

Diving Board-Style Work Platform within a Sensitive Environment

SUMMARY

A manufacturer of industrial heavy equipment needed a diving board-style work platform to gain access into an electrical cabinet. A key requirement was to eliminate the risk of platform interference with the sensitive equipment.

Spika's client is a leading manufacturer of construction, mining, forestry, and industrial heavy equipment. They required an adjustable diving board style of cantilevered work platform to gain access into an electrical cabinet within earth moving equipment during the manufacturing process.

Access for this had been deemed a safety issue, and the customer's safety-first culture required a custom solution for the access point.

The diving board deck had a 14" max width requirement in order to safely hover within a space that had sensitive components on all sides, including above and below the deck. Due to the sensitive environment, height adjustability had to be controlled from the deck with built-in safety interlocks to ensure only the



operator could raise and lower the system. The client chose to work with Spika because they needed a partner that could meet their unique and rigorous project requirements. They met through a video conference to review the project requirements and begin concept development. Additional calls and emails between Spika and the client refined the concept to ensure the platform would stop at pre-programmed heights to eliminate the risk of platform interference with the equipment.

Spika, along with an automation and controls partner, designed and manufactured a low



profile, cantilevered work stand to fit the tight confines of the machine cabinet.

- Programmable set points at different heights between 5' and 10' mitigated the risk of platform overtravel and contact with the top or bottom of the cabinet. This feature helped to ensure the safety of both the operator and equipment.
- Height control was provided via a digital user interface on an articulating arm on top of the deck.
- An onboard battery was added

to the system to allow free movement of the stand without the risk of slips or trips over cords. The addition of an onboard battery charger and maintainer reduced downtime of the system.

- A staircase provided access the lowest height of the platform. The user then rode the platform up and down via controls located on top of the deck. A self-closing safety gate ensured safety and full OSHA compliance while on top of the deck.
- High-traction anti-slip tape reduced slip and trip risks while in use.