

# High-speed Sortation System

A fast, reliable, cost-effective order fulfilment depends on a high-throughput sorting system. It is a vital element for our customers to improve competitiveness by shortening their order processing time.

## Features of System

**+ Comprehensive product lines, sorting all your 'problems' no matter how big or small**

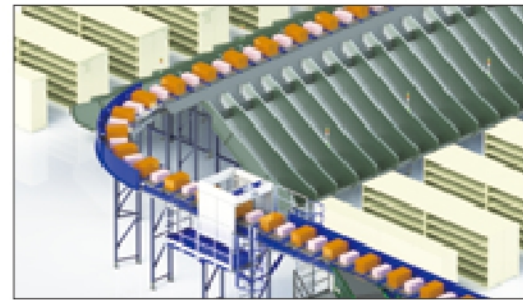
Adaptable to wide-range of articles in different weight and packaging from thin objects like mails to large parcels weighing up to 45 kg.

**+ High-throughput & Cost-effective Solutions**

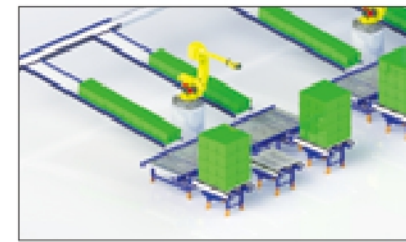
Constantly high-speed processing performance can reach 24,000 pcs/hr maximum capacity.

**+ Modular design, Flexible deployment**

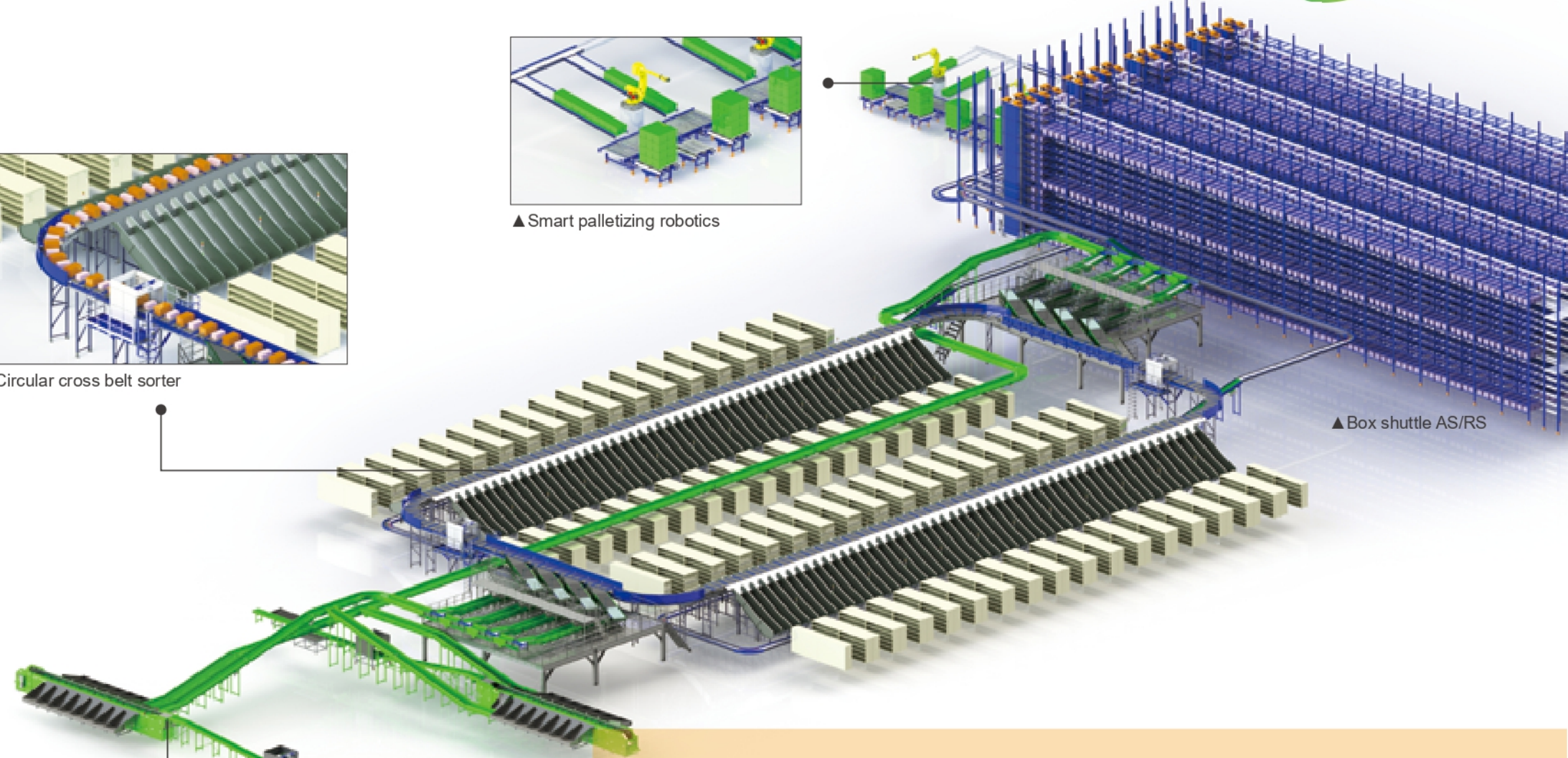
Modular design facilitate customization based on facility layout and expected capacity, massively increasing the flexibility of system deployment.



