

Identifying Mistakes Before They Happen

LOCKING IN THE RIGHT DESIGN WITH AR



Kress Straddle Carrier Cab Design

THE CHALLENGE

Due to a hard-to-reach touchscreen on a previous model, Kress wanted to determine the optimal location of the screen for the cab of its next straddle carrier — and getting it right was imperative, as the company aims to avoid costly and unnecessary re-designs or a negative association with the Kress brand. In the past, the company had used a traditional design review to make changes for new models — a process where designers and engineers collaborate around a table reviewing 3D models on a 2D flat screen mounted on the wall or a laptop. Too often, minor details that lead to larger problems and design flaws are missed due to visuals. Looking at a flat screen isn't the same as actually operating the final product. And these seemingly small issues turn quickly into large problems — manufacturing delays and redesigns that not only cost time and money but reflect poorly on the brand as well.



Enter Augmented Reality

We utilized Augmented Reality (AR) technology to conduct a full ergonomic design review of the straddle carrier cab. With AR, Kress' design and engineering teams were able to place themselves in a hologram of the cab itself, as opposed to looking at 2-dimensional flatscreen. AR design reviews offer a “real feel” perspective, allowing designers and engineers to experience what the end user experiences. Our AR solution was also able to capture crucial data, and feedback from users as well. AR allowed the team to not only pinpoint the perfect location for the screen, but to save time and money by driving design efficiency — and avoiding costly mistakes.

Kress AR Design Review Results

- Saved time and money
- Avoided redesign expenses and delays
- Confirmed form, fit and function
- Captured feedback from users
- Captured actionable data
- Delivered “real feel” perspective

