

Prepared For :  
**Advanced Battery  
Resources**

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 circular element is partially enclosed by a larger, teal-colored shape that curves around it from the top and right sides.

**ASE**  
systems

# **Case Study**

**SAFELY AND EFFICIENTLY LIFT  
200 LBS BATTERY MODULES**

# The Company

Advanced Battery Resources, Houston, TX

## Load Specifications

- Battery modules
- Weight: 200-lbs.
- Size: 55" x 14" x 4"



## Handling Issues

Advanced Battery Resources (ABR) contacted ASE Systems asking for a state-of-the-art lift assist device that they could add their own custom-made vacuum tooling to. ABR requested the lift assist to be “like a jib crane” but with an articulated boom and include an intelligent lifting device because they needed ease of movement and precise positioning capability. Operator safety in the workplace was another top priority with an emphasis on ergonomic functionality for operator safety. ABR was utilizing an overhead bridge crane and a forklift to handle their battery modules which took way too long to perform the handling task, did not provide gentle handling of their expensive batteries nor did they provide for precise positioning capability.

## Application Analysis

- Load: Battery modules
- Weight: 200-lbs.
- Dimensions: 55"x14"x4"

# The Solution

ASE Systems provided two options,

Option 1: The Easy Arm Intelligent lifting device.

Option 2: An Enclosed Track jib crane with an Electric Balancer lift assist device.

Option 1:

The Easy Arm Intelligent lifting device, enables the operator to move as fast or slow as necessary. The Intelligent Lifting Arm is a combination of our G-Force lifting device and an articulating jib crane. It is an ideal solution if you are looking for a turn-key, plug and play lifting device. You get all the strength, precision, and speed of our G-Force lifting technology and processor controlled electric servo drive system in the body of an ergonomic articulating jib crane. In addition, you get “float mode” which allows the operator to grasp the load itself, move the load in any direction and precisely place the load as needed; with float mode the lifting device follows the operator's hand movements with the littlest of human effort. The G-Force power pack can also be programmed with a myriad of functions like upper and lower limitations, speed limitations, communications with PLCs, weighing and much more.

Option 2:

Considering the customer’s need for a quick turn-around and availability, we also offered an enclosed track Jib crane with a DCBS electric balancer lift assist device that includes zero-gravity capability which is similar to “float mode”. The DCBS electric balancer was specifically developed for handling loads quickly and safely with one hand and includes many of the intelligent functions desired by the client. The load can be controlled easily with the D-Grip Servo control handle. By switching to “load positioning mode” the operator can grasp and guide the load directly with the lightest of pressure

# Key Technologies

## KEY TECHNOLOGIES:

Easy Arm Intelligent Lifting Device

<https://asesystems.com/industrial-manipulators/gorbel-manipulators/>

Enclosed Track Jib Crane

<https://asesystems.com/workstation-cranes/jib-cranes/>

DCBS Electric Balancer

<https://asesystems.com/air-balancers-and-electric-balancers/>

