SOUTHERN MACHINERY

Introduce of Intelligent SMT Reel Storage

Introducer: Jack Chan

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Hardware

Intelligent SMT Reel Storage

Software
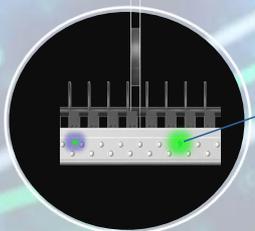
Intelligent SMT Reel Storage
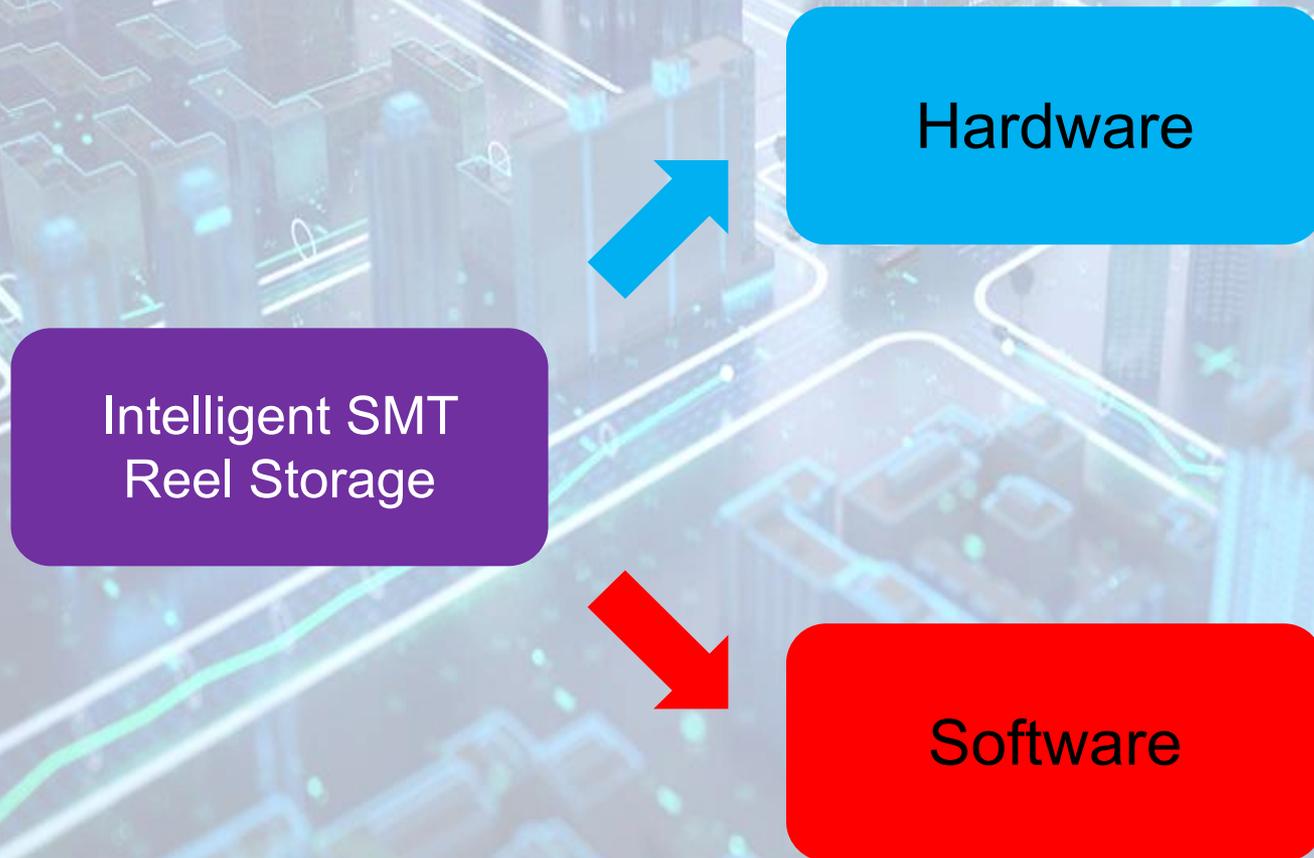
Hardware

