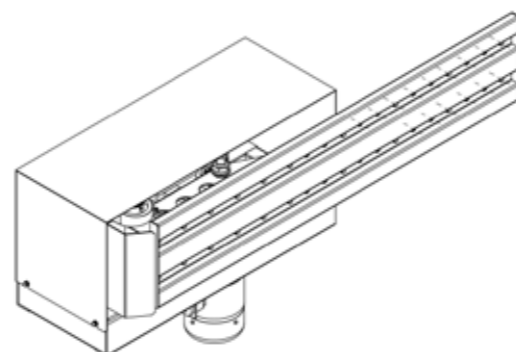
Drive

Type: AC gear motor
 Voltage: AC380V/3Ph/50Hz (Configured according to site requirements)
 Power: 1.5kW
 Transmission mode: Hollow shaft drive
 Control: PLC, optional 'Damon motor starter'

Installation

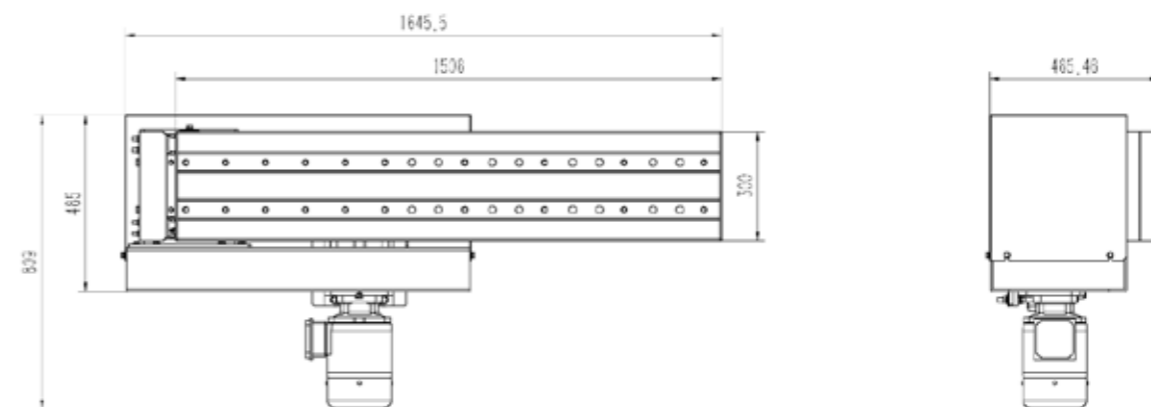
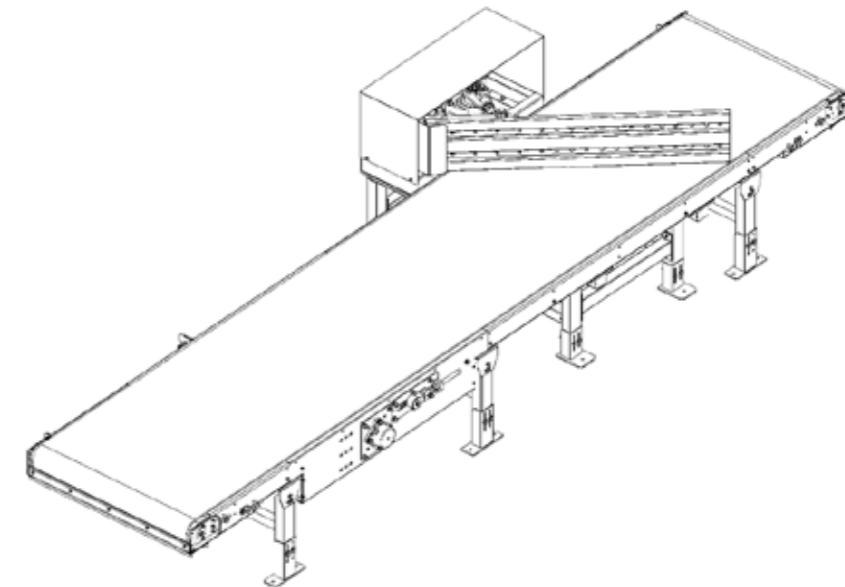
Frame installation: The bracket is made from welded 80 x 60 x 3mm rectangular tube. The swing arm is fixed on the bracket. The bracket is installed on the outside of frame which is fastened by bolts.

Flatness of swing arm: Horizontal installation, error $< \pm 0.5^{\circ}$



Swing Arm Sorter

Specifications



Overall dimensions: L1645.5×W465.46×H809 (mm)

Swing arm size: L1506×W33×H300 (mm)

Swing angle: 45°

Sorting direction: One way

Size of goods: Min. L150 x W150 x H30 (mm)

Max. L1000 x W800 x H800 (mm)

Space between lower edge of swing arm and belt surface: $\leq 20\text{mm}$

Color

- Color of frame is RAL7016
- Color of support is RAL7016
- No bottom under guard fitted
- Stainless steel, aluminum alloy parts not painted
- For non-standard colors, please contact Damon sales.

RAL7016

Shipping

- Frame and supports are packaged separately and requires assembly on site.



