Southworth Dock Lift Educational Presentation
Objectives

1. Dock Safety Concerns
2. Area & Building Considerations
3. Dock Lift Applications
4. Application Factors
5. Load Transfer Arrangements
6. Installation Arrangements
7. Typical Pit Plan
8. Work to be done by Contractors
9. Factors Effecting the Dock Lift Design
10. Scissor Dock Lift Safety Features
11. Industry Standard ANSI MH29.1
12. Dock Lift Typical Specifications
13. Features
14. Standard Dock Lift Options
15. Installations
16. Conclusions
Dock Lifts:

Dock lifts, also known as elevating tables, are used for loading and unloading materials from a ground level to a loading dock. The lift raises materials that need to be loaded or unloaded, such as pallets, boxes and other heavy items.

Dock lifts are located at the opening of the dock door and are either pit mounted or surface mounted.

Low-profile dock lifts can be semi-portable and are good for ground level doors, confined spaces and leased buildings.
Area & Building Considerations

- Dock height
  Common dock height is 48” to 54”
- Dock approach
- Door sizes
- Equipment used on the Dock Lift
  Pallet jack, fork truck, cart
Dock Lift Applications
Application Factors

- Volume of traffic
- Space available
- Weight of load
- Existing Dock Lift
- Truck bed height
- Stability of load

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<th>APPLICATION FACTOR</th>
<th>RECOMMENDED METHOD</th>
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<td>LEVEL HANDLING REQUIREMENT</td>
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Load Transfer Arrangements
Installation Arrangements
Typical Pit Plan

3" Dia. Electrical conduit used when 1/2" hydraulic hose and electrical leads are to be installed from power unit to lift (by pit contractor).

Locate bollard in front-pit wall.

Shallow pit for throw-over plate.

Bollard - 9" dia. steel pipe filled with concrete.

Grade

Pit walls true vertical ± 1/2".

Lag with 5/8" Dia. min. sleeve anchors

1/2" Recess for throw-over plate.

Concrete behind curb angle must be well compacted.

Pit drain (by pit contractor)
Work that Needs To Be Done by Contractors

- Supply fused disconnect to the location where the power unit will be installed
- Concrete work, building modifications and excavation
- Underground piping, conduit, angle frame to pit, sump drain
- Drainage from sump
Factors Effecting the Dock Lift Design

- Dock height
- Platform size
- Location, number of and size of bridge plates
- Load capacity
- How is the load unloaded and loaded
- Controls
- Voltage
- Handrail configuration
Scissor Dock Lift Safety Features

- Safety Chain
- Diamond tread surface
- Maintenance chock
- 3 to 1 Safety Factor
- Bridge plate stops
- Velocity Fuse
- Galvanized Base & Leg set
Industry Standard, ANSI MH29.1

All scissor Dock Lifts are manufactured to ANSI MH29.1 standards, the areas covered are:

- General Requirements and Load Ratings for All Industrial Scissors Lifts
- Deflection
- Platform Protection
- Controls
- Type of Actuation
- Maintenance Device
- Markings
- Operating/Maintenance Manual
- Responsibilities of Owners/Users
Standard Features
5000 lb and 6000 lb Models

- Fully Galvanized Base and Leg
- Biodegradable Oil
- Bevel Toe Guard Platform
- 18” x 62” Bridge Plate
- Removable Lifting Eyes
- Prewired Control Panel and Power Unit
- 2 Year Parts and Labor Warranty
Galvanized Base & Leg
Prewired Power Unit
18 Inch Bridge Plate and Bevel Toe Guard
Dock Lift Options

- Bridge Plates
  Different Sizes, Solid or Split, Steel or Aluminum
- Approach Ramps
- Night Locks
- Bellow Skirting
- Roller Shade
- Mechanical Wheel Chock
- Power Unit
  5 Horse Power, Power Unit Covers, Oil Immersion Heaters
- Electrical
  Limit Switch, Flashing Light, NEMA 4 Quick Disconnect, Lock Out or Quick Disconnect Controls
Dock Lift Installations
Conclusion

- Area & Building considerations
- Application
- Load Transfer
- Dock Lift specs
- What options will be needed on the Dock Lift
  - Capacity
  - Top & Bridge size
  - Voltage
- Type of installation

Questions?
Southworth has a full line of material handling equipment and an engineering department staffed to handle most any customized request.

Call 1-800-743-1000 for a quote!