

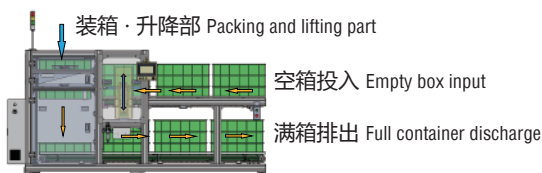
# 简易型排列机C SIMPLE PALLET CHANGER C

## C (Simple Pallet Changer)

- 可长时间无人化作业。  
It can be unmanned work for a long time.
- 排列机可以与AGV小车进行对接，可以通过IO或者通讯协议方式交互。(OP选项)  
It can be docked with the AGV car and can interact through IO or communication protocol. (OPTION)
- 进出口端可以外加升降单元，在AGV单层时候可以实现空箱和满箱的交替。(OP选项)  
The feed and discharge port can be supplemented with a lifting unit, which can realize the alternations of empty and full boxes when the AGV is single layer. (OPTION)
- 液晶显示器，操作简单。  
Liquid crystal display, operation is simple.
- 控制系统采用STEC-S2或者PLC。  
The control system adopts PLC or STEC-S2.
- 可以根据客户物料箱进行定制。  
It can be customized according to customer material box.



### 动作流程 OPERATION DIAGRAM



1. 在上层输送带每垛放入3个空箱，输送链开始转动，把空箱向前传送。
2. 通过阻挡气缸和传感器，逐个投入3垛空箱。
3. 最前端的空箱到位后，拆码垛单元对空箱进行拆垛，拆垛下来的空箱，推箱子气缸动作，把空箱推入空箱定位机构上面。
4. 升降单元马达移动，把空箱移动到待接产品位置，承接产品，摆满一箱后，升降马达下降，再推一个空箱到空箱定位机构上面，马达上升接空箱，然后开始接产品，重复上述动作直至一垛3个箱子摆满产品。
5. 产品摆满3空箱后，上下马达移动把满箱移动到下层输送带上面，传送带启动等待满箱移动离开后，升降单元上升。到待接空箱位置，接下个空箱。
6. 下层输送带运动，把满箱移动一个位置，待下面三垛9箱摆满后，排列机发出提示音，提示人工或AGV小车，把满箱拿走，同时上层放入空箱。这样周而复始满足长时间无人化生产。

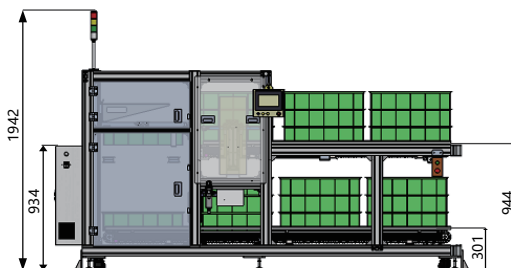
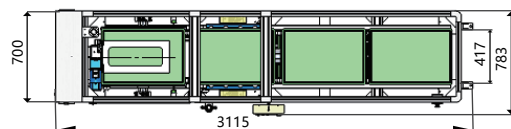
1. Put 3 empty boxes in each section of the upper conveyor, and the conveyor chain starts to rotate to transfer the empty boxes forward.
2. 3 empty boxes are put in one by one by the confirmation of the blocking cylinder and sensor.
3. When the most front empty box is in place, the dismantling and palletizing unit disassembles the empty box and pushes the empty box into the positioning mechanism through the cylinder pushing action.
4. The vertical unit motor moves, and the empty box moves to the position of receiving the product, after the product is filled with a box, the lifting motor drops, and then pushes an empty box to the positioning mechanism, the motor rises to receive the empty box, and begins to receive the product, repeat the above action until 3 boxes are filled with products.
5. After the products are filled with 3 empty boxes, the vertical motor moves the full box to the lower conveyor, the conveyor starts and moves the full box away, the lifting unit rises, and then goes to take the next empty box.
6. The lower conveyor moves the full box to the command position, and when the three stacks of 9 boxes are filled, the pallet changer gives a prompt tone to prompt the manual or AGV car to take away the full box, while puts in the empty box on the upper layer. This repeated cycle enables long-term unmanned production.

