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

APPLICATION FACTOR	RECOMMENDED METHOD		
	DOCK LEVELER	DOCK UFT	TRUCK
	4		N
HIGH VOLUME LOADING	x		x
NO DOCK		x	-
LOW DOCK (UNDER 28")		x	
LOW DOCK (28"-36")		x	x
LIFT TRUCK ACCESS TO GRADE		х	х
HIGH DOCK (50" - 59")		х	х
LOW TO MODERATE USE		x	1.1
WIDE VARIATION IN RUCK HEIGHTS	1	x	1
NARROW DOCK APRON		x	х
RESTRICTED TRUCK AREA	1.1	x	1.00
UNSTABLE LOADS	1.1	x	1
LEVEL HANDUNG REQUIREMENT		x	х

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

Load Transfer Arrangements



Installation Arrangements



Typical Pit Plan



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!





