

# STREAMLINING OPERATIONS THROUGH COMPREHENSIVE FACILITY SCANS



## OPPORTUNITY

A client sought to double their growth potential and required an evaluation of whether their current facility could accommodate the expansion or if a new facility would be necessary. KESI was engaged to optimize the entire layout of the facility, aiming to maximize the utilization of available square footage.

## PLAN

A comprehensive facility scan was conducted by utilizing new state of the art technology to accurately assess the facility's current state and develop a more effective layout. These scans served as the solid foundation for creating a precise and highly efficient "future state" facility layout. By utilizing cutting-edge technology, KESI was able to capture over 350, 360-degree HDR images and 3D laser scans, each capturing an impressive 2 million data points per second, inside and outside of the facility. KESI was able to achieve exceptional results with a minimum of 1/8 inch accuracy level for all scans. KESI's ultimate goal was to streamline the engineering process by leveraging these comprehensive reports and data points. Reports were meticulously analyzed to ensure their accuracy and the data obtained from the scans was used to optimize the facility layout and flow for both raw materials and finished goods.

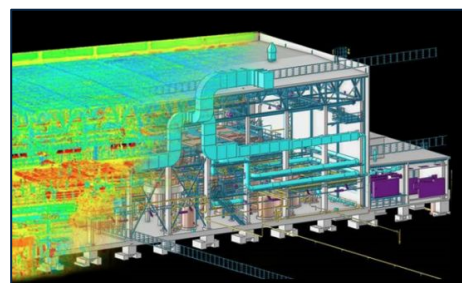
## CHALLENGES

- Minimizing workplace disruption during scanning process
- Processing, management, and integration of large amounts of point cloud data
- Design Time Constraints with Accuracy Requirements

**10x**  
Faster than traditional  
design techniques

## OUTCOME

KESI was able to create a successful future state design optimizing dock space, slotting, pick locations and raw material storage capacity by strategically incorporating additional updated racking. Client successfully enhanced efficiency and productivity within the facility, ultimately accomplishing the objective of streamlining operations and maximizing the utilization of available square footage. As part of the solution, KESI provided the client with meticulously crafted AutoCAD drawings, which were seamlessly integrated into the future state plan for the facility. The client benefited from additional dock space and strategically incorporated additional racking and pick locations, further optimizing their operations.



Capturing 2 Million data points per second with 1/8" accuracy



## OUR PROCESS

IDENTIFY



PLAN



EXECUTE



SUSTAIN