

Three-Lift Stage System



The Challenge

Miller Performing Arts Center at Alfred University houses a 3,000-square-foot stage used for various theatrical and musical performances. They did not have a way to safely and effectively moving large pieces of scenery from a subterranean storage area up onto the stage and back again.

The primary challenges in accomplishing this were the architectural requirements for creating a system of multi-purpose lifts for use in performances, and material movement between performances:

1. 150-pound-per-square-foot holds capacity (not lifting capacity)
2. This system had to be made up of three separate sections placed end to end, with one long side (facing the stage) being straight and the opposite long side (facing the audience) being curved
3. The three sections must be able to be operated individually or in unison.

The Autoquip Solution

To satisfy all requirements as presented by the customer and their architect, two different models of scissor tables were selected that had adequate capacities to support the three stage sections. Because of the limited length and width of the outside two stage sections, especially with the special curved outside perimeter, a double pantograph solution was recommended because of its smaller overall “footprint.” Each scissor lift was



provided with its own hydraulic power unit, and a special motor control panel and operator pushbutton station was supplied to allow the operator to select any, or all, lifts to be operated at the same time. The customer is completely satisfied with this unique lifting solution. Not only has the flexibility of the stage system been increased, but a safer means of moving scenery between elevations has been accomplished.

Lift Specifications for this Unique Application: Center Lift:

Lift Model: 96LL18SP

Platform Size: 79.5" x 170" with one side curved & with beveled toe guard protection

Holding Capacity: 13,800 lbs.

Vertical Travel: 96"

Travel Speed: 80 sec Outer Lifts: (one left hand, one right hand)

Lift Model: 120DP90EXNSP

Platform Size: 72.625" x 106.5" with one side curved & with beveled toe guard protection

Holding Capacity: 7,200 lbs.

Vertical Travel: 96"

Travel Speed: 51 sec

The Solution Benefits

Through the use of this customized scissor lift system, the flexibility of the overall stage has been enhanced, and the ability to safely transfer material from storage to stage levels has been provided for employee convenience and safety.