Tilted Belt Open Door Sorter

Specifications

Maximum load: $\leq 50\text{Kg/m}^2$
 Conveying speed: 20, 25, 30, 35, 40, 45m/min
 Sorting capacity: 8000pc/h
 Angle of Inclination: 40°C
 Ambient temperature: -15°C- 40°C
 Ambient humidity: $\leq 90\%$ (no condensation)

Installation:

Ground and steel platform: SP002; (Welded 80 x 60 x 3mm square steel tube. The main body is fixed on the bracket tilted at an angle of 40 degrees and fastened with bolts. The bracket is adjustable $\pm 50\text{mm}$.)

Overhead support: Not available

Conveying direction: The direction of conveying is set in the forward direction and cannot be reversed.

Belt:

Type: Smooth surface, longitudinal groove belt, low friction back
 Thickness: 3.0mm, 3.6mm
 Material: Black PVC, Black PVK

Slider bed:

Type: Smooth surface (The upper surface of slider bed and frame is on the same horizontal plane)

Thickness: 3.0mm
 Material: Powder coated carbon steel

Drive:

Type: AC gear motor (with brake)
 Voltage: AC380V/3Ph/50Hz (Configured according to site requirements)

Motor power (kW)	Applicable length(mm)
3	10000 $L \leq 15000$
4	15000 $L \leq 20000$
5.5	20000 $L \leq 25000$

Motor power of sliding door: 0.37kW

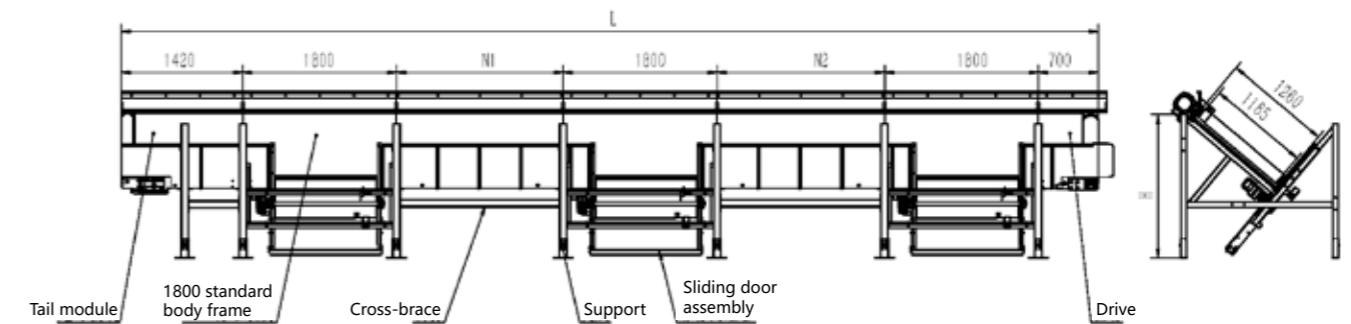
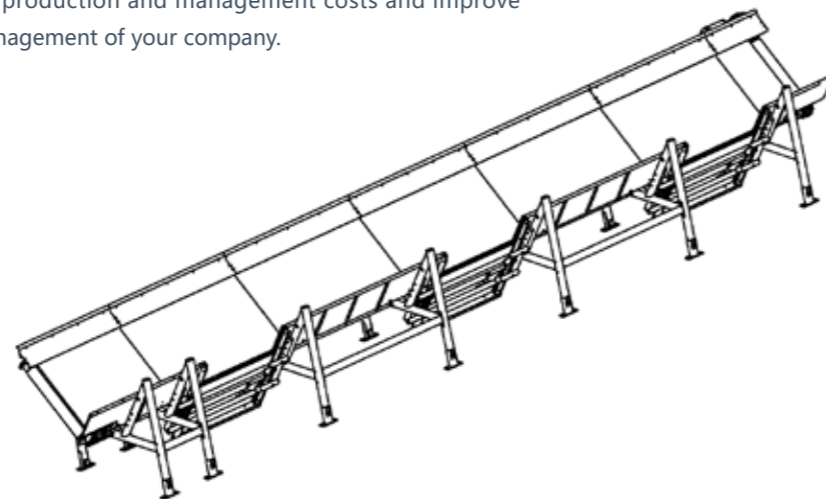
Motor power of sliding door: Hollow shaft drive (vertical mount)

Control: PLC optional 'Damon motor starter'

Tilted Belt Open Door Sorter

PRODUCT OVERVIEW

The tilted belt open door sorter is generally used to deliver goods to the front end of cross belt sorter manual infeed stations. Goods pass the automatic opening and closing doors and slide down the supply chute. When the chute is full, the door will automatically close and the next chute door will open performing a cyclic supply to the supply chutes. The tilted belt open door sorter is a highly efficient sorting solution with extremely low failure rates suitable for goods such as cartons and packages with a flat bottom surface. It can greatly improve the efficiency and effectiveness of your company, save production and management costs and improve the intelligence and management of your company.



Frame inner width: 1185mm
 Frame outer width: 1260mm
 Standard length: 10000 - 25000mm, in standard increments of 1000mm
 Installing height: $\geq 1000\text{mm}$ (relative to steel platform)
 Ground: $\geq 3000\text{mm}$
 Height of side guides: 500mm high

Color

- Color of frame is RAL7016
- Color of support is RAL7016
- No bottom under guard fitted
- Stainless steel, aluminum alloy parts not painted
- For non-standard colors, please contact Damon sales

RAL7016

Shipping

-Frame and supports are packaged separately and requires assembly on site.

Case Show

