

Digitizing Order Picking Processes with Vision Picking



Challenge

Errors in stocking, order picking, and inventory control can have devastating results on logistics operations. Siemens Energy, a global pioneer in the energy sector, focuses on the production, processing, and transportation of oil and gas, and operates a logistics center out of Berlin supplying critical parts needed for gas turbines for customers throughout Europe, Asia, and the Middle East. Siemens looked to Vuzix to offer a solution to digitize the order picking process by automating the documentation process and in return shortening delivery times.

Goals

All parts shipping out of the logistics center needed photographic verification during the picking process. This documentation is needed not only for customer auditing but also for import customs authorities. Historically, this process was done by manually, significantly impacting process efficiency. By digitizing the order picking and documentation process, Siemens sought to shorten the overall delivery times from the warehouse to customer, as well as automate the provisioning of information in digital form.

Solution

In partnership with Vuzix, Siemens was able to successfully digitize the picking process by leveraging the heads-up, hands-free display of Vuzix smart glasses. Employees in these warehouses were able to view all relevant picking information directly in their field of view, while keeping their hands free. Doing so, the picking process was ergonomically improved, and through the use of integrated AR software, employees were able to more easily locate and accurately pull items. These changes improved picking speeds by 10% on average. The proposed smart glasses solution further improved documentation processes by automatically assigning the required photos taken in the warehouse to each corresponding order, thus eliminating the additional step of manual assignment.

Results

> 10% faster work process

through the visualization of shelves and spare parts right in the user's field of view

Smart glasses allowed for
better training processes
in the warehouse

More flexibility while working

thanks to the hands-free display of Vuzix smart glasses

Ability for automatic documentation

allows for a more efficient work process by eliminating the need to manually upload