

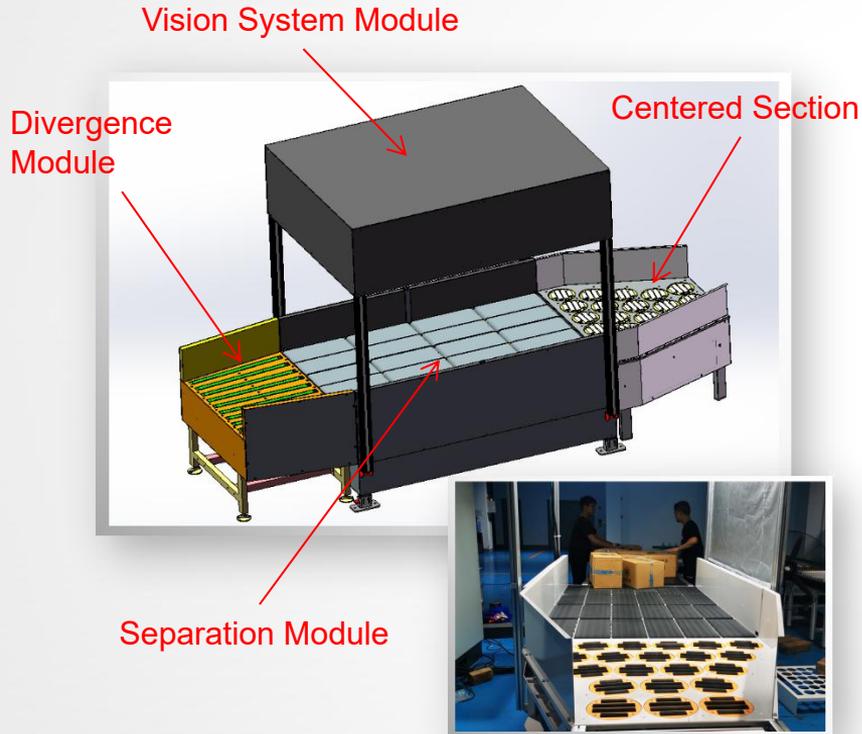


Singulation

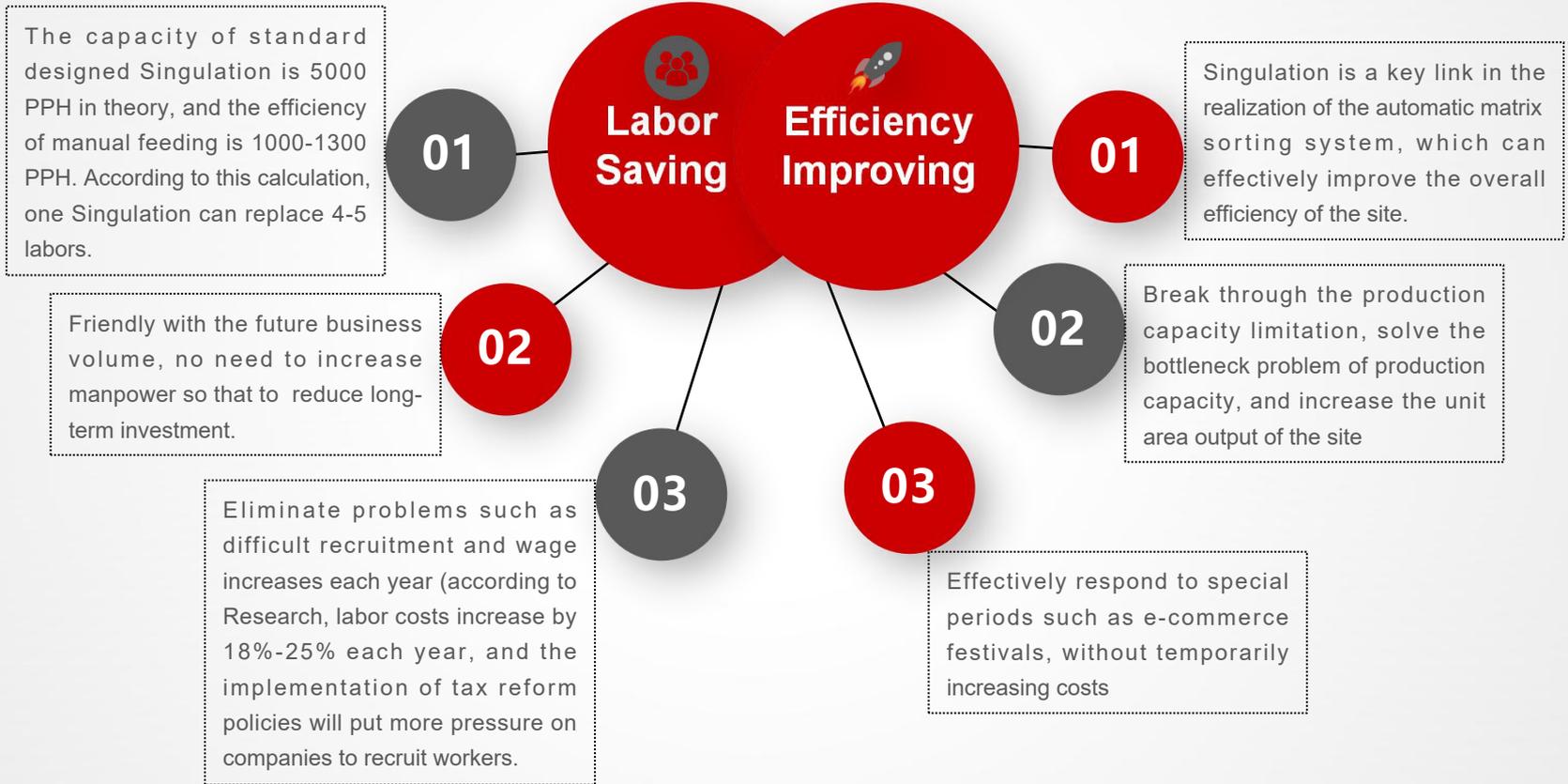
Wangman Intelligent(Shanghai) Co., Ltd

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Singulation conveyor system is mainly composed of Divergence Model, Separation Model, Vision System Model, Electrical Control Model and Centered Section. It can be designed at the front of various automated sorting solutions. The main function is to auto-separate, auto-space and auto-queue up the mixed packages before entering the sorting lines, so that the messy packages become single rows according to the specified spacing. The "formation" passes in an orderly manner and enters DWS or automated sorting equipment one by one, which greatly improves the success rate and accuracy of parcel sorting.