SIS7000A

- Suitable for 7inch reels, double-sided
- Slot width：17mm
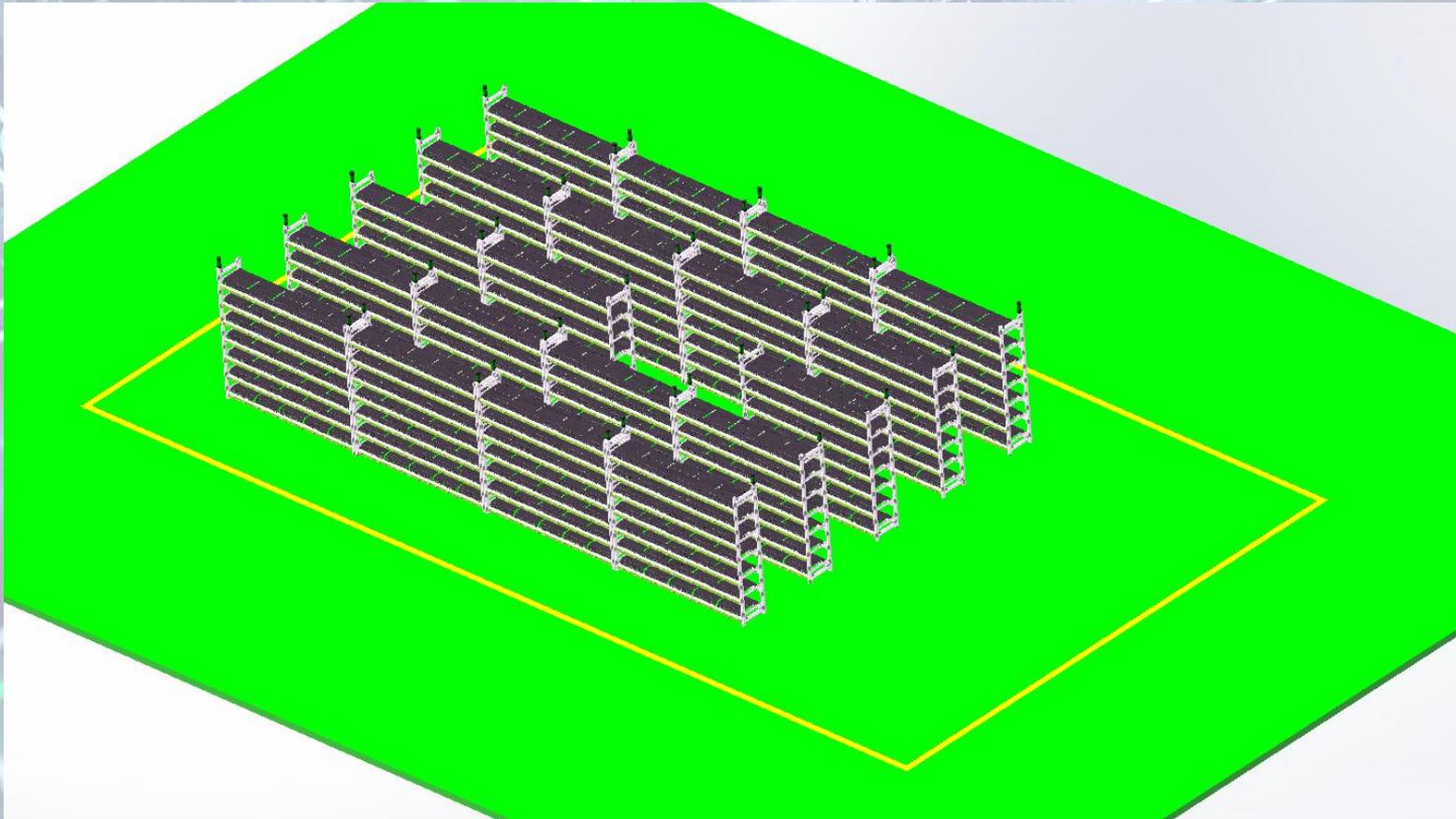- Size: 2170mm*400mm*1900mm
- Storage：7*100*2=1400 SLOT