▲ Circular cross belt sorter



▲ Smart palletizing robotics



▲ Box shuttle AS/RS



▲ Narrow-carrier cross belt sorter

## Case study

Omni-channel, digitalization and mass personalization are redefining the logistics industry, especially in retail, e-commerce and 3PL, they are facing a broad range and a large number of products with the demands of sortation, buffering and order processing. After integrating iAmech solution, you can effortlessly process tens of thousands of daily orders with our high-speed cross belt sorter; on the top of that, our box shuttle AS/RS can also maximize the use of height and buffer the products. Last but not least, palletizing in the shipping stage executed by smart palletizing robotics reduces numbers of operators. iAmech solution smooths the processes from receipt to dispatch and optimizes your distribution center.

**What iAmech did**

- √ Narrow-carrier Cross Belt Sorter
- √ Circular Cross Belt Sorter
- √ Box Shuttle AS/RS
- √ Smart Palletizing Robotics

**What iAmech achieved**

- √ 150,000 pieces of daily order performance
- √ 625 pallets of daily shipments
- √ 18,750 pcs/hr sorting capacity
- √ 20,000 storage locations



Achieve high throughput rates

## Cross Belt Sorter

iAmech has circular and linear configurations for cross belt sorter. In this year, our innovative team has already successfully developed narrow-carrier cross belt sorter.

In cross belt sorter, goods are placed and transported on a series of carriers which have small bi-directional conveyor belts. The carriers are driven mechanically by linear motor. When carriers reach to the assigned destination, the bi-directional conveyor belt of carrier will turn left or right to discharge goods to sorting chute.

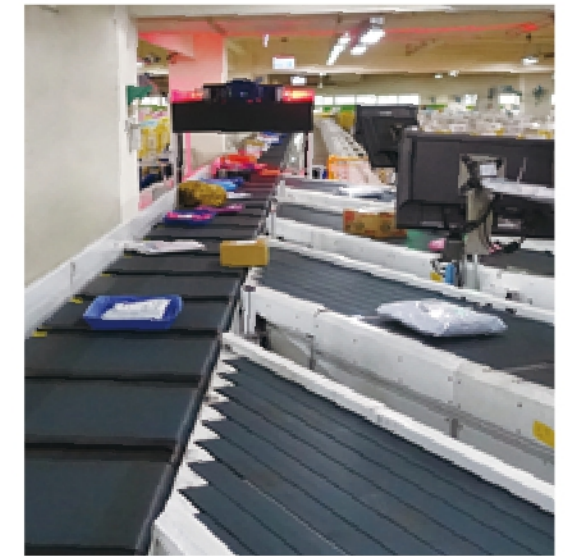
iAmech's solution can help you handle goods at high speed with high throughput. We can not only improve the accuracy of the sorting process to reduce the error rate in the distribution process, but also help you achieve high efficiency to exceed your expectations.



