

Prepared For :
Fluxwerx Illuminations

The logo for ASE systems is centered in the upper half of the page. It features the letters 'ASE' in a large, white, sans-serif font, with the word 'systems' in a smaller, white, lowercase sans-serif font directly below it. The text is set against a circular gradient background that transitions from a light blue at the top to a darker blue at the bottom. This circle is surrounded by a thick, teal-colored ring that curves around the top and right sides of the page.

ASE
systems

Case Study

REPETITIVE LIFTING AND
PACKAGING OF LIGHT FIXTURES

Load Specifications

- Load Type: Galvanized Steel Light Fixtures
- Weight: 8-25-lbs.
- Dimensions: 12"x 12" - 12"x 48"

Application Analysis

- Load: Steel Light Fixtures
- Weight: 8-25-lbs.
- Dimensions: (LWD) 12"x12"x3.75" to 12"x48"x5"
- Pick point: Vertical from a hanging conveyor hook @ 60"
- Place point: into a box on the floor
- Cycle time: 1 every 45 seconds
- Area of cov: 10'



Products are originally travelling vertically.

Weight distribution:
Most of weight is on driver enclosure

Handling Issues

The initial challenge this customer had was the large number of light fixtures that ran on an overhanging conveyor which then needed to be packed into boxes for packaging. Their current work method was repetitive and taxing on the operators. Fluxwerx reached out to ASE to procure an ergonomic handling system, with the desire to eliminate the need to perform the handling task manually with the expectations of reducing fatigue, injuries and the number of personnel currently required to complete the tasks.

The Solution

To achieve and maintain the requested cycle time, ASE specified a Free-standing Easy-Arm Intelligent Lift Device with vacuum cup tooling designed to increase productivity and operational efficiency. The Easy Arm with its high speed and ease of movement together with vacuum tooling with its quick attach and release ability exceeds the high cycle requirement. The Easy Arm with Intelligent Lift Device can take a variety of forms, but one key feature is that they are ergonomic and behave like a natural extension of the worker's arms and hands. The Intelligent Lift Assist Device with its servo motor uses sensing technology that interprets the user's hand movements into precise actions. Easy Arm lift assist devices are being incorporated in factories and warehouses to assist the human labor force with repetitive, difficult, or time-consuming lifting and moving tasks. The Easy Arm has eliminated back strain and associated injuries that typically result in higher medical costs.

Features:

- Anti-recoil technology
- Infinite speed control
- Fail-safe load braking in case of power loss
- Four times faster than traditional lifting devices
- Built-in photosensor to ensure operator presence
- Capacity overload system prevents excess loads
- Full-stroke mode allows users to carefully position materials
- Precision controls so users can get delicate parts into place



281-256-7450

Key Technologies

KEY TECHNOLOGIES:

Free-standing Easy-Arm Intelligent Lift Device Vacuum Cup Tooling
<https://asesystems.com/lift-assist-devices/easy-arm-floor-overhead-rail-manipulators/>

Vacuum Cup Tooling
<https://asesystems.com/vacuum-lifters/>