SIS4000A

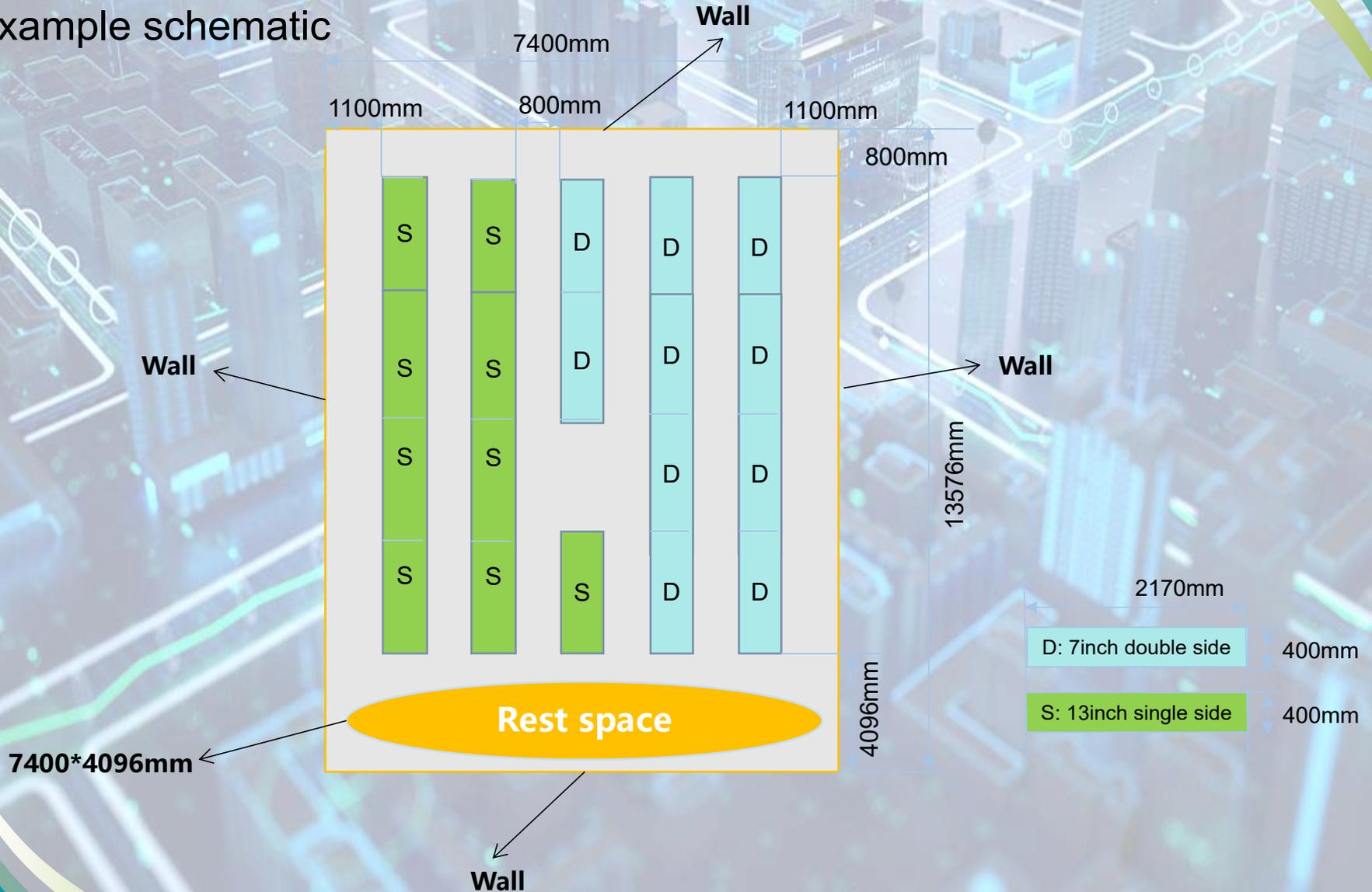- Suitable for 13inch reels, single-sided
- Slot width：40mm
- Size: 2170mm*640mm*1900mm
- Storage：4*100=400 SLOT

