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Improvement of Realization Quality of Aerospace Products Using Augmented Reality Technology

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Abstract : In the aviation industry, many faults may occur frequently during the maintenance processes and assembly operations of complex structured aircrafts because of their high dependencies of components. These faults affect the quality of aircraft parts or developed modules adversely. Technical employee requires long time and high labor force while checking the correctness of each component. In addition, the person must be trained regularly because of the ever-growing and changing technology. Generally, the cost of this training is very high. Augmented Reality (AR) technology reduces the cost of training radically and improves the effectiveness of the training. In this study, the usage of AR technology in the aviation industry has been investigated and the effectiveness of AR with heads-up display glasses has been examined. An application has been developed for comparison of production process with AR and manual one.

Keywords : aerospace, assembly quality, augmented reality, heads-up display
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