

## Development of Pallet Sorter Warehousing System

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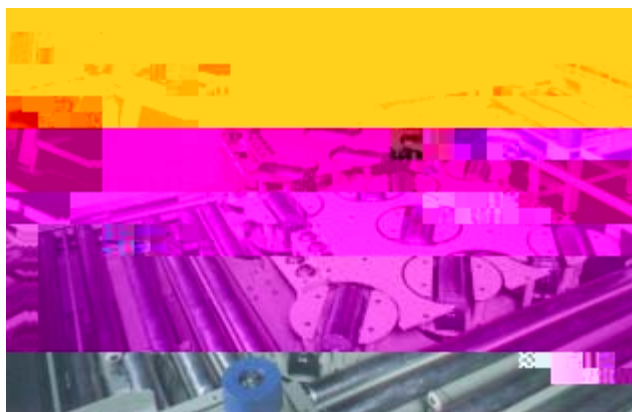


Photo 1 Separating or merging mechanism

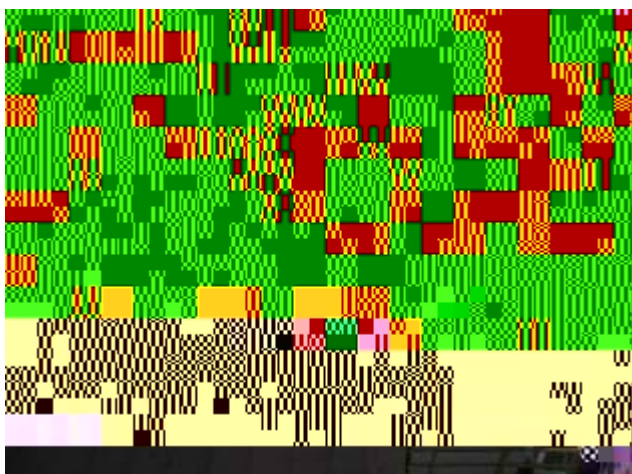
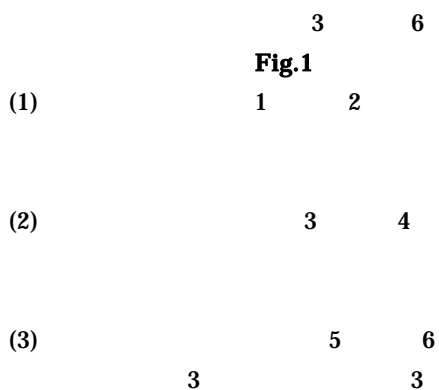


Photo 2 Experimental system of pallet sorter

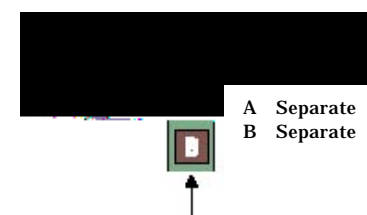
2 2



Function 1 Separation



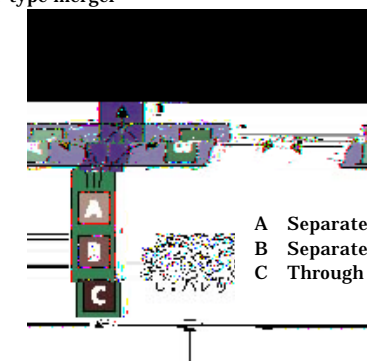
Function 2 Merger



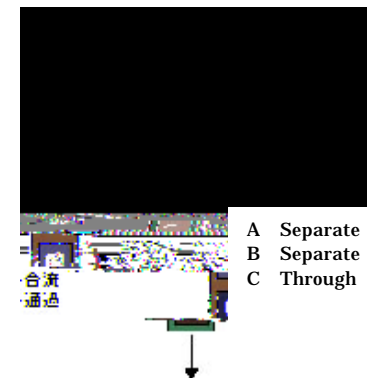
Function 3 T type separation



Function 4 T type merger



Function 5 Cross type merger



Function 6 Cross type separation

Fig.1 Layout pattern

2 3

**Fig.2**

25m/min.

750 /

**Fig.5(a) Fig.5(b)**

**Fig.4(a) Fig.4(b)**

**Fig.5(a)**

**Fig.5(b)**

**Fig.4(a)**

**Fig.4(b)**

**SPINNING**

**Simulation result**

(a) Appropriate rotation speed

(b) Inappropriate rotation speed

**Fig.4 Simulation result**

4.

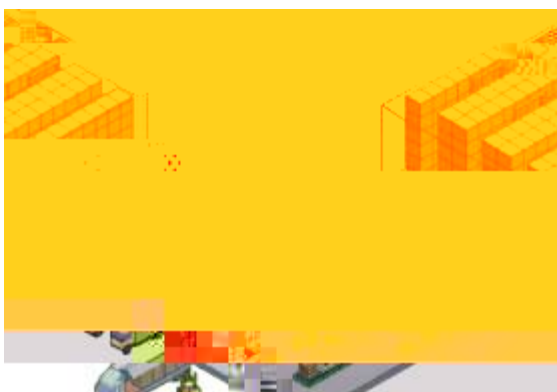
5.

NKK PALS

**Fig.6**

4

400 /



**Fig.6 Example of pallet sorter application**

NK CAPS  
CATS

NK

- 1) . “  
”. NKK . No.156, pp.39-43(1996).
- 2) . “  
”. NKK .  
No.170, pp.82-87(2000).
- 3) . “  
”. NKK .  
No.172, pp.52-57(2000).

**Photo 3**

1000

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**Photo 3 Pallet sorter picking system**