LED Indicator

Example

Intelligent SMT Reel Storage

Example schematic

Wall

7400mm

1100mm   800mm   1100mm

800mm

S	S	D	D	D
S	S	D	D	D
S	S		D	D
S	S	S	D	D

Wall

Wall

13576mm

4096mm

Rest space

7400*4096mm

2170mm

D: 7inch double side   400mm

S: 13inch single side   400mm

Wall

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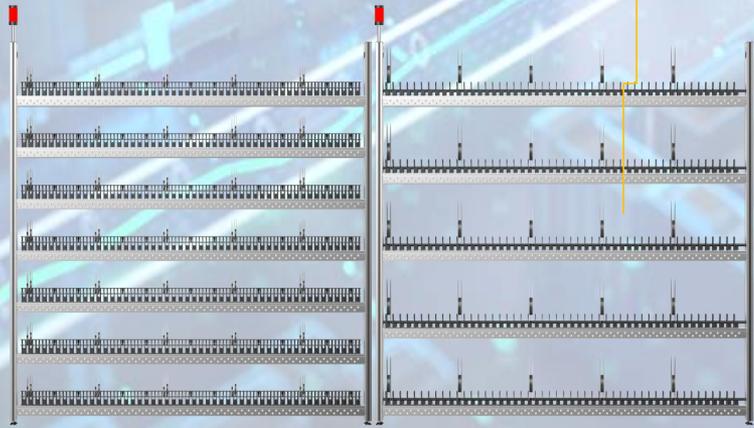
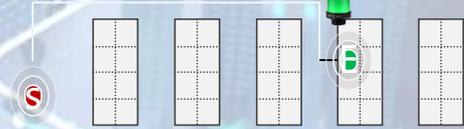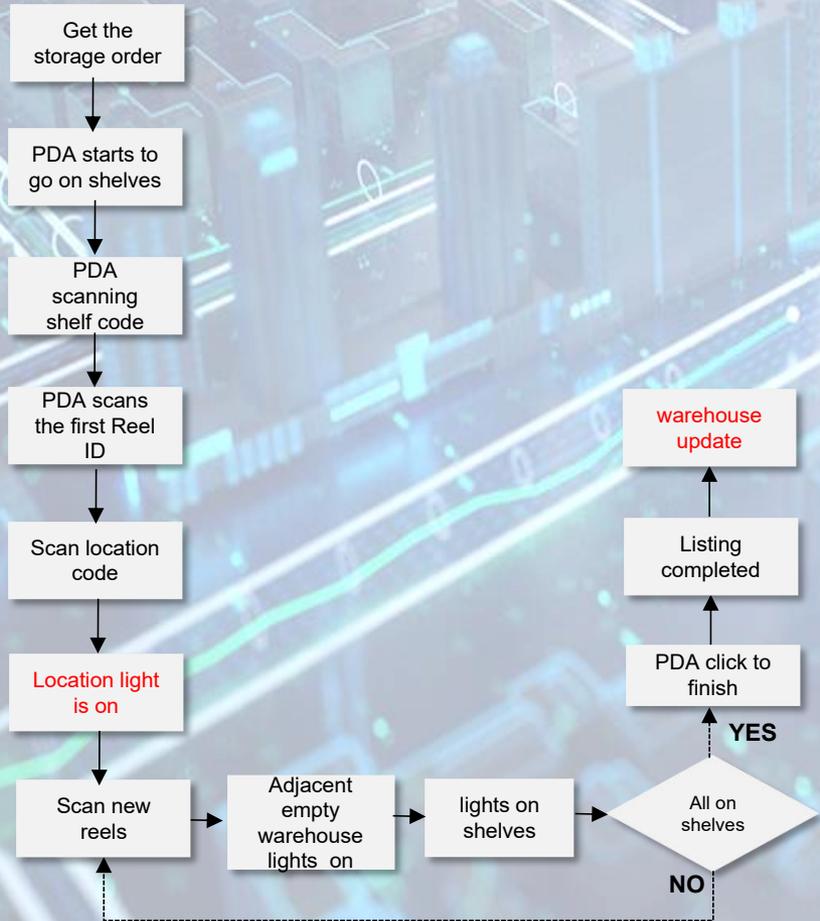**SOUTHERN MACHINERY**