▲Circular Cross Belt Sorter



▲Narrow-carrier Cross Belt Sorter



▲Linear Cross Belt Sorter



▲Circular Cross Belt Sorter



▲Circular Cross Belt Sorter

		Circular Cross Belt Sorter	Linear Cross Belt Sorter	Narrow-carrier Cross Belt Sorter
Weight of goods (kg)		0.5~10	0.5~10	0.5~10
Goods dimension (mm)	Min.	L150 x W150 xH15	L150 x W150 xH15	L150 x W150 xH15
	Max.	L450 x W350 x H300	L450 x W350 x H300	L450 x W350 x H300
Sorting speed (m/min)		120	60	80~100
Sorting capacity (pcs/hr)		Max. 24000	Max. 6000	8000~10000
Sorting pitch (mm)		600	600	500~1000
Goods		Letters, Packages, Polybags, Cartons	Letters, Packages, Polybags, Cartons	Letters, Packages, Polybags, Cartons

● Sorting capacity will depend on sorting pitch, sorting speed and the dimensions of goods



Adapt your diverse goods types

## Sliding Shoe Sorter

Sliding shoe sorter has conveyor with uniform aluminum slats that use shoes to divert goods. Shoes move diagonally across the conveyor to gently push the good to the sorting chute. Moreover, sliding shoe sorter can automatically measure the length of goods to determine how many shoes should be used to transport goods which makes the shoe sorter ideal for sorting a very wide range of product sizes. With iAmech's sliding shoe sorter, you can have more accurate movement and gentle handling of your product at high rates of speed.



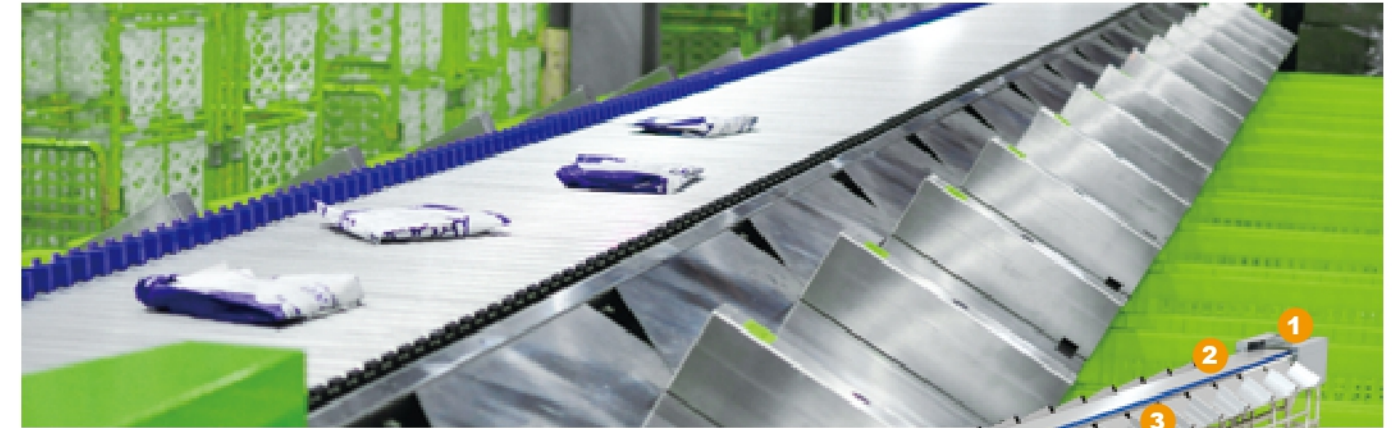
▲ Small, medium and Large sliding shoe sorter (Top view)



▲ Large Sliding Shoe Sorter



▲ Large Sliding Shoe Sorter



There is an outfeed port for defective goods in the end of the sorting system.



