

GUIDELINES FOR HANDLING POY PACKAGES WITH ASSIST OR AUTO-METHOD

1. Work Envelope:

Area to be covered by unit -

- a. Lowest pin - 17" off floor
- b. Highest pin - 96" off floor
- c. Vertical space between pins - 24" maximum
- d. Container dimension for mechanism to work around - assumed 44" x 44" x 41" high (off pallet height)
- e. Gross weight of case/pallet - 1,420 pounds

2. Aisle Spacing:

Side to side -

- a. 45" minimum - system to cover both sides of aisle
- b. 70" maximum

3. Linear Area:

To be covered without moving unit -

- a. Minimum 3' in plane of creel pin

4. Overhead Aisle Clearance:

- a. Maximum 10' clear area for operable unit

5. Weights To Be Handled:

- a. 0 - 100 pounds
- b. Weight adjustment must be simple and quick by semi-skilled operator within five (5) seconds without use of tools.
- c. Weight adjustment must be made without operator knowing weight of package.

6. No Touch Philosophy:

Quality -

- a. Operator must be able to move package from container to creel without touching yarn or package.

7. Gripper:

- a. To cover dimensions of 50, 75, 94, 140 and 143mm
- b. Grippers must be interchangeable by operator within one (1) minute without use of tools.
- c. Gripper must have guidance characteristic and clearance between jaws and tube to prevent ply of paper being rolled on I.D. of tube.
- d. Gripper must withdraw from tube easily after release.
- e. Depth insertion in tube - maximum 3"
- f. Fail safe - will not drop package if power loss occurs.

8. Returnables:

- a. Any piece (inner pack) must be accessible for gripper head being used for specific tube size.
- b. Returnables must be able to stack back on pallet as one unit.

9. Automatic Creeling:

- a. Scope - remove package from container and locate on pin with operator turning pin out and removing empty tube. Operator to notify system that pin is ready.

Handle separators and other returnables.

To pick up prepared container at staging area after depositing returnables.

10. Assist Systems:

- a. Floor system - manual effort to push truck - not to exceed 30 pounds.

Possible battery, air, or electrically powered
for movement.

Possible guidance system

b. Overhead system -

Mono or dual rail track
Power pick up from rail