Software

(1) . PDA starts material preparation task

(2) . Enter the reel rack lit by the tower light

(3) . Take out the SMT components from the warehouse location

Intelligent SMT Reel Storage

Reels preparation flow chart

Reels preparation schematic diagram

```
Get the
storage order
      ↓
PDA starts to
go on shelves
      ↓
PDA
scanning
shelf code
      ↓
PDA scans
the first Reel
ID
      ↓
Scan location
code
      ↓
Location light
is on
      ↓
Scan new  →  Adjacent  →  lights on  →  ◇ All on ◇
reels        empty         shelves       shelves
             warehouse
             lights  on
```

warehouse update

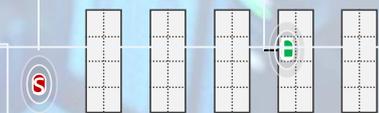Listing completed

PDA click to finish

YES / **NO**

1. Scan the barcode of the shelf

2. Scan the first Reel ID

3. Scan the barcode of the warehouse location (the scanning of the warehouse location code can be canceled, the specific process is to be determined)
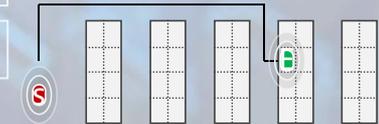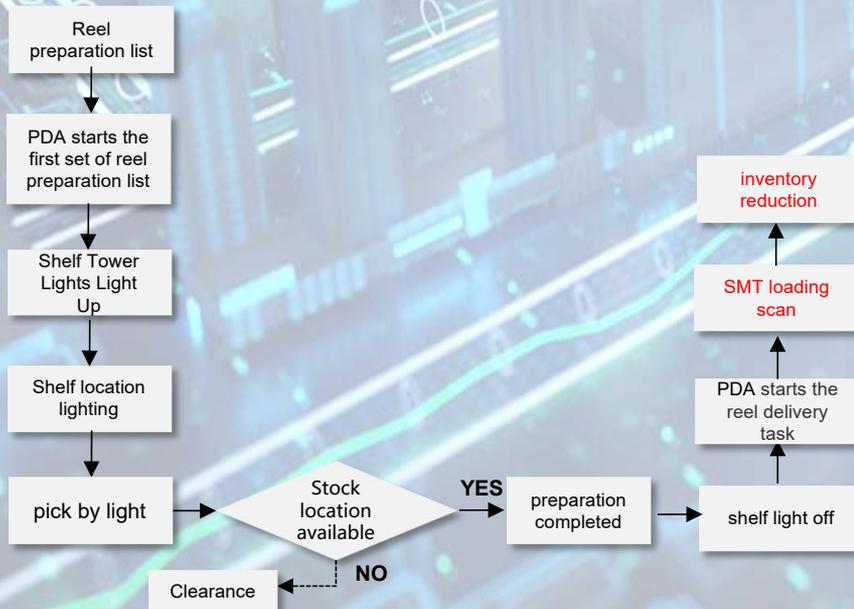
4. Light up and put on shelves
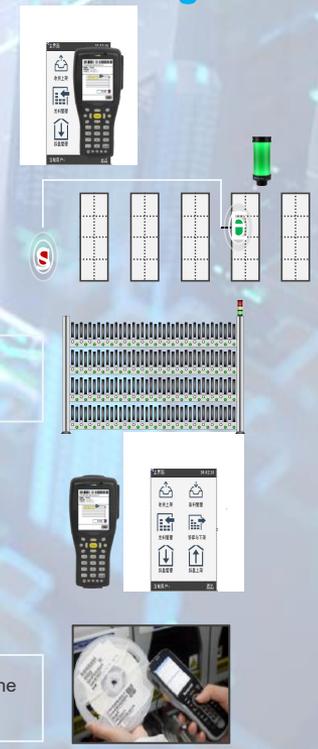
5. Scan the new reel barcode