1. Goods Infeed port
2. Conveyor
3. Sorting chutes
4. Defective goods outfeed port



▲ Small and medium sliding shoe sorter



▲ Small and medium sliding shoe sorter

		Small Sliding Shoe Sorter	Medium Sliding Shoe Sorter	Large Sliding Shoe Sorter
Weight of goods (kg)		0.1~5	0.1~10	1~45
Goods dimension (mm)	Min.	L55 x W55 x H5	L55 x W55 x H5	L230 x W230 x H50
	Max.	030 : L400 x W285 x H250	030 : L400 x W285 x H250	05 : L900 x W500 x H500
		040 : L500 x W350 x H250	040 : L500 x W350 x H250	06 : L1000 x W600 x H500
		050 : L600 x W416 x H250	050 : L600 x W416 x H250	08 : L1100 x W800 x H500
Sorting speed (m/min)		70	70	200
Sorting capacity (pcs/hr)		Max. 7000	Max. 7000	8000~11700
Sorting pitch (mm)		030 : 660.4	030 : 660.4	05 : 2700
		040 : 762	040 : 762	06 : 3000
		050 : 863.6	050 : 863.6	08 : 3600
Goods		Letters, Packages, Polybags, Cartons	Letters, Packages, Polybags, Cartons	Logistics boxes and cartons with rigid and flat bottom

● Sorting capacity will depend on sorting pitch, sorting speed and the dimensions of goods