Specification



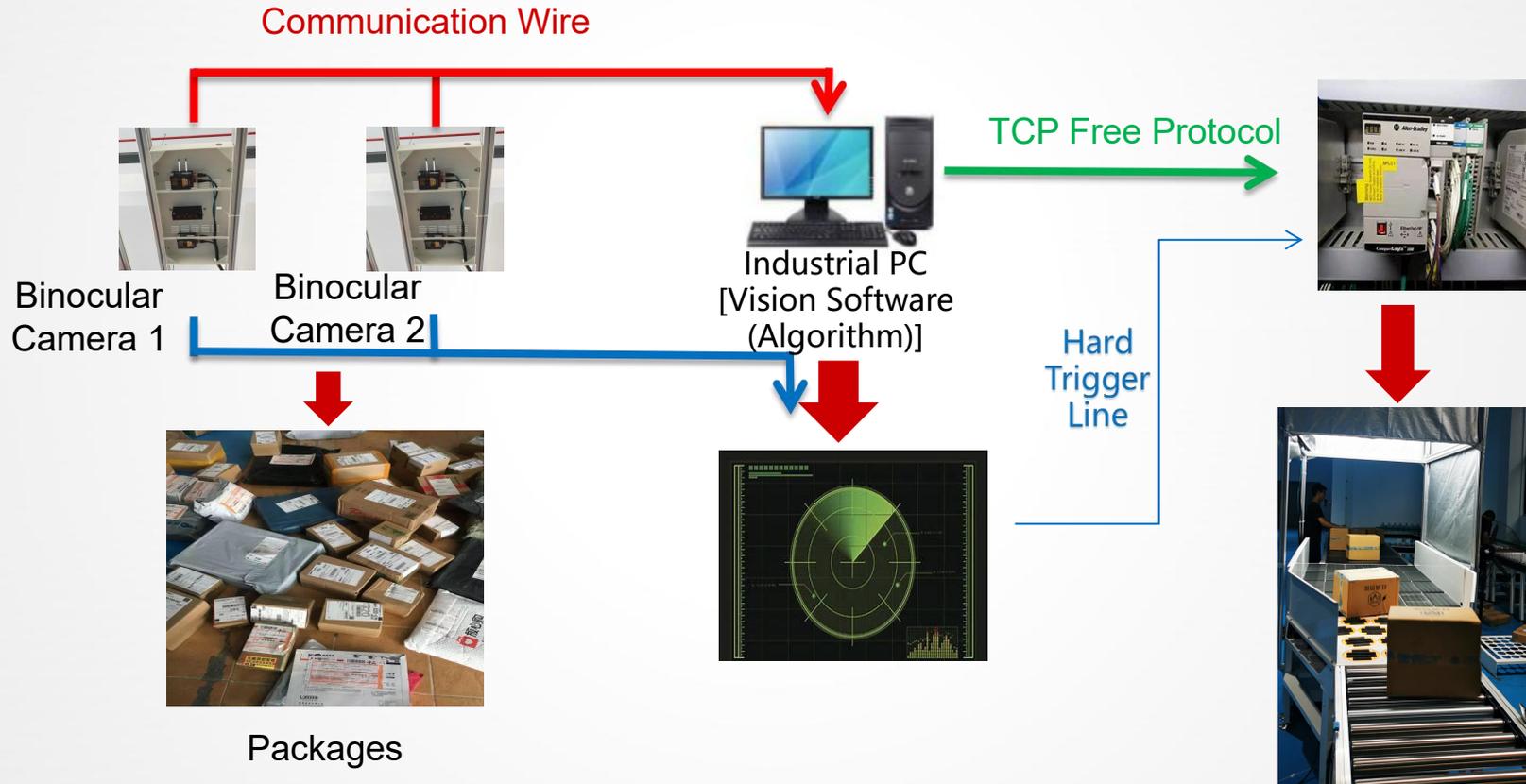
Item	Parameter	Item	Parameter
Working Mode	Separation Mode or Pipeline Mode	Package Shape	"Non-Rolling" Packages
Capacity	5000PPH(Packages Per Hour)	Speed of Divergence Module	0.8m/s~1.2m/s
Package Weight	Min 0.2kg~Max 35kgs	Speed of Separation Modules	1.2m/s~2m/s
Package Dimensions	150*150*15mm~1000*1000*600mm	Separation Success Rate	≥99%
Applications	Not limited by the degree of clutter and density	Working Temperature	-10~50 °C
	Adapt to diffuse reflection packages with surface reflectance bigger than 10%	Working humidity	20%~90% RH(Non-Condensing)

Main Components



No.	Item	Brand	Country	No.	Item	Brand	Country
1	PLC	Hechuan	China	7	Air Switch	Schneider	France
2	Servo Motor	Hechuan	China	8	Emergency Stop	Schneider	France
3	Servo Driver	Hechuan	China	9	Button	Schneider	France
4	Wheel Roller	Wangman	China	10	Alarm Indicator	Schneider	France
5	3D Vision Camera	Dahua	China	11	Power Indicator	Schneider	France
6	Relay	Schneider	France	12	Electric Control Box	Wangman	China

◆ Vision System Control Topology Diagram



Advantages



High-precision contour recognition algorithm, self-developed auto-space control and adjustment, support separation of packages left and right, front and rear adhesion.

The optical infrared binocular camera used in its visual recognition system has high stability and can resist ambient light interference

High-precision contour recognition algorithm to locate packages as low as 15mm.

Modular and stable design, convenient installation and maintenance, high return on investment

Make messy and mixed packages automatically separate and queue up, then enter DWS and various automatic sorting equipment in an orderly manner.

Reduce manual operation errors, and the accuracy of parcel sorting can be up to 99%

Friendly with various types of packages such as cartons, soft bags, woven bags, etc., with a maximum efficiency up to 5000 packages/hour, which greatly improves efficiency

The size of each module can be customized according to the actual needs of customers





THANKS

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