6. Repeat steps 3-5

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Reel delivery flow chart

```
Reel
preparation list
       |
       v
PDA starts the
first set of reel
preparation list
       |
       v
Shelf Tower
Lights Light
Up
       |
       v
Shelf location
lighting
       |
       v
pick by light  -->  Stock location available  --YES-->  preparation completed  -->  shelf light off
                           |
                          NO
                           |
                           v
                       Clearance
```

inventory reduction
↑
SMT loading scan
↑
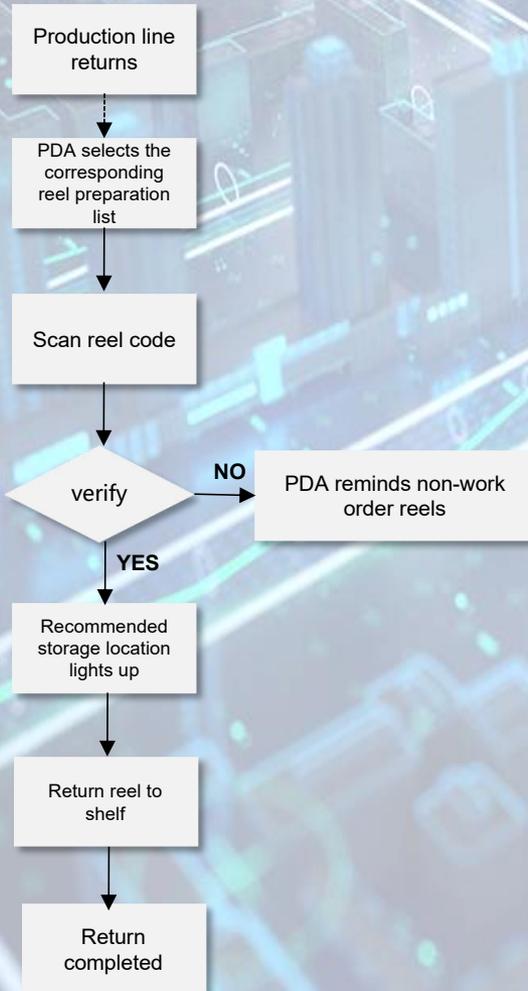PDA starts the reel delivery task
↑
shelf light off

Reel delivery schematic diagram

1. PDA starts reel preparation task

2. Enter the area lit by tower lights

3. Pick the warehouse location with lights

4. PDA starts the reel delivery task

5. Scan the reel and send the it

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Material returned flow chart

Production line returns

↓

PDA selects the corresponding reel preparation list

↓

Scan reel code

↓

verify → **NO** → PDA reminds non-work order reels

↓ **YES**

Recommended storage location lights up

↓

Return reel to shelf

↓

Return completed

Material returned schematic diagram
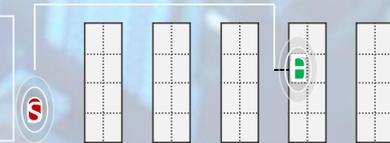
1. Start the return task

2. Scan the reel barcode

3. According to the light on the shelves

4. Return completed

Advantage

Storage					
Num	**Project**	**Current**	**Improved**	**Result**	**Remark**
1	Training	90days	2days	97%	97% reduction in personnel training days
2	Skill Requirements	Yes	No	100%	No personnel skill requirements, reduced by 100%
3	Impact of personnel changes	Yes	No	100%	The flow of personnel has no impact on the warehouse work
4	100 discs time-consuming	50mins	16mins	300%	Efficiency increased by 300%
5	Employees	8	3	63%	Reduce personnel by 63%

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Best After-sales service

— **Worldwide Support**

— **Free Installation/ Training**

— **1 day lead-time (spare parts)**

— **1 Month customize solution**

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6. Looking forward to your email: jack@smthelp.com