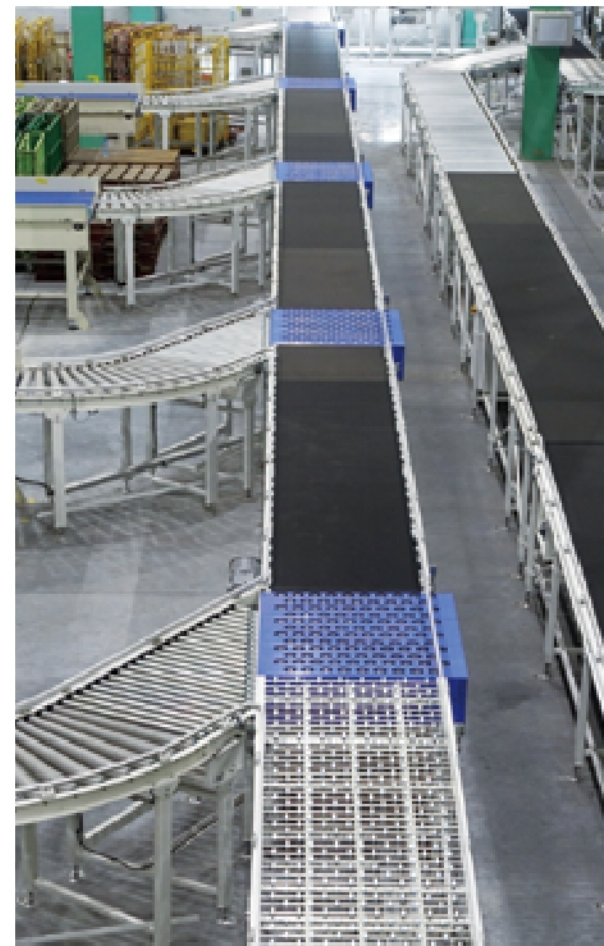
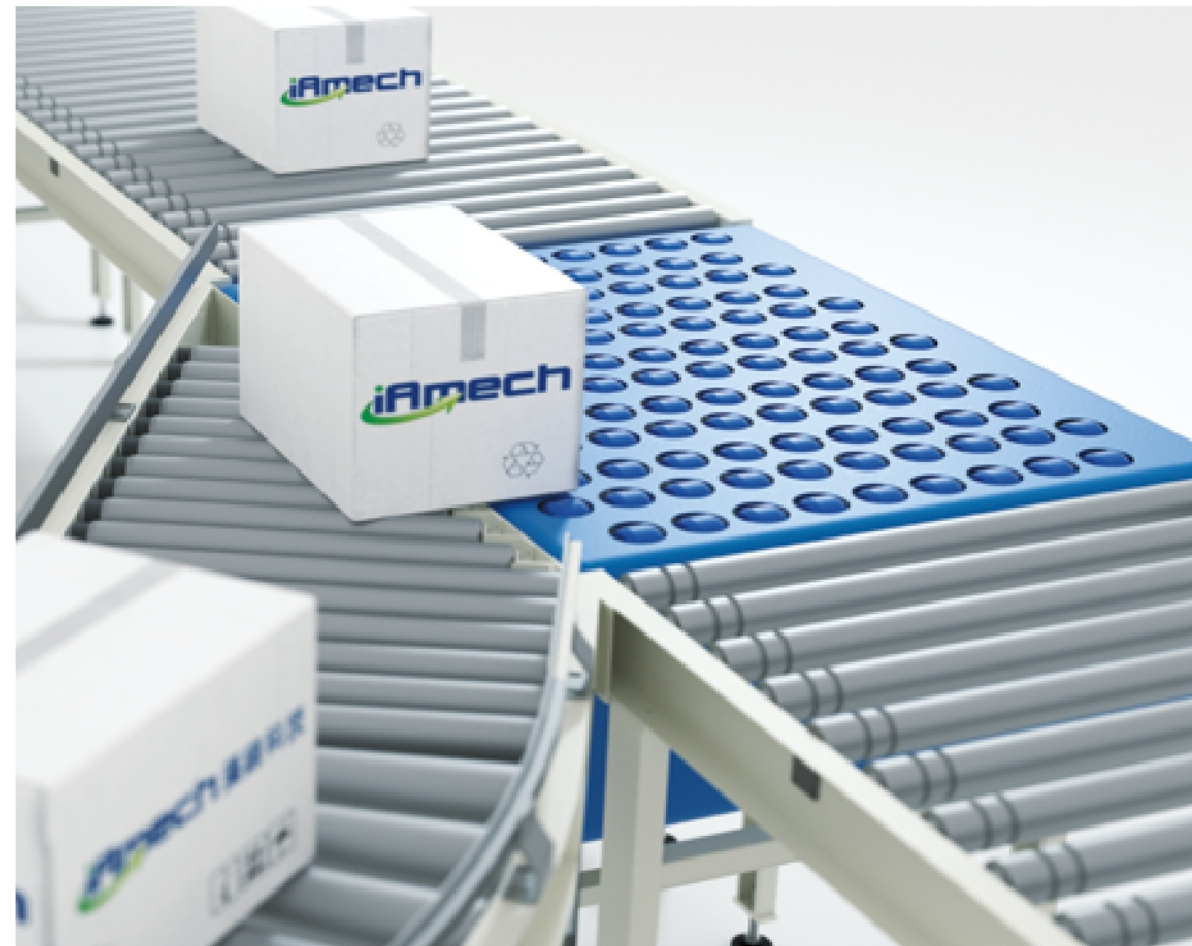


Flexible in multiple directions

## Wheel Sorter

Wheel sorter is based on the modular structure with flexible utilization and usually use between conveyors. Wheel sorter divert wheels to rotate and redirect goods. This can not only change direction of goods, but also can reduces the stresses involve on goods.

Weight of goods (kg)	0.5~50
Goods dimensions (mm)	Min. L250 x W200 xH15 Max. L1000 x W600 x H600
Sorting speed (m/min)	120
Sorting capacity (pcs/hr)	7200
Goods	Packages, polybags, cartons, logistics boxes



Your right-hand man for hanging goods

## Hanging Sorter

Hanging sorter is an overhead system which can sort, transport and sequence hanging goods like garments on hangers or flat-packed goods. iAmech's hanging sorter can improve your vertical space utilization to optimize your process.

Weight of goods (kg)	3
Sorting speed (m/min)	20
Sorting capacity (pcs/hr)	6000
Goods	Clothing, Hanging goods