

The industry remains highly dependent on human labor and due to high turnover rates, supportive systems are necessary to maintain efficiency and quality. The basis of every process is the work instruction, but in many cases these instructions are overly complicated and contain excessive information, which can overwhelm operators.

The research focuses on observing operators' learning curve, particularly in terms of improvements in time and quality, and how they interpret and engage with the provided work instructions. We aim to track how the time spent focusing on instructions decreases as operators become more proficient. This allows the creation of more abstract and simplified work instructions that highlight only essential information. By emphasizing key elements, operators can work better after the initial training phase.

An experiment was designed, targeted measurements were performed, and the results were analyzed. The learning curves and attentions were recorded during a disassembly process to find the critical elements in the created work instruction and later simplify it.

Keywords: Learning curve, work instructions, operator performance, disassembly task