### 主要参数 MAIN SPECIFICATIONS

电源 Power Source	单相(Single Phase) AC200V±10% · 50/60Hz
常用气压 Air Pressure	0.49MPa
电源设备容量 Electric Consumption	0.9kVA
耗气量 Air Consumption	4Nl / cycle
物料箱交换时间 Container Replacement Period	9.5sec
物料箱可搬重量 Maximum loading Weight of Container	7kg (含物料箱重量) (Including the weight of container)
一堆最大堆叠重量 Maximum Stacking Weight	30kg (含物料箱重量) (Including the weight of container)
可用物料箱 Available Container Type	类似F70 / Similar to F70
最大堆叠高度 Maximum Stacking Height	480mm
堆积量 Stockble Quantity	标准模式3堆 Standard Mode:3Piles
外观尺寸 Overall Dimension	L3115×W700×H1942mm

驱动方式 Driving Method	气缸+马达 Air Cylinder + Motor
控制方式 Control Method	STEC-S2控制器/PLC+触摸屏 STEC-S2 controller /PLC+ touch screen

### 外观尺寸 OUTER DIMENSIONS

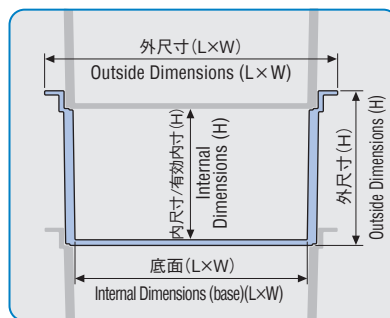


## FA 物料箱

大力推进自动化，强化物料箱的重要性。STAR也着眼物流行业，研发出具划时代意义的物料箱。

Demand of this kind of container is getting greater for more factory automation. STAR SEIKI can supply an epoch-making containers considering transportation and storage.

- FA物料箱 + 排列机 + 机械手 = 流畅的无人操作系统。  
Integrated automation system will be completed using FA Container, pallet changer and unloader.
- 不仅尺寸、颜色多样，还有带导电性物料箱，可满足多种不同的实际需求。  
We can custom build FA / conductive / color containers according to your factory's needs and requirements.
- 对应STAR标准排列机，为客户提供内置隔板。  
Inner sheets for Star Seiki standard Pallet Changer are also available.
- 也可根据客户既有的物料箱进行定制化设计。  
It also can be customized according to the existing material boxes of customers.



### 主要参数 MAIN SPECIFICATIONS

#### F-40

规格 Specification	25H	50H	75H	100H	125H	
外尺寸 (mm) Outside Dimensions	518(L) × 344 (W)					
底面/Base(mm) 内尺寸 Internal Dimensions	474(L) × 300 (W)					
高度 (mm) Height	外尺寸 Outside Dimensions	42.5	67.5	90	115	140
	内尺寸 Internal Dimensions	20	45	70	95	120
制品重量 (g) Weight	410	420	460	500	540	
最大容量 Maximum Capacity	7kg以下 / 7 kg and Under					
最大堆垛重量 Maximun Stacking Weight	70kg以下 / 70 kg and Under					

#### F-70

规格 Specification	25H	50H	75H	100H	125H	
外尺寸 (mm) Outside Dimensions	622(L) × 417 (W)					
底面/Base(mm) 内尺寸 Internal Dimensions	578(L) × 373 (W)					
高度 (mm) Height	外尺寸 Outside Dimensions	42	67	90	115	140
	内尺寸 Internal Dimensions	20	45	70	95	120
制品重量 (g) Weight	470	570	590	640	690	
最大容量 Maximum Capacity	7kg以下 / 7 kg and Under					
最大堆垛重量 Maximun Stacking Weight	70kg以下 / 70 kg and Under					

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